# NURS 3337: Nursing Care of Childbearing Families
## Clinical Education Center and Simulation
### Day 2 Experience
#### Lab Workbook KEY

## 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 activates 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

SUPPLIES: none

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?

- Delivery, amniocentesis, placenta abruption, version, miscarriage, abortion, maternal trauma transfusion.

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

- Hemolytic disease of the newborn (erythroblastosisfetalis)
- Severe anemia, enlarged liver and spleen, edema, respiratory distress, heart failure, and mental retardation and fetal/neonatal death.

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

- Research has demonstrated that occult maternal-fetal bleeds can occur with no symptoms and sensitize the mother prior to delivery. After sensitization, Rhogam or Rhophylac is not effective.

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

- If a large fetomaternal transfusion is suspected, the test determines amount of fetal blood that is in the maternal circulation. It will determine amount of Rhogam or Rhophylac that is needed to suppress Rh(+)
- Antibody formation.

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 web site, 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-positivered 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**

**SUPPLIES:** Breast feeding visual, With Child Visual, Nipple Shield, Baby Bellies Visuals

What are TRUE contraindications to breast feeding?

- Maternal Infections: HIV infection (only if replacement feeding is affordable, feasible, acceptable, sustainable, & safe); Varicella infection; Human T-cell leukemia virus type 1
- Maternal Infections where pumped breast milk can still be feed to infants but direct contact with infant is contraindicated
  - Active TB infection; Active herpetic lesions on breast; H1N1 infection
- Galactosemia in infant (infant is unable to utilize galactose-component of lactose in milk)
- Maternal Substance Abuse (not all types of substance are absolute contraindications to breastfeeding)
  - Cocaine, Cannabis, Phencyclidine (PCP), Alcohol
  - Maternal Medications: Antineoplastic, antimetabolic agents; Some anticonvulsants; Amiodarone; Radioactive isotopes

What are the basic concepts of positioning for breast feeding?

- Have mom sit straight up in chair, put a pillow in lap, skin-to-skin contact is best (tummy-to-tummy), remove wraps so baby is alert enough to feed, baby should lay horizontally on pillow with their head in the same line as their bottom,

**Activity #1:** Label below some common breast feeding/hand positions

Below are Common Hand Positions: C-Hold, U-Hold, and Scissor Hold

- A = U-Hold; B = C-Hold; C = Scissor Hold

![Activity Image]
To the left are common feeding positions: Cradle, Cross-Cradle, Side Lying, Football Hold, Laid Back

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?
- Think sandwich! Which way is it easier for you to eat a sandwich? Short ways or long ways?
- U-Hold is best. You want mom’s fingers parallel to the baby’s lips so that the compressed breast conforms to the shape of the baby’s mouth.
- Make sure the mom’s fingers are at least 1 to 2 inches away from the areola

What is the capacity of the Newborn stomach?
Newborn’s stomach has capacity of 50–60 ml

What is “latch-on”?
- Where the infants tongue elongates the nipple and compresses the lactiferous sinuses beneath the areola against the baby’s hard palate facilitating access to milk ducts beyond the base of the nipple.

What are signs of good latch on?
- Top and bottom lips are wide open
- Lower lip is turned outward against the breast
- The chin is touching the breast, and the nose is close to the breast
- The cheeks are full
- The tongue comes out over the lower lip during latch-on and stays below the areola during nursing

What are signs of poor latch-on?
- Contact between the upper and lower lip at the corners of the mouth
- Sunken cheeks
- Clicking sounds (indicate breaking suction)
- Tongue not visible below the nipple when lower lip is pulled down
- Creased nipple following nursing
What are causes of poor latch-on?
- Inverted nipples, poor hand position, neurologic complications

What can you do to assist in latch-on?
- Adjust infant and/or mom’s positioning
- Use a pump or other device to draw out the nipple prior to breastfeeding
- Use a nipple shield

Activity #3: Practice in groups different breast feeding positions with breastfeeding model

Skill #3: Epidurals

SUPPLIES: Alaris with epidural/PCA channel attached to right side, 60cc Terumo syringe w/ epidural tubing attached; Turn pump on, set to L&D, pick 0.1% bupiv 2 mcg/ml Fentanyl, continuous, select 8 mL/hr; can program a bolus using code 003; 60 cc Luer Lock Syringe with labels reading “Bupivacaine 0.1% with Fentanyl 2 mcg/ml in 50 mL”; Epidural order sets (On Y drive in OB day 2, OB chart folder) IV primary line supplies; Karen brought epidural placement set

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?
- When labor established and mom request; not based on a specific dilation amount.

Is there a time when it is too late for an epidural?
- When delivery is imminent, for example a multip at crowning.

What are some risks and side effects of continuous lumbar epidurals?
- Needle into spinal fluid (Spinal headache)
- No relief from pain
- Infection
- Hypotension
- Decreased perfusion of placenta
- Decreased motor sensation
- Bladder distension (may need to insert foley catheter)
- Nausea, vomiting (use of opiates)
- Prolonged second stage of labor
- Fetal bradycardia

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

Scan local hospital order sheet to review with the group
- Verify MD’s orders for epidural anesthesia.
- Confirm signed informed consent by the doctor and patient in the medical record.
- Perform hand hygiene.
- Initiate or maintain IV access. Give 500-1000ml fluid bolus if ordered.
- Obtain baseline pulse, blood pressure, pulse, and pulse oxygenation.
- Conduct a “Time Out” to verify: right patient using 2 identifiers, consent signed, and correct part of the body identified.
- Continuous FHR and contraction monitoring before and after epidural anesthesia.
- Mask if close to sterile field (to prevent droplet exposure during procedure).

Assist the patient into the correct position for epidural placement (either sitting on side of bed with head placed on pillow leaning forward or on modified lateral Sims position with shoulders parallel, legs lightly flexed and back arched outward. Anesthesiologist will decide on position.

Explain sensations to patient: 1st she will feel a bee sting sensation during the numbing of the skin. Then she may feel an electric shock as the catheter is placed. Ask the patient to identify which side she feels the sensation.

What is nursing care for a patient with an epidural anesthesia?
- Reposition the patient to a comfortable position on left lateral
- Check pain level, sedation level, VS (pulse, BP, HR, SpO2), and motor level according to hospital policy
- Check sensory levels of mom using bag of ice or ice in glove according to hospital policy
  - If level of block rises above T6 during check stop infusion immediately and call anesthetist
- Check Fetal Well Being via continuous fetal monitoring
- RN’s must call provider to change any settings
- Still need to perform 6 rights and record settings in MAR
• Record input amount of epidural medication according to hospital policy
• Ensure epidural pump is locked, has proper tubing (yellow with no injection ports!), and is labeled so nothing else is put through this line
• Monitor output
• Monitor for headache, nausea, vomiting, itching

Activity #2: In group do the following
1. Go over Epidural pump/order sheet in group
2. Discuss nursing care of patients with epidural anesthesia

Assessing level of sedation

To help determine whether the patient is receiving an appropriate level of pain control—one that keeps him free from pain, but not overmedicated—try using the Modified Ramsey Scale. Level 2 is what you’re trying for.

<table>
<thead>
<tr>
<th>Level 1: Anxious, agitated, or restless</th>
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<tbody>
<tr>
<td>Level 2: Cooperative, oriented, and tranquil</td>
</tr>
<tr>
<td>Level 3: Responsive to command only</td>
</tr>
<tr>
<td>Level 4: Briskly responsive to loud auditory stimulus or glabellar tap</td>
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<tr>
<td>Level 5: Sluggishly responsive to loud auditory stimulus or glabellar tap</td>
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<tr>
<td>Level 6: Not responsive to loud auditory stimulus or glabellar tap</td>
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EPIDURAL/PATIENT CONTROLLED EPIDURAL ANALGESIA ORDER SET

1. ANALGESICS:
   Patient Allergies:  
   Weight: 75.4 kg
   A. Initial dose already given via [ ] Epidural  [ ] Intrathecal
   Drug: 0.1% Ropivacaine  Dose: 3 cc  Time: 0000
   B. Epidural is [ ] lumbar catheter  [ ] thoracic catheter
   C. CONTINUOUS EPIDURAL INFUSION: IN 0.9% NaCl (preservative free)
   [ ] Ropivacaine (Naropin) 0.15% with Fentanyl 2.5 mcg / ml @  dosage ml/hr
   [ ] Bupivacaine (Marcaine) 0.1% with Fentanyl 2 mcg / ml @ dosage ml/hr
   [ ] Other:
   D. [ ] PCEA (Patient Controlled Epidural Analgesia) – see PCA order set
   E. FOR BREAKTHROUGH PAIN give: SELECT ONE
   [ ] Morphine mg IV every hour
   [ ] Fentanyl mcg IV every hour
   [ ] Ketorolac mg IV every 6 hours PRN x doses
   [ ] Epidural Bolus Dose ml every hour(s) for severe pain unresolved from above IV bolus
   [ ] Other:
   F. No systemic opioids, benzodiazepines, treatment anticoagulants, or other CNS or respiratory depressants except those ordered by Anesthesiology. May resume surgeon’s or PCP’s analgesic orders at Date:  
      Time:

2. IV FLUIDS:
   Maintain IV access while epidural is in place and for 24 hours after last epidural OR spinal Opioid dose. IV fluids and rate as per surgeon’s or PCP’s orders unless otherwise instructed.

3. AMBULATION/POSITIONING:
   May ambulate as tolerated if Motor Function Scale is 4 and verified with surgeon or attending.
   [ ] HOB elevated 20 – 30 degrees unless contraindicated:

4. ANTICOAGULANTS:
   [ ] "Patient at risk for epidural bleeding, no anticoagulants if epidural in place unless authorized by an anesthesiologist"
   If ordered by the primary service AND checked below, the following anticoagulants are allowed while epidural is indwelling:
   [ ] Aspirin
   [ ] Heparin 5000 units
   [ ] Enoxaparin 40 units OR less
   All other anticoagulants, including enoxaparin twice a day, and Heparin IV CANNOT be administered during epidural therapy without anesthesia approval. Do not restart anticoagulants until 12 hours after epidural catheter is removed.

5. Naloxone (Narcan) 0.4 mg and a 3 ml syringe available.
6. Ephedrine 50 mg ampule and a 3 ml syringe available
7. MONITORING:
   A. Lumbar epidural catheters Vital signs will include: BP, P, R, Pulse ox, pain scale, Ramsay Sedation scale, sensory level and motor function.
      Vital sign frequency:
      - Upon epidural initiation, patient arrival or after each nurse initiated bolus during the first 24 hours – every 15 min x 2, every 30 min x 2, every 1 hr x 12 hours, every 2 hrs x 12 hours, then every 4 hrs after the last epidural dose and removal of catheter.
   B. Thoracic epidural catheters Vital signs will include: BP, P, R, Pulse ox, pain scale, Ramsay Sedation scale, sensory level and motor function.
      - Vital sign frequency for: upon epidural initiation - every 5 minutes x 3, every 15 min x 2, every 30 min x 2, every 1 hr x 12 hours, every 2 hrs x 12 hours, then every 4 hrs until 24 hours after the last epidural dose and removal of catheter.

Date:  
Physician Printed Name:  Dr. Bernstein

Epidural/Patient Controlled Epidural Analgesia Order Set

PHYSICIAN ORDER SET

Place Patient Label Here

*ANES* MR0131v061511.1 EPIDURAL Page 1 of 2
• Upon patient arrival or after each nurse initiated bolus during the first 24 hours—every 15 min x 2, every 30 min x 2, every 1 hr x 12 hours, every 2 hrs x 12 hours, then every 4 hrs until 24 hours after the last epidural dose.
C. Side effects, urine output, dressing appearance, temp upon arrival and every 4 hours until 24 hours after the last epidural dose.
D. Continuous pulse-oximetry x 24 hours. Alarm must be audible at nurse station or via telemetry.

8. SUPPLEMENTAL O₂:
O₂ at 1L nasal cannula and titrate to 90% SpO₂ for first 24 hours after Initiation
• Titrate to 90% SpO₂ after first 24 hours.

9. TREATMENT OF SIDE EFFECTS:
A. For Respiratory Rate less than 10 / min, or SpO₂ less than 90% or sedation scale greater than or equal to 3 or patient is difficult to arouse; give Naloxone (Narcan) 0.1 mg IV push every 1 min (titrate to satisfactory response), call Anesthesiologist and respiratory therapy; stop epidural infusion, and administer 100% O₂ per face mask
B. If patient is apneic and unarousable; give Naloxone (Narcan) 0.4 mg IV push and initiate Code Blue.
C. For Nausea or Vomiting: (SELECT ONE)
   □ Promethazine 6.25-12.5 mg IV every 6 hours PRN OR
   □ Ondansetron (Zofran) 4 mg IV every 4-6 hours PRN OR
   □ Naloxone (Narcan) 40 mcg (0.04 mg) IV every 5 min. May repeat x 3 OR
   □ For refractory nausea or vomiting, may start:
   Naloxone infusion: 1 mg in 250 ml D5W at 20 ml/hr. Call anesthesiologist for unresolved symptoms or pain.

D. For Pruritus: If no apparent allergic reaction. (SELECT ONE)
   □ Diphenhydramine 25 – 50 mg IV every 6 hours PRN OR
   □ Nalbuphine (Nubain) 5 mg IV every 4-6 hours PRN OR
   □ Naloxone (Narcan) 40 mcg (0.04 mg) IV every 5 min. May repeat x 3.
   □ For refractory Pruritus, may start: Naloxone infusion 1 mg in 250 ml D5W at 20 ml/hr.

Call anesthesiologist for unresolved symptoms or pain.
E. For Urinary Retention: (if Foley not in place)
   □ If no void x 6 h, may insert Foley PRN.
F. For Hypotension (Systolic Blood Pressure less than 90 mmHg, or orthostatic):
   □ Give 250 ml IV of normal saline or NS Bolus - Recheck Blood Pressure: Lie patient flat, check sensory level and I&Os

    For emergencies call Trauma Anesthesia at 303-855-5923

A. Respiratory Rate less than 10 / min
B. Decreased Level of Consciousness, sedation scale 3 or greater
C. Inadequate analgesia
D. SpO₂ less than 90% frequently or greater than 1 min
E. Hypotension: Systolic Blood Pressure less than 90 mmHg, or postural Systolic Blood Pressure drop greater than 15 mmHg
F. Sensory level higher than T4, or significant motor block (Motor Function Scale greater than 2)
G. Epidural Catheter Problems: kinked, pump alarms, leak at catheter site, unilateral block, difficulty removing the catheter
H. Persistent side effects despite treatment
I. Inability to void for 6 hours or bladder distention
J. Signs and Symptoms of Local Anesthetic toxicity

11. OTHER ORDERS:

Date: Today Time: 0700 Physician Signature: Dr. Benstein
Physician Printed Name: Dr. Edward M. Benstein

The Medical Center of Aurora
Centennial Medical Plaza

Epidural/Patient Controlled Epidural Analgesia Order Set
PHYSICIAN ORDER SET

*ANES* MR0131v061511.1 EPIDURAL

Place Patient Label Here

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Skills Related to the Newborn

Skill #1: Elimination

Supplies: Newborn dirty diaper visuals and baby models

What is the minimum output a newborn should have in the first 24 hours after birth?
- Newborns should have a minimum of one wet diaper and one meconium stool by 24 hours of age.

What could be the causes of delayed clearance of meconium?
- Delayed or failed lactogenesis, poor lactation management, ineffective milk transfer, and rarely intestinal obstruction r/t cystic fibrosis

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?
- Assess fluid intake – is baby getting a good latch/milk transfer w/ feedings
- Assess for restlessness, abdominal distension, s/s of pain/discomfort

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

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

Minimum Output By Day of Life:
- Day 1: 1 wet diaper and 1 stool
- Day 2: 2 wet diapers and 2 stools
- Day 3: 3 wet diapers and 3 stools
- Day 4: 4 wet diapers and 3 to 4 stools
- Day 5: 5 wet diapers and 3 to 4 stools

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)?
- Breastfed babies should lose no more than 7% of their body weight in the first 5 days of life but should regain their birth weight by 10 – 14 days.
- Breast feed whenever they show s/s of hunger: movement of hands toward mouth, sucking on fists and fingers, fussiness, sticking tongue out, root reflex, agitation, flailing of extremities, loud, persistent crying.
- Babies should breastfeed every 2 – 3 hours initially, which means 8 – 10 times a day.
- After day 5 frequency of voiding should be 6 to 8 times a day
- After day 4 babies should have 3 or more stools a day, often timed with feeding.
- Stools usually appear pale yellow and seedy.

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?
- Formula fed babies should lose no more than 5% of their body weight after birth and should regain their birth weight by 10 - 14 days.
- Same as above for breast feed frequency
- Formula is not as easily digested so may only have 1-2 stools a day
- Voiding should be the same as above
- Stools usually appear pale yellow and are formed or pasty (like peanut butter)

What are signs and symptoms of constipation in an infant?
- Hard/firm stools, NOT constipation if the stool is soft
• Grimacing or crying with defecation
• Distended abdomen

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

Newborn Gestational Age Assessment:
- When should it be done & why is it done?
  • Needs to be done soon after delivery
  • There are other methods for determining gestational age
- Different tools used – what do they assess and between what gestational ages are they typically accurate?
  • all assess physical and neurologic maturity of infant
  • New Ballard Score is accurate for assessing infants from 20 – 44 weeks

**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>
</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. Score as shown in the above diagram.

**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?
Answer: 13-14

**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?
Answer: 13

<table>
<thead>
<tr>
<th>Physical maturity</th>
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<tbody>
<tr>
<td><strong>Skin</strong></td>
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<tr>
<td>Sticky; friable;</td>
</tr>
<tr>
<td>transparent</td>
</tr>
<tr>
<td>Gelatinous; red;</td>
</tr>
<tr>
<td>translucent</td>
</tr>
<tr>
<td>Smooth; pink;</td>
</tr>
<tr>
<td>visible veins</td>
</tr>
<tr>
<td>Superficial</td>
</tr>
<tr>
<td>peeling and/or</td>
</tr>
<tr>
<td>rash; few veins</td>
</tr>
<tr>
<td>Cracking pale</td>
</tr>
<tr>
<td>areas; rare veins</td>
</tr>
<tr>
<td>Parchment deep</td>
</tr>
<tr>
<td>cracking; no</td>
</tr>
<tr>
<td>vessels</td>
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<td>Leathery;</td>
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<tr>
<td>cracked; wrinkled</td>
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<td><strong>Lanugo</strong></td>
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<td>Sparse</td>
</tr>
<tr>
<td>Abundant</td>
</tr>
<tr>
<td>Thinning</td>
</tr>
<tr>
<td>Bald areas</td>
</tr>
<tr>
<td>Mostly bald</td>
</tr>
<tr>
<td><strong>Plantar creases</strong></td>
</tr>
<tr>
<td>Heel-toe &gt;50 mm;</td>
</tr>
<tr>
<td>no crease</td>
</tr>
<tr>
<td>Heel-toe &lt;40 mm;</td>
</tr>
<tr>
<td>&lt;2 crease</td>
</tr>
<tr>
<td><strong>Breast</strong></td>
</tr>
<tr>
<td>Imperceptible</td>
</tr>
<tr>
<td>Barely perceptible</td>
</tr>
<tr>
<td>Flat areola; no</td>
</tr>
<tr>
<td>bud</td>
</tr>
<tr>
<td>Stippled areola;</td>
</tr>
<tr>
<td>1-2 mm bud</td>
</tr>
<tr>
<td>Raised areola; 3-4</td>
</tr>
<tr>
<td>mm bud</td>
</tr>
<tr>
<td>Full areola; 5-10</td>
</tr>
<tr>
<td>mm bud</td>
</tr>
<tr>
<td><strong>Eye/ear</strong></td>
</tr>
<tr>
<td>Lids fused loosely: -1</td>
</tr>
<tr>
<td>Lids open; pinna flat; stays folded</td>
</tr>
<tr>
<td>Slightly curved pinna; soft with slow recoil</td>
</tr>
<tr>
<td>Well-curved pinna; soft but ready recoil</td>
</tr>
<tr>
<td>Formed and firm with instant recoil</td>
</tr>
<tr>
<td>Thick cartilage; ear stiff</td>
</tr>
<tr>
<td><strong>Genitals (male)</strong></td>
</tr>
<tr>
<td>Scrotum flat, smooth</td>
</tr>
<tr>
<td>Scrotum empty; faint rugae</td>
</tr>
<tr>
<td>Testes in upper canal; rare rugae</td>
</tr>
<tr>
<td>Testes down; good rugae</td>
</tr>
<tr>
<td>Testes pendulous; deep rugae</td>
</tr>
<tr>
<td><strong>Genitals (female)</strong></td>
</tr>
<tr>
<td>Clitoris prominent; labia flat</td>
</tr>
<tr>
<td>Prominent clitoris; small labia minora</td>
</tr>
<tr>
<td>Prominent clitoris; enlarging minora</td>
</tr>
<tr>
<td>Majora and minora equally prominent</td>
</tr>
<tr>
<td>Majora large; minora small</td>
</tr>
<tr>
<td>Majora cover clitoris and minora</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).
Answer: 34-35 weeks

<table>
<thead>
<tr>
<th>Maturity rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
</tr>
<tr>
<td>-10</td>
</tr>
<tr>
<td>-5</td>
</tr>
<tr>
<td>0</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>35</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>45</td>
</tr>
<tr>
<td>50</td>
</tr>
<tr>
<td><strong>Gest. Age, Weeks</strong></td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>22</td>
</tr>
<tr>
<td>24</td>
</tr>
<tr>
<td>26</td>
</tr>
<tr>
<td>28</td>
</tr>
<tr>
<td>30</td>
</tr>
<tr>
<td>32</td>
</tr>
<tr>
<td>34</td>
</tr>
<tr>
<td>36</td>
</tr>
<tr>
<td>38</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>42</td>
</tr>
<tr>
<td>44</td>
</tr>
</tbody>
</table>
**Skill #3: Classification of Newborns – Based on Maturity and Intrauterine Growth**

**Supplies:** growth charts, baby scale, measuring tapes, baby mannequins

**Define the Following Terms:**

- **Large for Gestational Age:** > 90th percentile, 4000-4500g
- **Small for Gestational Age:** < 10th percentile
- **Appropriate for Gestational Age:** 10th – 90th percentile
- **Pre-term:** <36 weeks, 6/7ths (depends on facility definition some say 38 weeks r/t increased morbidity and mortality below 38 weeks)
- **Full-term:** 37– 41 weeks, 6/7th
- **Post-term:** >42 weeks

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

**Answer:** Preterm large for gestational age.

**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?

**Answer:** Possibly, large for gestational age and breathing spontaneously with good Apgar scores. Monitor blood sugars and temperature stability; probably keep on continuous pulse oximetry, O2 supplement if necessary.

**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:

**Answer:** Full term SGA

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

**Answer:** Preeclampsia is a large factor. Baby is probably well developed internally, but small and scrappy! Monitor blood sugars (due to SGA status) and temperature frequently due to low body weight.

**Activity #3:** Practice weighing, and measuring length and head circumference on the baby mannequins

- **Weight:** Average term infant weighs 3405 g (7 lb, 8 oz)
- **Length:** Average at term measures 48 to 52 cm (18 – 22 in.); put infant flat on their back and extend legs as much as possible to measure
- **Head Circumference:** Average at term = 32 to 37 cm (12.5 – 14.5 in.); place tape over most prominent part of occipit and bring tape just over eyebrows.
Classification of Newborns – Based on Maturity and Intrauterine Growth

**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

**Week of Gestation**

- **GM**
  - 4000
  - 3800
  - 3600
  - 3400
  - 3200
  - 3000
  - 2800
  - 2600

**INTRAUTERINE WEIGHT-LENGTH RATIO**

- 100 g GRAMS/L^2 CENTIMETERS

**1st Exam (X)**

**2nd Exam (O)**

**LARGE FOR GESTATIONAL AGE (LGA)**

**APPROPRIATE FOR GESTATIONAL AGE (AGA)**

**SMALL FOR GESTATIONAL AGE (SGA)**

**Age at Exam**

**Signature of Examiner**

M.D./R.N.  M.D./R.N.


**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?

**Answer:** Elevated levels of unconjugated bilirubin can cause Kernicterus. Generally thought to occur with bilirubin levels above 20 mg/dl in full term infants. Staining the brain tissue causing an encephalopathy of the brain (irreversible mental and motor brain damage). There is a 50% survival rate.

**Assessment of Jaundice:**
- Jaundice appears in a cephalocaudal manner:
  - First appears on the head, including sclera of the eyes and mucous 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).

**Schema for grading extent of jaundice**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Extent of Jaundice</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>None</td>
</tr>
<tr>
<td>1</td>
<td>Face and neck only</td>
</tr>
<tr>
<td>2</td>
<td>Chest and back</td>
</tr>
<tr>
<td>3</td>
<td>Abdomen below umbilicus to knees</td>
</tr>
<tr>
<td>4</td>
<td>Arms and legs below knees</td>
</tr>
<tr>
<td>5</td>
<td>Hands and Feet</td>
</tr>
</tbody>
</table>

**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):

![Transcutaneous Bilirubinometer](image)

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

![Bilirubin graph](image)

**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 24 hr of age
  - Persists beyond the age of resolution of physiologic jaundice in the term and preterm infant
  - Increases more than 0.5 mg/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?
Answer: Undress him totally, blanche skin, and evaluated extent of jaundice in a caudal fashion.

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

What should you do next?
Answer: Notify MD.

You receive orders for Serum bilirubin, which comes back 8.0 at 18.5 hrs. What should you do?
Answer: Notify MD; get orders to start bilibed.

Care for infant on bilibed?
Answer: Monitor temp.
  - Frequent feedings
  - Educate parents of condition and importance of infant to spend as much time on bed, not being held.

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

**SKILL #3: Heal Sticks**

**SUPPLIES: heal stick demo model, warming pack demo model, sweeties, baby models**

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?
- LGA, SGA, infant of a diabetic mother, preterm infant.

What are some potential complications of this procedure?
- Infection, scarring, calcified nodules, or bruising may occur at the puncture site. Inspect the site daily.

What should be documented after this procedure?
- Note the date and time of the procedure, site of the puncture, the number of samples obtained, the amount of blood loss, and the child’s response to the procedure.
- Document any associated teaching provided to the parents or guardian and their understanding of that teaching.

**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 s/s of hypoglycemia. Samples should be obtained before feedings.
At Risk Infants:  
- Premature infants  
- Infants of diabetic mothers  
- Infants who require intensive care  
- Infants of mothers treated w/beta adrenergic or oral hypoglycemic agents  
- Infants w/polycythemia  

<table>
<thead>
<tr>
<th>Signs/Symptoms of Hypoglycemia in Infant:</th>
</tr>
</thead>
</table>
| • Jitteriness and/or tremors  
| • Hypotonia  
| • Change in LOC (irritability, lethargy, stupor)  
| • Apnea, bradycardia, and/or cyanosis  
| • Tachypnea  
| • Poor suck or poor feeding  
| • Weak or high-pitched cry  
| • Hypothermia  

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" × 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.

• 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:
  S/S of poor perfusion, localized edema at site, s/s of infection, ecchymosis, 2mm away from prior puncture sites

• 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

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

  Note the date and time of the procedure, site of the puncture, the number of samples obtained, if heat or sweeties used, the amount of blood loss, and the child's response to the procedure. Document any teaching provided to the parents or guardian and their understanding of the teaching based on return demonstrations observed.

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.

Note to Instructors, show students Sweeties™, discuss how they are used to decrease pain, how warm pack is applied to heal to promote vasodilatation, and discuss how the entire circle must be saturated in order to have an adequate newborn screen.
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 year old 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: Margaret Sanger</th>
<th>DOB: Sept 14</th>
<th>MRN: 00098790</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGE: 35</td>
<td>MEDICAL HISTORY: negative</td>
<td>G/P: 5/4-0-1-4</td>
</tr>
<tr>
<td>SO: Bill (husband)</td>
<td>OB HISTORY: without complications</td>
<td>GESTATIONAL AGE: 414/7's</td>
</tr>
<tr>
<td>CHILDREN: 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: 63”</td>
<td>WT (GAIN): 165# (35#)</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>
</tr>
<tr>
<td>EDUCATION: College Graduate</td>
<td>PHYSICAL EXAM AT TRANSFER to PP: Stable v/s, yet to void, fundus at Umbilicus</td>
<td>BIRTHPLAN: natural, did use Fentanyl IVP</td>
</tr>
<tr>
<td>OCCUPATION: 4th grade teacher</td>
<td>PSYCHOSOCIAL ISSUES: None noted</td>
<td>BIRTHCONTROL: IUD DESIRED</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>PRENATAL LABS:</td>
<td>ABO/RH: A neg</td>
</tr>
<tr>
<td>CHILDBIRTH EDUCATION: yes</td>
<td></td>
<td>HBSaG: neg</td>
</tr>
<tr>
<td>GENETIC TESTING: no</td>
<td></td>
<td>GBS: positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIV: neg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RUB: non-immune</td>
</tr>
<tr>
<td></td>
<td></td>
<td>H&amp;H: 11/33 at time of delivery</td>
</tr>
</tbody>
</table>

ADDITIONAL INFORMATION:
Husband went home to tell kids about new baby
Baby in nursery, did not nurse in LDR

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?
   a. Breech
   b. Bleeding
   c. Precipitous labor
   d. Placenta previa/low lying placenta?

2. What are some common interventions for excessive postpartum bleeding?
   1) Check H&H (this will be toward the end)
   2) Fundal massage
   3) Bladder scanner/Empty bladder
   4) Assess the perineum
   5) Add Pit to IV
   6) Medications
      (1) Pitocin (Oxytocin)
          (a) Action: stimulates uterine smooth muscle. Has vasopressor and antidiuretic effects.
          (2) On the floor often given wide open for PPH; however drug resources say for PPH only administer via pump at 10 to 40 milliunits per minute, can go up to 80 mU for short period.
      (3) Methergine (Methylergonovine)
          (a) Ergot alkaloid
          (b) Action: stimulates uterine and vascular smooth muscle.
          (c) Contraindications: HTN, careful with concomitant use with vasopressors.
      (4) Cytotec (misoprostol)
          (a) Prostaglandin analogue
          (b) Caution with previous C-section may cause uterine rupture
      (5) Hemabate
      (6) Lomotil
   7) Increase fluids, isotonic NS or LR
   8) Give oxygen, 100%
   9) Weigh chux and pads
   10) Head down to increase perfusion
   11) Call for help (sooner rather than later, possibly after fundal massage or empty bladder)
Simulation 1 Staff Guide:

Patient Care Simulation Set-up/Supplies
- Noelle and birthing baby (baby will be brought in by sim tech during the sim, if requested by students, so mom can Breast feed)
- ID Bracelet on Mother and baby
- Patient gown
- Peri-pads with blood and clots and under garment
- IV in right arm, 18 gage saline lock
- Injection Pad
- IV pump

Uterus in place – on Boggy setting
- Set BP to repeat every 1 min.
- Black cherry Jell-O for clots and pads saturated with red liquid
- Red food coloring or other material to make blood

Preparation of Medications
- Pitocin 30 u in 500 mL of NS
- 500 ml of bags of NS
- Methergine (methergovine) 0.2 mg/mL ampule
- Normal saline flushes
- Filter needles
- IV primary tubing
- Medicine cups, Calculator, Drug book
- Patient labels

Equipment at Bedside
- Bedside commode with fabricated urine and 3, 10 x 10cm clots
- Peri Pads
- Washcloths
- Chux
- Rinse bottle, ice pack, Lanolin cream and breast pads

Diagnostic Forms/Diagnostics to prepare
- Chart prepared forms in binder with each form in pocket protector:
  - PostPartumOrders
  - MAR

Documents needed during the SimNurses Notes
- Bladder Scan report – about 100ml urine report.
- Student Observation Form
  - DH SBAR form by phone - on Y drive in Integration folder
  - Blank provider order sheet by phone

Timeline Guide for Staff – This Sim is a total of 50 min.

10 min: Studentsto discuss action plan without staff present; review overview and consider a plan; and consider filling out nurses notes from the information given.

At 10 min mark: Sim tech disrupts students and gives the pre-assigned observer the observation form (this is not to be given in advance). The Tech says “I think you should come to check on Margaret, she has clots in the commode and doesn’t look so good.” Tech then exits the scene.

10 min into Sim Begin Simulation for 20 min for early postpartum hemorrhage with one observer.

Sim patient Helen Sim #8

Sim Tech will bring in copy of bladder scanner if requested by students.
Sim Tech will also be physician and give phone orders if requested by students
Sim Tech will bring in baby to nurse, if requested by students
Instructor will be voice of patient
Sim Tech will help with mannequin bleeding, vital sign changing etc.

At 30 min mark Simulation is complete
At 30 min mark Begin De-brief for 20 min.
SIMULATION #1 SPECIFIC STUDENT GUIDED EVALUATION

Students Participating:

________________________________________________________

Student Observer: ____________________________________________

<table>
<thead>
<tr>
<th>Element</th>
<th>Completed</th>
<th>Not Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Universal Competencies: Introduce self to client, Hand hygiene/Asepsis, Verify client name and ID, Verify allergies, patient dignity, patient privacy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assess vital signs to include pulse ox and pain (PQRST)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Performs focused postpartum assessment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of Fundus and perineum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of bleeding in pad and bedside commode</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assessment of bladder, adequately emptied?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changes pad with appropriate hand hygiene</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition of postpartum hemorrhage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognizes need for nursing intervention such as: (circle interventions completed)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>fundal massage, bladder scanner, lower head of bed, oxygen: type:_______</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Addresses breast feeding as nursing intervention for uterine contraction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calls physician and communicates the pertinent information using SBAR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administers first medication for bleeding: Which medication? ____________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administers second medications for bleeding. Which medication?___________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration of medications (All Right of Medication Administration)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration of Pain medication if applicable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration of NS IV bolus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reassessment after nursing interventions performed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient and Family Centered Care: Supports patient and her family using therapeutic communication addressing anxiety regarding increased bleeding.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use of Resources – bladder scanner, baby to BF, provider to see patient, charge nurse for assistance?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Guided Patient Response Guide

<table>
<thead>
<tr>
<th>General</th>
<th>Name – Margaret Sanger DOB: 9/14</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allergies: none</td>
</tr>
<tr>
<td></td>
<td><strong>VS:</strong> ________________________</td>
</tr>
<tr>
<td></td>
<td><em>(s/s of PPH: lightheadedness/syncope, oliguria, tachycardia, and hypotension)</em></td>
</tr>
</tbody>
</table>

During initial assessment

- “I am having really bad pain and cramping.”
- “I just used the bedside commode and I had a lot of bleeding with some clots”
- “I just put on a new pad, about 5 minutes ago”
- “My pain is an 8.” If they ask – “in my stomach, sharp and cramping”
- “That really hurts, don’t push on me.”

During interventions, patient is quite, not responding to all questions asked, tired, groggy.

- “Is everything okay?” Weak voice, act different - groggy

If interventions performed without explanation

- “What are you doing?” - agitated
- “I am so tired and dizzy”

If interventions performed without explanation

- “How much is she bleeding?”
- “How often is she soaking a pad?”
- “What are her vital signs?”
- “Is her uterus firm or boggy?”
- “Is her bladder empty?”
- “What have you given her so far”
- “If she goes to the OR, is her IV adequate? (Student should realize they a large IV – 18 gage and may need a second IV site.”

If no interventions performed or delay in performing interventions:

- Blood pressure continues to drop and heart rate increases.
- Patient continues to get more somnolent and less responsive.

Provider Participant Response Guide: J Jones, MD

Scenario overview: Pt is at having postpartum bleed. Orders on MAR are for Methergine 0.2mg IM every 4 hours for heavy bleeding and Pitocin 30 units in 500 ml of NS

<table>
<thead>
<tr>
<th>Questions if SBAR is incomplete</th>
<th>“How much is she bleeding?”</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>“How often is she soaking a pad?”</td>
</tr>
<tr>
<td></td>
<td>“What are her vital signs?”</td>
</tr>
<tr>
<td></td>
<td>“Is her uterus firm or boggy?”</td>
</tr>
<tr>
<td></td>
<td>“Is her bladder empty?”</td>
</tr>
<tr>
<td></td>
<td>“What have you given her so far”</td>
</tr>
</tbody>
</table>
|                                 | “If she goes to the OR, is her IV adequate? (Student should realize they a large IV – 18 gage and may need a second IV site.”

<table>
<thead>
<tr>
<th>Orders</th>
<th>If only one medication given – order the other one – MethergineIM or Pitocin IV</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Methergine – ask about BP, contraindicated in patients with hypertension</td>
</tr>
</tbody>
</table>
“Start Pitocin as ordered.” OR
“Give her Methergine IM as ordered”
“Oh and also give a bolus of 1000 ml of Normal Saline” and let’s add Methergine 0.2mg po every 6 hours”

GUIDED DEBREIFING QUESTIONS
(For All OB Simulations)

1. So how did it go? How did that feel for everyone?

2. As you think about all the things you need to do, what were some of your priorities?

3. What new skills did you need to know and perform for this scenario?

4. Ask the Observer - What items did they complete?

5. Ask the Observer - What items did they NOT complete?

6. Ask the Observer - What would you do differently if we repeated the scenario?

7. How was the team communication?

8. Any lingering questions?

POSSIBLE SIMULATION SPECIFIC QUESTIONS

1. Was this patient at risk for bleeding? Why?
   - Yes
   - Multiparity, large baby, vacuum assisted delivery, long labor, augmentation of labor, difficulty delivery, retained placental fragments.

2. What other information regarding her history was significant in planning her medications?
   - History of HTN, IV access, H&H values

3. The patient complained of severe abdominal pain. Is this normal after vaginal delivery?
   - No

4. How much bleeding is normal/abnormal?
   - Normal = 1 pad per hour and a few grape size clots, abnormal- soaked pad in less than 1 hour, a few large clots, many small clots 1 point drop in HGB = 500 ml blood loss.

5. Did you recognize the patient was bleeding excessively? At what point? Did you make this the priority of care?
   - Should have been the priority

6. What did/should you have done when you recognized this was the priority?
   - Nursing process related to bleeding, assess, interventions and reassess

7. Did you use the nursing process to help you make decisions on performing care?

8. Ask observer what the students assessed related to the bleeding?
   - VS, fundus, rate pain, check pad and ask question of patient to get details on amount of bleeding, assess bladder

9. What interventions did you perform?
   - Fundal massage, medications(Pitocin), breastfeeding, bladder scan
   - What other interventions could be performed? IV fluids, oxygen, lower head of bed

10. Did you notify the provider? Why?
    - Yes, to get new order and inform pt of abnormal bleeding
11. Did you use the SBAR format?
12. What needs to be reassessed for this patient?
   - Uterus, VS, rate pain, check pad and amount bleeding, repeat H&H
13. How do you perform a postpartum assessment?
   - Breast- condition of nipples, temperature, fullness, discharge, unusual contour
   - Uterus- location related to umbilicus, soft or boggy, midline, decreases about 1 cm from umbilicus each day after delivery
   - Bladder- full can displace uterus
   - Bowel- vaginal delivery BM will be painful, need to make sure have stool softener and do not want them to get constipated, C-section need to access bowel sound and make sure bowel is functioning
   - Lochia – rubra(3-4 days dark red bleeding), serosa (3-10 days of pink discharge), alba (up to 2 weeks of creamy/yellow discharge), should not have foul odor
   - Episiotomy- use REEDA scale, redness, edema, ecchymosis, discharge, approximation; laceration degree-1st tear through skin, 2nd extends through muscle, 3rd continues through anal sphincter, 4th involves anterior rectal wall
   - Homan’s - some hospitals do not do Homan’s
   - Emotions- determine postpartum depression, rule out by bringing in baby and observing mom response
14. How would you describe the communication among the team members? Give me examples of your good/bad teamwork?
   - Assisting team by noticing and offering to help when they are struggling or unsure
   - Regrouping
   - Leadership skills

### Instructor Teaching Guide

#### TABLE 24-13 Maternal Adaptations Following Birth

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>NORMAL FINDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blood pressure</td>
<td>Returns to prelabor level</td>
</tr>
<tr>
<td>Pulse</td>
<td>Slightly lower than in labor</td>
</tr>
<tr>
<td>Uterine fundus</td>
<td>In the midline at the umbilicus or 1–2 fingerbreadths below the umbilicus</td>
</tr>
<tr>
<td>Lochia</td>
<td>Red (rubra), small to moderate amount (from spotting on pads to 1/4–1/2 of pad covered in 15 minutes) Doesn’t exceed saturation of one pad in first hour</td>
</tr>
<tr>
<td>Bladder</td>
<td>Nonpalpable</td>
</tr>
<tr>
<td>Perineum</td>
<td>Smooth, pink, without bruising or edema</td>
</tr>
<tr>
<td>Emotional state</td>
<td>Wide variation, including excited, exhilarated, smiling, crying, fatigued, verbal, quiet, pensive, and sleepy</td>
</tr>
</tbody>
</table>

### Possible Nursing Diagnoses
- Potential for Impaired Gas Exchange secondary to bleeding
- Potential for Fluid deficit secondary to bleeding
- Potential for Impaired circulation secondary to bleeding
- Altered Skin Integrity R/T 2nd degree vaginal side wall laceration
- Alteration in Comfort R/T Tear and Childbirth
- Fear R/T Bleeding
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>CHRONIC ILLNESS: No</td>
<td>IMMUNIZATIONS: Fluvac is &amp; TDAP UTD</td>
<td></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>OCCUPATION: 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>PRENATAL LABS</td>
<td>ABO/RH: 0 neg</td>
</tr>
<tr>
<td>CHILDBIRTH EDUCATION: yes</td>
<td></td>
<td>HBSaG: neg</td>
</tr>
<tr>
<td>GENETIC TESTING: no</td>
<td></td>
<td>GBS: positive</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIV: neg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>RUB: non-immune</td>
</tr>
<tr>
<td></td>
<td></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>INFANT FEEDING: breast</td>
</tr>
<tr>
<td>ALLERGIES: none</td>
<td>MEDS/DRUGS: no</td>
<td></td>
</tr>
<tr>
<td>PRENATAL CARE: yes</td>
<td>CURRENT MEDICATIONS: none</td>
<td></td>
</tr>
<tr>
<td>GENETIC TESTING: no</td>
<td>Patient labs</td>
<td>ABO/RH: A Positive</td>
</tr>
<tr>
<td></td>
<td></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>ADDITIONAL INFORMATION: 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 (300 additional calories over pregnancy intake while breastfeeding and increase fluids)
2. Pericare/comfort items and Bowel care (avoid constipation, baths, soaking, squirt bottle, Tucks, Epifoam, Air Ring)
3. Home Discharge Medications (Tylenol, Ibuprofen, Percocet 5/325, Lanolin, PNV, Tucks)
4. Maternal Immunization needs (Depending on mom's status Tdap, pneumococcal, flu, and MMR might be needed)
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 (1 wet diaper per day of life up to 7 for 7 day old infant; no need to alcohol cord per EBP, bathe once to twice a week; just sponge bathe and do not immerse in water until cord falls off)
3. Warmth and Safety (lose heat from head)
4. Signs and symptoms of illness (poor feeder, missing two feedings in a row, fever of 99.5(F) axillary vomiting whole feedings, decreased wet diapers, difficulty breathing)
5. Car Seat (Required by law)
6. Jaundice frequent feedings (Q2 hrs and if yellow at waist or below, call pediatric provider)
7. Follow-up pediatric care and resources (usually seen between 3-5 days of life)

SCENARIO PREP QUESTIONS FOR STUDENTS:

1. What medications do you think you need to administer before discharge?
   a. RH negative, RhoGam or Rhophylac
   b. Rubella non-immune, MMR if Rubella not available
   c. Flu shot for mom if not received this year, TdaP if indicated and, pneumococcal if mom has chronic illness
   d. HBV to baby

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

Pg 840 text of book – the parent’s way of caring for their neonatal is best unless it causes harms. There are many correct ways to care for an infant and you should adjust your teaching to the family’s personal and cultural preferences. The nurse needs to help make the parents feel comfortable with infant feeding, changing and handling. The nurse provides the new parents confidence and role models goo/safe care practices
**Medication Administration Record (MAR)**

**Date:** Today

**Name:** Margaret Sanger  
**MRN:** 00098790  
**Date of Birth:** 09/14  
**Allergies:** NKDA  
**Admit Height:** 5'3"  
**Admit Weight:** 75 Kg

<table>
<thead>
<tr>
<th>Scheduled Medications</th>
<th>Time</th>
<th>Sun</th>
<th>Mon</th>
<th>Tues</th>
<th>Wed</th>
<th>Thurs</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Senokot –S 2 tablets PO every HS</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature</th>
<th>initials</th>
<th>Signature</th>
<th>initials</th>
<th>Signature</th>
<th>initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sue Stewart RN</td>
<td>SS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Medication Administration Record (MAR)**

**Date:** Today

**Name:** Margaret Sanger  
**MRN:** 00098790  
**Date of Birth:** 09/14  
**Allergies:** NKDA

<table>
<thead>
<tr>
<th>PRN Medications</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acetaminophen</strong> 500 mg PO every 4 hrs PRN discomfort 1-3 on pain scale</td>
<td></td>
</tr>
<tr>
<td><strong>Oxycodone</strong> 5 mg/APAP 325 mg (Percocet) 1 tablet po every 3 hours prn for pain 4-5 on pain scale</td>
<td></td>
</tr>
<tr>
<td><strong>Oxycodone</strong> 5 mg/APAP 325 mg (Percocet) 2 tablets po every 3 hours prn for pain greater than or equal to 6 on pain scale</td>
<td></td>
</tr>
<tr>
<td><strong>Bisacodyl</strong> (Ducolax) 10 mg suppository daily prn constipation</td>
<td></td>
</tr>
</tbody>
</table>
| **Post Delivery:**  
**Methergine** 0.2 mg IM following for excessive bleeding, if NOT hypertensive |
| **Post Delivery:**  
500 ml of Normal Saline with 30 units of **Pitocin** at 250 ml/hr for excessive bleeding |

<table>
<thead>
<tr>
<th>Signature</th>
<th>Initials</th>
<th>Signature</th>
<th>Initials</th>
<th>Signature</th>
<th>Initials</th>
</tr>
</thead>
</table>


Simulation 2 & 3 Staff Guide:

Patient Care Simulation Set – Up-supplies
- 3G mannequin dressed as woman
- Baby Hal swaddled in mom’s arms
- ID Bracelet on Mother and baby
  a. Arm band with “Marie Sanchez, DOB: 1/20, MRN: 000246810”
  b. Arm band with “Baby Sanchez DOB 2 days ago MRN: 000246811”
- Patient gown
- IV in right arm, 22 gage
- Injection Pad
- Position Marie sitting up in bed holding Baby Hal

Preparation of Medications:
- Percocet 5/325mg po
- Tylenol 500mg po
- Motrin 600 mg po
- Colace 100 mg po
- MMR vaccine
- Rhophylac 1500 IU (300 mcg)
- Normal saline flushes
- Patient labels for both mom and baby

Equipment at Bedside
- Chux
- Rinse bottle, ice pack, and Tucks
- Lanolin cream and breast pads
- Bulb syringe, diapers, blankets
- Bassinette at bedside with baby card completed
- Supplies in room to d/c saline lock

Diagnostic Forms/Diagnostics to prepare – Note to Travis = Please scan before placing labels, that way we can change the patient’s information as desired/indicated. - thx

Baby’s Chart
- Gestation Age Graph
- Risk of Hyperbilirubinemia
- Newborn Physician Orders
- **Newborn Flow sheets – too much – get rid of?**
- MAR with place to give Hepatitis B vac.

Mom’s Chart
- Postpartum vaginal delivery orders
- Discharge Summary
- MAR
- Teaching and discharge forms in the room

Mom Forms on clip board in room
- discharge information sheet there is one for mom and one for baby
- List of Discharge Medications

Baby Forms on clipboard in room
- discharge information sheet
- jaundice teaching sheet,
- Consent HBV
- Physician Newborn D/C instructions

Student Observation Forms for Mom and Baby discharge VIS forms in med room
- MMR, Tdap, pneumococcal vaccine information sheets (will not need the Pneumococcal or Tdap – just there as a distracter)
- HBV vaccine information consent

Timeline Guide for Staff
Note: 50% of the students will discharge mom and the other 50% will discharge baby. If odd number of students, have larger group discharge mom as there are more meds to pass.

Start: Mom discharge for 20 min. Give Rhophylac, and MMR; (Flu, Tdap and pneumococcal note indicated)

At 20 min mark: Second Group to discharge baby – needs HBV with signed consent

At 40 min mark: Begin De-Brief

_Instructor will serve as patient’s voice and work mannequin._
SIMULATION #2 SPECIFIC STUDENT GUIDED EVALUATION

Students Participating:

____________________________________________________________________________________

____________________________________________________________________________________

Student Observer:

__________________________________________________________________________________________________

Desired Activity | Completed | Not Completed
--- | --- | ---
Completes universal competencies – patient identification, introduce self hand hygiene, privacy, etc |  |  
Completes all Medication Rights correctly  
Gives Vaccine Information Sheet (VIS) for MMR which is given SC  
Gives Rhophylac 1500IU IVP over 2 min. |  |  
Confirms Flu and Tdap not indicated |  |  
Discontinues IV using universal precautions correctly |  |  
Teaches Diet/Nutritional needs |  |  
Teaches Pericare/ Bowel care |  |  
Teaches Medications |  |  
Teaches Immunizations |  |  
Teaches Rest/Activity |  |  
Teaches when to seek medical attention and follow-up |  |  

Additional Comments:

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
## SIMULATION #3 SPECIFIC STUDENT GUIDED EVALUATION

**Students Participating:**

____________________________________________________________________________________________________________
____________________________________________________________________________________________________________

**Student Observer:**

____________________________________________________________________________________________________________

<table>
<thead>
<tr>
<th>Desired Activity</th>
<th>Completed</th>
<th>Not Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Completes universal competencies – patient identification, introduce self hand hygiene, privacy, etc</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Completes all Medication Rights</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gives VIS and gets HBV consent signed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administers IM vac.</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaches about Feeding and Sleeping cycles</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(8-12 feedings per day if breastfeeding; q3-4 hours with formula)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaches about routine care – diapering, cord care, bathing</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaches about infant safety – warmth, on back, crib, car seat,</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaches about jaundice and when to call/notify pediatric provider (yellow at waist or to extremities)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaches about signs and symptoms if ill infant</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Teaches about follow-up care – next 1-3 days after discharge is routine</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Additional Comments:**

____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
____________________________________________________________________________________________________________
Simulation 2 – Mother’s Discharge with medications to be administered (IV Rhophylac, and SQ MMR)
Focus less on breastfeeding as students are learning this in the CEC on same day.

<table>
<thead>
<tr>
<th>Student Action / Interaction</th>
<th>Patient’s Verbal Response</th>
<th>Patient’s Physical Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifies pt and Checks VS Checks Pain</td>
<td>Marie Sanchez 1/20</td>
<td>VS: 37°C, 90 BPM, 20 RR, 114/80 BP, 98% on room air</td>
</tr>
<tr>
<td>Student should ask about Mom’s diet/fluids and medications before discontinuing Saline Lock</td>
<td>“I would like to leave this morning, do I need any medications and can you take out this IV thing”. Yes I have been drinking and eating well, no, no nausea”</td>
<td></td>
</tr>
<tr>
<td>Medication Administration: Rhophylac IV MMR</td>
<td>If student ask – say last tetanus was 4 years ago and you have no chronic illness (do not need Tdap or pneumococcal IZ) OK to take while Breast Feeding? MMR: How does a MMR protect me and any future pregnancies?</td>
<td></td>
</tr>
<tr>
<td>Discharge Medication Review</td>
<td>Ask student about each medication, How long do I take my Prenatal Vitamins for? As long as BF and at least 6 weeks How much fever is too much for me? 100.6 What if I can’t poop? Ask something about each mediation on the medication d/c sheet</td>
<td></td>
</tr>
<tr>
<td>Important Self Care Teaching</td>
<td>Prompt students to discuss Sleep/Rest Fluids/nutrition while Breastfeeding /weight loss Pericare/constipation prevention Uterine cramping especially with Breast feeding – Ibuprofen can help Activity/lifting/sex Breast Care to prevent yeast infection and mastitis When to call office/ warning signs</td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>“How will I know if I am ill or just normal post baby stuff?” Elevated temp, increased vag bleeding/more than one pad an hour for several hours, foul odor with cramps or abdominal pain, breast pain worsening/breast mass with flu like symptoms, feeling worse/sadder throughout the day When do I need to be seen? Some providers want to see patients at 2-4 weeks postpartum, Need 6 week exam</td>
<td></td>
</tr>
<tr>
<td>Report sister had post partum depression</td>
<td>Prompt students to discuss: Depression compared to Baby Blues: Ask “what is the difference”</td>
<td></td>
</tr>
<tr>
<td>Reports Husband lost job</td>
<td>“I am so concerned about what we are going to do. My husband just lost his job and I have 3 kids at home. I do not know how we will pay the bills and have enough money to buy food for the kids.”</td>
<td></td>
</tr>
</tbody>
</table>

Simulation 3
Discharge of Baby: Change Student Groups begin scenario at point of education for baby in anticipation of discharge

| Medication Administration: HBV IM                    | Prompt students’ to ask about administering vaccine. HBV: “Yes, I think that we should go ahead and give her that shot” |                                                                 |
| Diapering/Core Care/ and                             | “How come the urine seems to smell bad – is that OK “(yes uric acid |                                                                 |
Bathing

- Crystals with reddish appearance and odor first few days of life
- How many times will my baby poop? (6-10 yellowish stools until breast feeding well established)
- Should I cover up the umbilical cord? (no it should air out/fold diaper under it, normal to be tender and black in color)

Warmth and Safety

- Can you give me an overview on the car seat? (infant seat, middle back of car facing backwards until 20lbs, adjust straps for babies shoulder)
- Where should she sleep? (in a crib, no crib pillow/toys/bumpers and on back)
- How much fever is too much? 100.4 AX
- How do I use that blue thing that goes up her nose? (bulb syringe)

Signs of Illness

- How will I know if my baby is ill? (temp/forceful vomiting/listless/inconsolable/cyanotic/jaundiced/red or purulent umbilical cord drainage/change in stools/no wet diapers/projectile vomiting/rash not milia)

GUIDED DEBRIEFING QUESTIONS

(For All OB Simulations)

1. So how did it go? How did that feel for everyone?
2. As you think about all the things you need to do, what were some of your priorities?
3. What new skills did you need to know and perform for this scenario?
4. Ask the Observer - What items did they complete?
5. Ask the Observer - What items did they NOT complete?
6. What would you do differently if we repeated the scenario?
7. How was the team communication?
8. Any lingering questions?

Basic OB Discharge Teaching Guide

<table>
<thead>
<tr>
<th>MOM</th>
<th>BABY</th>
</tr>
</thead>
</table>
| Maternal nursing diagnoses
  - Impaired Urinary Elimination
  - Impaired Skin Integrity
  - Acute Pain
  - Risk for Infection
  - Risk for Constipation |
| Nursing assessment
  - Do parents have realistic expectations
  - Assess depth of knowledge in caring for newborn Diagnoses include
  - Readiness for Enhanced Parenting
  - Readiness for Enhanced Family Processes |
| General Health
  - Rest when baby rest
  - Do what you think is right, everyone will have an opinion/advice for you
  - No heavy lifting, listen to your body
  - Wt loss 10–12 lb initial loss, Return to pre-pregnant |
| General Health
  - Sleep wake cycles and changes with growth spurts
  - Nurse more often
  - Even at night |
<table>
<thead>
<tr>
<th>Weight at approximately 6–8 weeks</th>
<th>Feeding: Side Note - Remember it is normal to have weight loss in first 3–4 days of life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunizations MMR</td>
<td>• Live virus vaccine</td>
</tr>
<tr>
<td></td>
<td>• Can give with Rhophylac</td>
</tr>
<tr>
<td></td>
<td>• Avoid pregnancy for 4 weeks</td>
</tr>
<tr>
<td>RhoGam/Rhophylac - need second dose within 72 hours after birth if baby is RH positive</td>
<td>• Formula fed no greater than 5%</td>
</tr>
<tr>
<td></td>
<td>• Breast fed no greater than 7%</td>
</tr>
<tr>
<td>Breast Feeding overview</td>
<td>Soothing infant/Techniques for quieting baby</td>
</tr>
<tr>
<td></td>
<td>• Sore nipples management, no hot showers, bra even at night, breast shield, lanolin,</td>
</tr>
<tr>
<td></td>
<td>• s/s of mastitis – redness with fly like symptoms</td>
</tr>
<tr>
<td></td>
<td>• Check for soiled diaper</td>
</tr>
<tr>
<td></td>
<td>• Swaddle or bundle baby</td>
</tr>
<tr>
<td></td>
<td>• Hold swaddled baby upright against mid-chest</td>
</tr>
<tr>
<td></td>
<td>• Use slow, calming movements with baby</td>
</tr>
<tr>
<td></td>
<td>• Softly talk, sing, or hum to baby</td>
</tr>
<tr>
<td></td>
<td>• Hold baby close/next to you</td>
</tr>
<tr>
<td>Discharge meds: PNV, ducosate sodium, Ibuprofen Tylenol</td>
<td>Safety topics</td>
</tr>
<tr>
<td></td>
<td>• Bulb syringe</td>
</tr>
<tr>
<td></td>
<td>• Alone only in crib</td>
</tr>
<tr>
<td></td>
<td>• Demonstrating bath, cord care, temperature assessment</td>
</tr>
<tr>
<td></td>
<td>• When to call healthcare provider</td>
</tr>
<tr>
<td></td>
<td>• Healthy term infants placed on backs to sleep</td>
</tr>
<tr>
<td></td>
<td>• Reduce incidence of sudden infant death syndrome (SIDS)</td>
</tr>
<tr>
<td></td>
<td>• Car safety considerations</td>
</tr>
<tr>
<td></td>
<td>• Car seat adapted to fit newborns</td>
</tr>
<tr>
<td>Maternal complications</td>
<td>Elimination</td>
</tr>
<tr>
<td></td>
<td>• Fever</td>
</tr>
<tr>
<td></td>
<td>• Increase in lochia / clots</td>
</tr>
<tr>
<td></td>
<td>• Evidence of mastitis</td>
</tr>
<tr>
<td></td>
<td>• Evidence of thrombophlebitis</td>
</tr>
<tr>
<td></td>
<td>• Evidence of urinary tract infection (UTI)</td>
</tr>
<tr>
<td></td>
<td>• Evidence of infection</td>
</tr>
<tr>
<td></td>
<td>• Severe pelvic pain</td>
</tr>
<tr>
<td></td>
<td>• Abdominal tenderness</td>
</tr>
<tr>
<td></td>
<td>• Urine</td>
</tr>
<tr>
<td></td>
<td>• Normal progression of stool changes</td>
</tr>
<tr>
<td></td>
<td>• (1) Meconium (thick, tarry, dark green)</td>
</tr>
<tr>
<td></td>
<td>• (2) Transitional stools (thin, brown to green)</td>
</tr>
<tr>
<td></td>
<td>• (3a) Breastfed infant (yellow gold, soft, mushy)</td>
</tr>
<tr>
<td></td>
<td>• (3b) Formula-fed infant (pale yellow, formed, pasty)</td>
</tr>
<tr>
<td>Intercourse</td>
<td>Cord Care</td>
</tr>
<tr>
<td></td>
<td>• Birth control, decreased fertility while breast feeding, but could ovulate before menses resumes</td>
</tr>
<tr>
<td></td>
<td>• Family planning information should be part of discharge and Appropriate method for couple</td>
</tr>
<tr>
<td></td>
<td>• No Estrogen for 6 weeks</td>
</tr>
<tr>
<td></td>
<td>• Hypo-estrogenic state while breast feeding – vaginal dryness, decreased desire, breast tenderness</td>
</tr>
<tr>
<td></td>
<td>• When to resume intercourse – whenever she wants ; advise to consider waiting until 3 or 6 week check for reassurance that everything is fine.</td>
</tr>
<tr>
<td></td>
<td>• Pregnancy can occur before first menstrual period</td>
</tr>
<tr>
<td></td>
<td>• Wash hands with clean water and soap</td>
</tr>
<tr>
<td></td>
<td>• Keep cord dry, exposed to air</td>
</tr>
<tr>
<td></td>
<td>• Clean cord and skin around base with water only</td>
</tr>
<tr>
<td></td>
<td>• Do not give tub baths until cord falls off</td>
</tr>
<tr>
<td></td>
<td>• Fold diapers below umbilical cord to air dry</td>
</tr>
<tr>
<td></td>
<td>• Expect tenderness around cord</td>
</tr>
<tr>
<td></td>
<td>• Check cord daily for odor or increased redness</td>
</tr>
<tr>
<td></td>
<td>• Report signs of infection</td>
</tr>
<tr>
<td></td>
<td>• Never pull cord or attempt to loosen</td>
</tr>
<tr>
<td>Depression vs baby blues</td>
<td>Illness/How and when to reach care providers</td>
</tr>
<tr>
<td>PP Blues</td>
<td>• Baby blues are normal, feel sad and good throughout the same day for no apparent reason</td>
</tr>
<tr>
<td></td>
<td>• Transient period of depression</td>
</tr>
<tr>
<td></td>
<td>• Hormonal, environmental, fatigue factors</td>
</tr>
<tr>
<td></td>
<td>• Importance of social support</td>
</tr>
<tr>
<td>Depression</td>
<td>• Continued mood changes, risk factor is a history of</td>
</tr>
<tr>
<td></td>
<td>• Temperature above 38°C (100.4°F) axillary</td>
</tr>
<tr>
<td></td>
<td>• Below 36.6°C (97.8°F) axillary</td>
</tr>
<tr>
<td></td>
<td>• Continual rise in temperature</td>
</tr>
<tr>
<td></td>
<td>• More than one episode of forceful vomiting</td>
</tr>
<tr>
<td></td>
<td>• Frequent vomiting over 6-hour period</td>
</tr>
<tr>
<td></td>
<td>• Refusal of two feedings in a row</td>
</tr>
<tr>
<td></td>
<td>• Lethargy, difficulty in awakening baby</td>
</tr>
<tr>
<td></td>
<td>• Cyanosis with or without feeding</td>
</tr>
</tbody>
</table>
depression or of post partum depression

- No enjoyment in activities, progressively feeling worse
- Should not continue to feel worse, should not have thoughts of hurting yourself or your baby

- Absence of breathing >20 seconds
- Inconsolable infant, continuous high-pitched cry
- Discharge, bleeding from umbilical cord or any opening
- Two consecutive green watery or black stools
- Increased frequency of stools
- No wet diapers for 18 to 24 hours
- Fewer wet diapers per day
- Eye drainage

When to discharge?
- 48 hours for vaginal birth
- 96 hours for cesarean birth
- Include:
  - Physical examination
  - Discharge teaching
  - Rubella vaccine, RhoGAM/Rhophylac
  - Healthcare provider follow-up
  - 1–2 weeks, 6 weeks Per your provider, some like to do a 2 week appt to check in with mom and then a pelvic exam at 6 weeks
  - Call if you have a temp or any signs of infection or excessive bleeding or are concerned

When to discharge
- Stable temp
- Wet diaper/ had BM
- Include:
  - Physical examination
  - Discharge teaching
- Pediatric Follow up at about 3-5 days of life for weight check and jaundice check
- 2 weeks for second newborn screen
- Call if any concerns

Rhophylac Dosage and Administration

As with all blood products, patients should be observed for at least 20 minutes following administration of Rhophylac.

Preparation and Handling

- Rhophylac is a clear or slightly opalescent, colorless to pale yellow solution. Inspect Rhophylac visually for particulate matter and discoloration prior to administration. Do not use if the solution is cloudy or contains particulates.
- Prior to intravenous use, ensure that the needle-free intravenous administration system is compatible with the tip of the Rhophylac glass syringe.
- Do not freeze.
- Bring Rhophylac to room temperature before use.
- Rhophylac is for single use only. Dispose of any unused product or waste material in accordance with local requirements.

Suppression of Rh Isoimmunization

Rhophylac should be administered by intravenous or intramuscular injection. If large doses (greater than 5 mL) are required and intramuscular injection is chosen, it is advisable to administer Rhophylac in divided doses at different sites.

Table 1 provides dosing guidelines based on the condition being treated.

<table>
<thead>
<tr>
<th>Indication</th>
<th>Timing of Administration</th>
<th>Dose* (Administer by IV or IM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IU, international units; mcg, micrograms.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*A 1500 IU (300 mcg) dose of Rhophylac will suppress the immunizing potential of ≥15 mL of Rh0(D)-positive RBCs.

†The dose of Rhophylac must be increased if the patient is exposed to >15 mL of Rh0(D)-positive RBCs; in this case, follow the dosing guidelines for excessive fetomaternal hemorrhage.

Rh-incompatible pregnancy
Table 1: Dosing Guidelines for Suppression of Rh Isoimmunization

<table>
<thead>
<tr>
<th>Indication</th>
<th>Timing of Administration</th>
<th>Dose* (Administer by IV or IM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine antepartum prophylaxis</td>
<td>At Week 28-30 of gestation</td>
<td>1500 IU (300 mcg)</td>
</tr>
<tr>
<td>Postpartum prophylaxis (required only if the newborn is Rh0(D)-positive)</td>
<td>Within 72 hours of birth</td>
<td>1500 IU (300 mcg)†</td>
</tr>
<tr>
<td>Obstetric complications (e.g., miscarriage, abortion, threatened abortion, ectopic pregnancy or hydatidiform mole, transplacental hemorrhage resulting from antepartum hemorrhage)</td>
<td>Within 72 hours of complication</td>
<td>1500 IU (300 mcg)†</td>
</tr>
<tr>
<td>Excessive fetomaternal hemorrhage (&gt;15 mL)</td>
<td>Within 72 hours of complication</td>
<td>1500 IU (300 mcg) plus:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• 100 IU (20 mcg) per mL fetal RBCs in excess of 15 mL if excess transplacental bleeding is quantified or</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• An additional 1500 IU (300 mcg) dose if excess transplacental bleeding cannot be quantified</td>
</tr>
</tbody>
</table>

ITP

- For treatment of ITP, **ADMINISTER Rhophylac BY THE INTRAVENOUS ROUTE ONLY** (see Preparation and Handling [2.1]). **Do not administer intramuscularly.**
- Rhophylac should be administered at a rate of 2 mL per 15 to 60 seconds.
- [http://www.drugs.com/pro/rhophylac.html](http://www.drugs.com/pro/rhophylac.html)