Learning Activities

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Preparation for CEC/SIM Learning Activities

In order to come prepared to be active and engaged in today’s learning activities you will need to review the following information, make medication cards, and read the following article:

**SIMULATION 1**
- Knowledge of normal and abnormal postpartum assessment findings
- Knowledge of general physical assessment and postpartum physical assessment
- Knowledge of identification and treatment of postpartum hemorrhage
- Answer scenario prep questions

**SIMULATION’S 2 & 3**
- Discharge care of Mom
- Discharge care of Baby
- Answer scenario prep questions

**MEDICATION CARDS**
- **Rhophylac** 1500 IU IM
- **Methergine** 0.2 mg IM
- **Pitocin** 30 units IV

In addition you will need to review the following journal article:
Skills Related to the Woman

**SKILL #1: Rho (D) Immune Globulin Administration**

A woman is at risk for developing antibodies when her blood type is Rh(−) and the fetus is Rh(+). Although the maternal and fetal blood systems are separate, there are times when fetal blood can enter the maternal system. RhoGAM is administered IM and Rhophylac is administered IV. If women have a abortion, spontaneously or induced, up to 12 weeks gestation and are RH(−), they will need a smaller dose of Rho (D) immune globulin.

If the Rh(-) woman is exposed to Rh(+) blood, she will develop antibodies, attacking the Rh(+) blood cells, called sensitization.

RhoGAM or Rhophylac (Brand Names) can be given during pregnancy (with procedures or trauma) and at approximately 26-28 weeks gestation to suppress the antibody formation. It is repeated within 72 hours of delivery if the baby is RH+

**Activity #1:** Answer the following questions

What are some situations when maternal blood can be exposed to fetal blood?

What could happen to a fetus with Rh(+) blood with a mother who is Rh(-) and sensitized? What would be the symptoms?

Why would you need to give a dose during pregnancy at 28 weeks if no invasive procedures were done?

What is KliehauerBetke test and why is it important to Rh(-) mothers?

---

**Exerts from University of Colorado Hospital Policy and Procedure**

Administration of Blood Components Related to RhoGAM

A blood derivative is a pooled blood product, which usually is obtained from pharmacy. Examples of these are: albumin, gamma globulin, immune globulins, hemophiliac preparations, vaccines, interferons, interleukins, and others.

Consent is not required for blood derivatives, unless the patient refuses blood component administration.

**Exerts from Ortho Clinical Diagnostics website, Jan 2013**

Related to Administration of RhoGAM

RhoGAM Ultra-Filtered PLUS Rh(D) Immune Globulin (Human) is made from human plasma. Since all plasma-derived products are made from human blood, they may carry a risk of transmitting infectious agents, e.g., viruses, and theoretically the Creutzfeldt-Jakob disease (CJD) agent. RhoGAM is intended for maternal administration. Do not inject the newborn infant.

Local adverse reactions may include redness, swelling, and mild pain at the site of injection and a small number of patients have noted a slight elevation in temperature. Patients should be observed for at least 20 minutes after administration.

Hypersensitivity reactions include hives, generalized urticaria, tightness of the chest, wheezing, hypotension, and anaphylaxis. RhoGAM contains a small quantity of IgA and physicians must weigh the benefit against the potential risks of hypersensitivity reactions.

**RhoGAM Administration**

Each single dose prefilled syringe of RhoGAM contains 300 μg (1500 IU) of Rho(D) Immune Globulin (Human). This is the dose for the indications associated with pregnancy at or beyond 13 weeks unless there is clinical or laboratory evidence of a fetal-maternal hemorrhage (FMH) in excess of 15 mL of Rh-positive red blood cells.
**MICRhoGAM Administration**
Each single dose prefilled syringe of MICRhoGAM contains 50 µg (250 IU) of Rho(D) Immune Globulin (Human). This dose will suppress the immune response to up to 2.5 mL of Rh-positive red blood cells. MICRhoGAM is indicated within 72 hours after termination of pregnancy up to and including 12 weeks gestation. At or beyond 13 weeks gestation, RhoGAM should be administered instead of MICRhoGAM.

**SKILL #2: Assistance with Breast Feeding**

What are TRUE contraindications to breast feeding?

What are the basic concepts of positioning for breast feeding?

**Activity #1**: Label below some common breast feeding/hand positions
Below are Common Hand Positions: C-Hold, U-Hold, and Scissor Hold

A. ________________________   B. ______________________

C. ________________________
Activity #2: Review and answer the following questions

Only one of them is truly recommended. Which one do you think it is and why? Why are the other ways wrong?

What is the capacity of the Newborn stomach?

What is “latch-on”?

What are signs of good latch on?

What are signs of poor latch-on?

What are causes of poor latch-on?

What can you do to assist in latch-on?
**Activity #3:** Practice in groups different breast feeding positions with breastfeeding model

**Skill #3: Epidurals**

Pain is normal and expected in the laboring woman. Nurses spend a lot of time assisting the woman and her coach with decisions around when and if to get an epidural. It is important to note that not all pain can always be eliminated. Additionally, some women choose to use no medications. No matter what the woman’s choice, pain management is a critical part of nursing care for the laboring woman.
At what time in labor are the epidurals most commonly placed?

Is there a time when it is too late for an epidural?

What are some risks and side effects of continuous lumbar epidurals?

Activity #1: Discuss what nursing care the patient needs prior to and immediately after a epidural insertion. Conduct a Pre-Epidural Insertion “Time Out”.

Activity #2: In groups of 2 do the following
1. Set-up primary infusion of 0.9% Sodium Chloride at 75 mL/hour
2. Now Set-up Epidural pump according to order sheet in groups of 2

Skills Related to the Newborn
Skill # 1: Elimination

What is the minimum output a newborn should have in the first 24 hours after birth?

What could be the causes of delayed clearance of meconium?

You are caring for Juan, who was born over 36 hours ago. He has not had a wet diaper yet. What assessments and interventions are you going to do?

Activity #1: Match the type of stool with the appropriate day and the description

<table>
<thead>
<tr>
<th>Day</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>A. Transitional stools – thin, brown to yellow</td>
</tr>
<tr>
<td>Day 2</td>
<td>B. Meconium stools – dark, thick, sticky, black to dark green</td>
</tr>
<tr>
<td>Day 3</td>
<td>C. Transitional stools or Milk stools</td>
</tr>
<tr>
<td>Day 4</td>
<td>D. Early transitional stools – thin, brown to greenish</td>
</tr>
<tr>
<td>Day 5</td>
<td>E. Yellow milk stools - yellow/gold, soft or mushy stools, may have curdy or seedy appearance</td>
</tr>
</tbody>
</table>

Minimum Output By Day of Life:

<table>
<thead>
<tr>
<th>Day</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>Day 1</td>
<td>1 wet diaper and 1 stool</td>
</tr>
<tr>
<td>Day 2</td>
<td>2 wet diapers and 2 stools</td>
</tr>
<tr>
<td>Day 3</td>
<td>3 wet diapers and 3 stools</td>
</tr>
<tr>
<td>Day 4</td>
<td>4 wet diapers and 3 to 4 stools</td>
</tr>
<tr>
<td>Day 5</td>
<td>5 wet diapers and 3 to 4 stools</td>
</tr>
</tbody>
</table>

Activity #2: Discuss the following situations and answer the questions in small groups

Anna is going home after giving birth to a healthy newborn baby boy. She plans to exclusively breast feed. What education would you give her regarding healthy weight loss for her son, frequency of breast feeding, how her son’s milk stools should appear, and frequency of stools and voiding once breastfeeding is well established (~1 month)?
Bridgette is going home today with her newborn baby girl. She plans to formula feed her baby. What education would you give her regarding healthy weight loss for her daughter, frequency of feeding, how her daughter’s milk stools should appear, and frequency of stools and voiding?

What are signs and symptoms of constipation in an infant?

**Skill #2: Dubowitz/Ballard Exam for Gestational Age**

Newborn Gestational Age Assessment:

- When should it be done & why is it done?

- Different tools used – what do they assess and between what gestational ages are they typically accurate?

**Neuromuscular Maturity**

**Activity #1**: With the infant models go through the steps of performing a neuromuscular maturity exam on a new born.

<table>
<thead>
<tr>
<th>Neuromuscular maturity</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Posture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Square window (wrist)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Arm recoil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Popliteal angle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scarf sign</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heel to ear</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Posture**: With infant supine and quiet, score infants posture.

**Square Window**: Flex the hand at the wrist. Exert pressure sufficient to get as much flexion as possible. The angle between the hypothenar eminence and the anterior aspect of the forearm is measured and scored.

**Arm Recoil**: With the infant supine, fully flex the forearm for 5 seconds, and then fully extend by pulling the hands and release. Score the reaction.
**Popliteal Angle:** With the infant supine and the pelvis flat on the examining surface, the leg is flexed on the thigh and the thigh fully flexed with the use of one hand. With the other hand the leg is then extended and the angled scored.

**Scarf Sign:** With the infant supine, take the infant's hand and draw it across the neck and as far across the opposite shoulder as possible. Assistance to the elbow is permissible by lifting it across the body. Score according to the location of the elbow.

**Heel to Ear:** With the infant supine, hold the infant's foot with one hand and move it as near to the head as possible without forcing it. Keep the pelvis flat on the examining surface.

**Activity #2:** Baby Shaw was born @ 32 weeks gestation. Upon assessment, you note that both arms and legs are flexed, however arms are less flexed when resting. When you move his left arm across his body, you noticed his elbow almost meets the middle of his torso, but not quite. You place your finger into his hand and he has a moderately strong grasp. You flex his hand to his arm and notice a 90 degree angle. When you flex his arms, then extend, they recoil to being perpendicular to his upper arm and torso. When examining his lower legs, you flex the leg to the thigh and flex the thigh. Upon straightening the leg with the other hand, you notice that it goes to approximately 11:00 on a clock. Then you place his foot to his head, but meet resistance at his chest and his leg extends to about 110 degrees from his hip.

What is the neuromuscular score of baby Shaw?

**Physical Maturity**

**Activity #3:** In your further evaluation of baby Shaw, you note he is looking at you, his ears have a nice curve and recoil well. You notice fine hair on his shoulders; the areolas are spotted with small breast buds the size of the tip of a pen. His skin is pink with a newborn rash and a few veins on his abdomen. His testicles are small, you feel a pea size round object in the left, nothing in the right. You notice 4 ridges on the testicular skin. In viewing his feet, he has 10 toes, but you notice one foot has two toes that are webbed. You also notice he has creases on anterior 1/2 the soles of his feet.

What is his physical maturity rating?

<table>
<thead>
<tr>
<th>Physical maturity</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Sticky; friable; transparent</td>
<td>Gelatinous; red; translucent</td>
<td>Smooth; pink; visible veins</td>
<td>Superficial peeling and/or rash; few veins</td>
<td>Cracking pale areas; rare veins</td>
<td>Parchment deep cracking; no vessels</td>
<td>Leathery; cracked; wrinkled</td>
</tr>
<tr>
<td>Lanugo</td>
<td>None</td>
<td>Sparse</td>
<td>Abundant</td>
<td>Thinning</td>
<td>Bald areas</td>
<td>Mostly bald</td>
<td></td>
</tr>
<tr>
<td>Plantar creases</td>
<td>Heel-toe 40-50 mm: -1 &lt;40 mm: -2</td>
<td>Faint red marks</td>
<td>Anterior transverse crease only</td>
<td>Crease anterior 2/3</td>
<td>Creases over entire sole</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Breast</td>
<td>Imperceptible</td>
<td>Barely perceptible</td>
<td>Flat areola; no bud</td>
<td>Stippled areola; 1-2 mm bud</td>
<td>Raised areola; 3-4 mm bud</td>
<td>Full areola; 5-10 mm bud</td>
<td></td>
</tr>
<tr>
<td>Eye/ear</td>
<td>Lids fused loosely: -1 lightly: -2</td>
<td>Lids open; pinna flat, stays folded</td>
<td>Slightly curved pinna; soft with slow recoil</td>
<td>Well-curved pinna; soft but ready recoil</td>
<td>Formed and firm with instant recoil</td>
<td>Thick cartilage; ear stiff</td>
<td></td>
</tr>
<tr>
<td>Genitals (male)</td>
<td>Scrotum flat, smooth</td>
<td>Scrotum empty; faint rugae</td>
<td>Testes in upper canal; rare rugae</td>
<td>Testes descending; few rugae</td>
<td>Testes down; good rugae</td>
<td>Testes pendulous; deep rugae</td>
<td></td>
</tr>
<tr>
<td>Genitals (female)</td>
<td>Clitoris prominent; labia flat</td>
<td>Prominent clitoris; small labia minora</td>
<td>Prominent clitoris; enlarging minora</td>
<td>Majora and minora equally prominent</td>
<td>Majora large; minora small</td>
<td>Majora cover clitoris and minora</td>
<td></td>
</tr>
</tbody>
</table>
Maturity Rating

Activity #4: Add up the individual Neuromuscular and Physical Maturity scores for the twelve categories, then obtain the estimated gestational age from the table below (next page).

<table>
<thead>
<tr>
<th>Score</th>
<th>-10</th>
<th>-5</th>
<th>0</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>25</th>
<th>30</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gest. Age, Weeks</td>
<td>20</td>
<td>22</td>
<td>24</td>
<td>26</td>
<td>28</td>
<td>30</td>
<td>32</td>
<td>34</td>
<td>36</td>
<td>38</td>
<td>40</td>
<td>42</td>
<td>44</td>
</tr>
</tbody>
</table>

Skill #3: Classification of Newborns – Based on Maturity and Intrauterine Growth

Define the Following Terms:

Large for Gestational Age: ______________________________________

Small for Gestational Age: ______________________________________

Appropriate for Gestational Age: ______________________________________

Pre-term: ______________________________________

Full-term: ______________________________________

Post-term: ______________________________________

Activity #1: Baby Boy Smith is born @ 32 weeks gestation. He weighs 2335 grams, his length is 47 cm, and head circumference is 32.5 cm. He is breathing spontaneously and Apgar scores are 8 and 9. Classify him according to the graph on the next page: (Pre-term, Full-term, Post-term; SGA, AGA, LGA)

Question: Could the mother be off on dates? Why or why not? What type of monitoring would you do to assure the well-being of this infant?

Activity #2: Baby Girl Frazzle is born to a preeclamptic mother with chronic hypertension @ 37.2 weeks by dates. She weighs 2035 grams, her length is 45.4 cm and her head circumference is 33 cm. Classify her according to the graph below:

Question: What could be some factors affecting her classification? What would you be monitoring with this infant?

Activity #3: Practice weighing, and measuring length and head circumference on the baby mannequins
CLASSIFICATION OF NEWBORNS – BASED ON MATURITY AND INTRAUTERINE GROWTH

Symbols: X - 1st Exam  O - 2nd Exam

Week of Gestation

Length ________ cm

Weight ________ gm

Head Circumference ________ cm

INTRAUTERINE WEIGHT-LENGTH RATIO
100 gm / CM²

1st Exam (X)  2nd Exam (O)

LARGE FOR GESTATIONAL AGE (LGA)
APPROPRIATE FOR GESTATIONAL AGE (AGA)
SMALL FOR GESTATIONAL AGE (SGA)

Age at Exam  hrs.  hrs.

Signature of Examiner  M.D./R.N.  M.D./R.N.


Classification of Newborns – Based on Maturity and Intrauterine Growth

Patient Information/Label

*NB* LB146 (11/99)
**Skill #4: Jaundice of the Newborn**

**Incidence:**
- Almost every infant has serum bilirubin levels above 2mg/dl
- Serum bilirubin levels above 5mg/dl occur in 65% of all infants
  - The antioxidant effect of hyperbilirubinemia in physiologic jaundice is thought to be beneficial as the infant is deficient of most antioxidant substances.
- Too high of bilirubin levels can cause detriment to the infant.

**Question:** What could the detriment to the infant be?

**Assessment of Jaundice:**
- Jaundice appears in a cephalocaudal manner:
  - First appears on the head, including sclera of the eyes and mucus membranes (mild - grade 1)
  - Then it extends down to the thorax (moderate - grade 2-3)
  - If head, thorax and extremities are jaundiced, the condition is considered marked (grade 4-5).

To evaluate the skin:
- Place the infant on a neutral colored background (preferably white).
- Gently blanch the skin on the nose - you may see a yellow tint
- Proceed to the torso (gently blanch the chest)
- Then look at the legs and arms
- Evaluate the parents skin tones (if yellow undertones, baby may not be as jaundiced as appears).
**Symptoms:**

- Lethargic
- Poor feedings
- Dark colored urine
- Wanting to sleep

At many hospitals, use of a Transcutaneous Bilirubinometer every 24 hrs for non invasive monitoring and if the results plot in the high intermediate or high risk range, a serum bilirubin level will be drawn. Below is an example of a Transcutaneous Bilirubinometer (TCB):

The bilirubin graph follows. Although it states serum bilirubin graph, evidence demonstrates transcutaneous bilirubin levels can be plotted on the same graph.

**Timing of Jaundice:**

- Levels must exceed 4-6 mg/dl before it is visible as jaundice
- In Physiologic Jaundice:
  - First appears AFTER 24 hr. of age in the term infant and 48hr. of age in the preterm infant
  - Reaches peak at day 3 or 4, resolves by day 7 in the term infant
- Reaches peak at day 5 or 6 in the preterm newborn and resolves by day 9 or 10
- In Pathologic Jaundice:
  - Appears IN the first 24hr of age
  - Persists beyond the age of resolution of physiologic jaundice in the term and preterm infant
  - Increases more than 0.5mg/dl/hr and associated with hepatosplenomegaly and anemia.

**Treatment:**
- Frequent feedings (8-12 feedings per 24 hrs)
- Keep warm and monitor temperature
- Bili blanket, bili bed, and /or bili lights
- Monitor serum bilirubin levels frequently.
- Exchange transfusion (for most extreme cases)

**Activity #1:** Baby M was born 18 hours ago. He is of Native American descent. His mother experienced a long labor and despite his gestational age of 36.5 weeks, he weighed 8 lb 4 oz. He experienced a shoulder dystocia at birth and findings of a broken right clavicle upon exam were confirmed by x-ray. You note he is slightly yellow.

*What other steps would you take?*

Baby M’s TCH comes back at 7.5. Plot out this level on the graph from the previous page.

*What should you do next?*

You receive orders for Serum bilirubin, which comes back 8.0 at 18.5 hrs. *What should you do?*

*What is the care for infant on bilibed?*

*Resources: American Academy of Pediatrics*  
*AWHONN Core Curriculum for Maternal – Newborn Nursing*

**SKILL #3: Heal Sticks**

Heal sticks are the preferred methods of obtaining blood samples from newborns. Two examples of frequently obtained blood samples from a heal sticks are blood sugars and newborn screenings. Some hospitals do not routinely check healthy asymptomatic term infants born after an uncomplicated pregnancy & delivery. Some hospitals do routinely so be aware of this.

What are some maternal or neonatal conditions requiring blood glucose monitoring?

What are some potential complications of this procedure?

What should be documented after this procedure?
University Hospital Neonatal Hypoglycemia Monitoring Protocol

- Glucose monitoring is performed within one hour after birth in infants who are at risk for hypoglycemia or who are exhibiting symptoms of hypoglycemia. Samples should be obtained before feedings.

<table>
<thead>
<tr>
<th>At Risk Infants:</th>
<th>Signs/Symptoms of Hypoglycemia in Infant:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Premature infants</td>
<td>• Jitteriness and/or tremors</td>
</tr>
<tr>
<td>• Infants of diabetic mothers</td>
<td>• Hypotonia</td>
</tr>
<tr>
<td>• Infants who require intensive care</td>
<td>• Change in LOC (irritability, lethargy, stupor)</td>
</tr>
<tr>
<td>• Infants of mothers treated w/beta adrenergic or oral hypoglycemic agents</td>
<td>• Apnea, bradycardia, and/or cyanosis</td>
</tr>
<tr>
<td>• Infants w/polycythemia</td>
<td>• Tachypnea</td>
</tr>
<tr>
<td></td>
<td>• Poor suck or poor feeding</td>
</tr>
<tr>
<td></td>
<td>• Weak or high-pitched cry</td>
</tr>
<tr>
<td></td>
<td>• Hypothermia</td>
</tr>
</tbody>
</table>

1. Check blood glucose following first feeding, preferable at 1-2 hours of life.
2. If blood glucose is greater than or equal to 45, check glucose prior to next feeding.
   a. If second glucose is greater than 45, no further action is required unless infant appears symptomatic.
3. If any blood glucose is less than 45, follow current level I nursery hypoglycemia practices.
4. If serum glucose is less than 40 AND infant exhibits clinical signs of hypoglycemia, AND infant refuses or does not tolerate feeds, call HCP to evaluate infant for potential need for one gavage feeding or transfer to NICU.

Newborn Screening:

- Phenylketonuria (PKU): an amino acid disorder
- Maple syrup urine disease (MSUD): give infant high doses of vitamin B₆
- Galactosemia: unable to use galactose and lactose
- Congenital hypothyroidism: elevated TSH, low T4 – premature infant
- Mandatory screening varies for other disorders by state

Heel Stick Procedure:

Heel sticks are used in infants who require a blood sample of less than 2.5 mL. Blood sampling is performed using sterile technique and standard precautions and requires a doctor’s order.

Equipment:

- Automated lancing device or lancet (no longer than 1.55 mm)
- Antiseptic wipes
- 2” x 2” sterile wipes
- Gloves
- Specimen container, capillary tubes, or micropipettes
• Warming supplies (commercially prepared chemical warmer or a warm cloth cooler than 109° F [42.8° C])
• Bedside test strip or sealing clay
• Laboratory transport bag
• Ice or refrigerator for transport (if needed)
• Oral sucrose and swaddling blankets for comfort

Preparation:
• Confirms doctor’s order, gather supplies, wash hands and confirm baby’s identity with 2 identifiers. If parents present, inform parents of procedure.
• Anesthesia for heel sticks includes oral sucrose, ambient light and noise reduction, and swaddling.
• Developmentally appropriate positioning, should be implemented when possible. The heel stick sample is obtained most easily with the infant supine.

Technique:
• If heel warming is desired, apply a heel warmer according to the manufacturer’s directions for approximately 5 minutes before performing the heel stick.

• Don clean gloves.
• Prepare the automated heel-lancing device according to the manufacturer’s directions.
• Prepare an adequate area around the heel stick site with antiseptic solution.
  When using the heel, use a site lateral to an imaginary line drawn from in between the fourth and fifth toes and running parallel to the lateral aspect of the heel. Alternatively, use a site that’s medial to an imaginary line drawn from the middle of the great toe and running parallel to the medial aspect of the heel.

• Place the extremity in a dependent position and grasp it firmly. (Dorsiflex the infant’s foot for heel sticks).

• Briskly puncture the skin with the selected lancing device and wipe off the first drop of blood with sterile gauze.
• Continue to hold the puncture site in a dependent position while gently applying intermittent pressure to the surrounding area. Harshly squeezing the area may produce hemolyzed samples and bruising, which may contaminate the sample with tissue fluid.
• Collect the blood in the appropriate container. Hold capillary tubes or micropipettes horizontally to fill them by capillary action; fill them 2/3 to 3/4 full. If performing a newborn screen, apply drops to completely fill the circles on the form.

[Image]

• Cover the end with your gloved finger when transferring the sample to the bedside test strip or sealing clay.
• Elevate the extremity above the level of the child's heart and gently press dry, sterile gauze to the puncture site until the bleeding stops. Don't use bandages, which can lead to skin maceration and pose an aspiration hazard.
• Properly dispose of contaminated equipment. Place the lancing device in a sharps container and blood-soaked gauze in a biohazard bag.
• Perform bedside laboratory testing according to your facility's policy or label the sample with the child's name, medical record number and unit, date and time of collection, and your initials in the presence of the child.
• Remove and discard your gloves and perform hand hygiene

Activity #1: Heal Stick
• Name at least 3 assessment pieces prior to performing this procedure:

[Activity]

• Using the infant mannequins demonstrate how you will stabilize the leg to perform a heal stick.
• Demonstrate how you will hold warm pack around heal

[Demonstration]

• Write below what documentation you might anticipate for this procedure:

_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________
_____________________________________________________________________________________________________

Nursing alert: Never puncture the back of an infant’s heel because the calcaneus bone is closest to the surface in that location. Avoid puncturing through a previous puncture site to reduce the risk of cellulitis.
SIMULATION

SIM 1: EARLY POSTPARTUM CARE

SCENARIO OVERVIEW

Primary Medical Diagnosis:
• Normal delivery, term

Secondary Medical Diagnosis:
• Retained Placental parts
• 2nd degree vaginal side wall laceration

Patient Name: Margaret Sanger is a 35 yearold woman who was transferred to the postpartum unit 20 minutes ago. She is now experiencing heavy bleeding after a prolonged labor at 41 weeks gestation that was augmented with Pitocin and a vacuum-assisted delivery after pushing for 2 hours. With sedation, she had a manual removal of retained placental fragments. Her 2nd degree tear was repaired in LDR. The patient has a saline lock from IV medication administration in labor. It is a 18 gauge angiocath.

Margaret gave birth to an infant boy 2 hours ago. She attempted to BF immediately after delivery but was unable to get the infant to latch. Weight: 9 lbs 8 oz; Length: 18 inches; Head 13 inches; No resuscitation; No meconium; Place of Birth: LDR; Apgars: 7 (1min) 7 (5min) and 9 (10min), cord gases 7.15 and 7.19, baby sent to NICU for observation for hypoglycemia, blood glucose 30dl/mg.

PRETERNANT INFORMATION:

<table>
<thead>
<tr>
<th>Name</th>
<th>Margaret Sanger</th>
<th>DOB: Sept 14</th>
<th>MRN: 00098790</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE</td>
<td>28</td>
<td>MEDICAL HISTORY: negative</td>
<td>G/P: 5/4-0-1-4</td>
</tr>
<tr>
<td>SO</td>
<td>Bill (husband)</td>
<td>OB HISTORY: without complications</td>
<td>GESTATIONAL AGE: 41 4/7's</td>
</tr>
<tr>
<td>CHILDREN</td>
<td>three children at home</td>
<td>CURRENT PREGNANCY: low lying placenta, 35 pound weight gain</td>
<td>LABOR: Retained placental fragments with manual removal, 2nd degree tear with repair</td>
</tr>
<tr>
<td>HT</td>
<td>63&quot;</td>
<td>MEDS/DRUGS: Lidocaine for repair and Fentanyl 100mcg IVP at 6 cm, at 8-9 cm and again prior to removal of uterine fragments 4 doses of Penicillin IVPB during labor, a loading dose of 5 million units and 3 subsequent doses of 2.5 million units.</td>
<td>REASON FOR ADMISSION: labor, delivered 2 hours ago, just transferred to postpartum</td>
</tr>
<tr>
<td>WT (GAIN)</td>
<td>165# (35#)</td>
<td>PHYSICAL EXAM AT TRANSFER to PP: Stable vs, yet to void, fundus at Umbilicus</td>
<td></td>
</tr>
<tr>
<td>EDUCATION</td>
<td>College Graduate</td>
<td>BIRTHPLAN: natural, did use Fentanyl IVP</td>
<td></td>
</tr>
<tr>
<td>OCCUPATION</td>
<td>4th grade teacher</td>
<td>PSYCHOSOCIAL ISSUES: None noted</td>
<td>BIRTHCONTROL: IUD DESIRED</td>
</tr>
<tr>
<td>ALLERGIES</td>
<td>none</td>
<td>CURRENT MEDICATION: prenatal vitamins</td>
<td>INFANT FEEDING: breast</td>
</tr>
<tr>
<td>PARENTAL CARE</td>
<td>yes</td>
<td>PRENATAL LABS:</td>
<td>ADDITIONAL INFORMATION:</td>
</tr>
<tr>
<td>CHILDBIRTH EDUCATION</td>
<td>yes</td>
<td>ABO/RH: A neg</td>
<td>Husband went home to tell kids about new baby</td>
</tr>
<tr>
<td>GENETIC TESTING</td>
<td>no</td>
<td>GBS: positive</td>
<td>Baby in nursery, did not nurse in LDR</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RUB: non-immune</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>H&amp;H: 11/33 at time of delivery</td>
<td></td>
</tr>
</tbody>
</table>

LEARNER OBJECTIVES & PREPARATION FOR SCENARIO

1. Identifies abnormal postpartum assessment findings
2. Utilizes knowledge of general physical assessment, demonstrates logical approach to postpartum physical assessment
3. Identifies postpartum hemorrhage and prioritizes and implements appropriate interventions
4. Utilizes team to adequately care for the patient.
SCENARIO PREP QUESTIONS FOR STUDENTS:

1. What complications are more common with grand-multips?

2. What are some common interventions for excessive postpartum bleeding?
SIM 2 & 3: ROUTINE DISCHARGE OF MOM AND BABY

SCENARIO OVERVIEW

Primary Medical Diagnosis: Normal delivery, term
Well Neonate

Secondary Medical Diagnosis: 2nd degree laceration to perineum

Marie is a 28 year old multiparous woman. She had a normal vaginal delivery with a second degree laceration to perineum at 40 4/7 weeks and delivered a healthy girl with Apgars of 7 at 1 minute and 9 at 5 minutes. No complications for mom or baby have been noted and mom would like to be discharged this morning, 48 hours after delivery. Marie was GBS positive and did receive 4 doses of IVAB prior to delivery. She still has an IV normal saline cap in her arm.

Baby has remained afebrile and nursing well. Baby received Vit K and erythromycin eye ointment one hour after birth, but parents were going to hold off and think about giving their child vaccinations.

PRETERNANT INFORMATION:

<table>
<thead>
<tr>
<th>Name: Marie Sanchez</th>
<th>DOB: January 20</th>
<th>MRN:000246810</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE: 28</td>
<td>MEDICAL HISTORY: negative</td>
<td>G/P: 4/3-0-1-3</td>
</tr>
<tr>
<td>SO: Bill (husband)</td>
<td>OB HISTORY: without complications</td>
<td>GESTATIONAL AGE: 40 4/7's</td>
</tr>
<tr>
<td>CHILDREN: With new baby, 3 kids</td>
<td>PREVIOUS SURGERIES: no</td>
<td>CURRENT PREGNANCY: neg for complications, 35 pound weight gain</td>
</tr>
<tr>
<td>HT: 68”</td>
<td>WT (GAIN): 170# (35#)</td>
<td>MEDS/DRUGS: no</td>
</tr>
<tr>
<td>EDUCATION: college graduate</td>
<td>PHYSICAL EXAM: negative</td>
<td>REASON FOR ADMISSION: labor</td>
</tr>
<tr>
<td>OCCUATION: homemaker</td>
<td>PSYCHOSOCIAL ISSUES: husband lost job</td>
<td>BIRTHPLAN: HAD EPIDURAL</td>
</tr>
<tr>
<td>ALLERGIES: none</td>
<td>CURRENT MEDICATION: prenatal vitamins</td>
<td>INFANT FEEDING: breast</td>
</tr>
<tr>
<td>PRENATAL CARE: yes</td>
<td>PERNATAL LABS</td>
<td>ADDITIONAL INFORMATION:</td>
</tr>
<tr>
<td>CHILDBIRTH EDUCATION: yes</td>
<td>ABO/RH: 0 neg</td>
<td>HBSaG: neg</td>
</tr>
<tr>
<td>GENETIC TESTING: no</td>
<td>GBS: positive</td>
<td>HIV: neg</td>
</tr>
<tr>
<td></td>
<td>RUB: non-immune</td>
<td>H&amp;H: 13/38 this morning</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name: Baby Sanchez</th>
<th>DOB: 2 days ago</th>
<th>MRN:000246811</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE: 2 days</td>
<td>MEDICAL HISTORY: term baby</td>
<td>GESTATIONAL AGE: 40.4</td>
</tr>
<tr>
<td>Exam: slightly yellow on face</td>
<td>OB HISTORY: without complications</td>
<td>REASON FOR ADMISSION: newborn</td>
</tr>
<tr>
<td>HT: 19”</td>
<td>WT: 7 lbs.1oz/3390</td>
<td>MEDS/DRUGS: no</td>
</tr>
<tr>
<td>ALLERGIES: none</td>
<td>CURRENT MEDICATIONS: none</td>
<td>INFANT FEEDING: breast</td>
</tr>
<tr>
<td>PRENATAL CARE: yes</td>
<td>PERNATAL LABS</td>
<td>ADDITIONAL INFORMATION:</td>
</tr>
<tr>
<td></td>
<td>ABO/RH: A Positive</td>
<td>Bilirubin: 10.7 serum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Newborn Screen: done</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACCUCHECK: 1 hr post delivery 64</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HEARING SCREEN: passed</td>
</tr>
</tbody>
</table>

LEARNER OBJECTIVES & PREPARATION FOR SCENARIO

Be prepared to complete a discharge for both mom and baby.
For mom, specifically familiarize yourself with:

1. Diet
2. Pericare/comfort items and Bowel care
3. Home Discharge Medications
4. Maternal Immunization needs
5. Breast Feeding Tips and Resources
6. Activity level/Lifting precautions/sexual activity
7. Depression, Edinburg Screening Test
8. Follow-up and resources

For Baby, specifically familiarize yourself with:
1. Feeding and Sleeping
2. Diapering, Cord Care, Bathing
3. Warmth and Safety
4. Signs and symptoms of illness
5. Car Seat
6. Jaundice frequent feedings
7. Follow-up pediatric care and resources

SCENARIO PREP QUESTIONS FOR STUDENTS:

1. What medications do you think you need to administer before discharge?

2. What methods of infant care are the best, the nurses or the parents, why?