PHS AND AFFILIATES

SCE: Neonatal Emergency

Perinatal Clinical Academy

Simulated Clinical Experience and Facilitator Guide

Last Revision: July, 2016

Molly Charger

Age: 34 **Weight:** 56 kg

Learner Information

You will be providing care for a 34-year-old female who is recovering from spontaneous vaginal delivery one hour ago. Mother is GBS positive and ruptured membranes her 11 hours prior to delivery. The infant was born at 37 2/7 weeks and weighed 2.8kg. Baby and mother are stable and have had one successful breastfeeding attempt.

Facilitator Information

In this scenario the learners is expected to perform the appropriate postpartum assessments on both mother and baby. Learners should deliver teaching/education to the patient and family member regarding breastfeeding and newborn care. The infant will become limp and apneic while being breastfeed; the learners should follow Neonatal Resuscitation Program protocols to initiate MRSOPA and PPV to the infant. Upon recovery the infant will transfer to a higher level of care.

Pre SIM Preparation Required

Patient: Molly Charger **Age: 34** **Weight: 56 kg**
Charger, Baby Girl **37 2/7 weeks** **Weight: 2.8 kg**

You will be providing care for a 34-year-old female who is recovering from spontaneous vaginal delivery one hour ago. Mother is GBS positive and had ruptured membranes 11 hours prior to delivery. The infant was born at 37 2/7 weeks and weighed 2.8kg. Baby and mother are stable and have had one successful breastfeeding attempt.

- Assesses and maintains safe and complete care of both mother and baby
- Performs head to toe physical assessment and focused assessments as indicated
- Recognizes differential diagnosis and communicates relevant clinical information to the LIP
- Recognizes escalating level of care and modifies the nursing plan as appropriate
- Utilizes Neonatal Resuscitation Guidelines for the assessment and intervention in an neonatal emergency
- Administers medications per protocol
- Utilizes the Nursing Process
- Maintains effective closed loop communication with all members of the health care team
- Demonstrates safe and comprehensive medication administration
- Provides a culture of safety for all patients
- Demonstrates awareness of clinical environment, infection control, aseptic technique, fall prevention, skin care, behavioral health , and pain management
- Demonstrates caring and advocacy for patient and family

Preparation Required:

Review the following medications and be prepared to administer:

- Epinephrine
- Normal Saline (for bolus)

Review the following Standards:

- Newborn Management
- Neonatal Resuscitation
- Neonatal Sepsis Risk
- Neonatal Glucose Screening
- Heel Stick Blood Sampling
- Skin-To-Skin
- Benefits of Breastfeeding
- Methods of Supplementation

SIM Set Up Checklist SCE: Neonatal Emergency

Print patient labels with correct birthdate and MRN, then label patient, labs, orders appropriately.

Standard Room Supplies

- Family observer clipboard and SAFETY /QUALITY OBSERVER CHECKLIST
- Oxygen regulators x2 with Adult ambu bag hanging and Non rebreather mask on O2 regulator
- Suction regulators, canister, suction tubing and yankuar in package sitting on top x2
- Adult and Newborn Stethoscopes x4
- Bathroom: peri-care supplies (Pink bucket with Mesh panties, chuks pads x4, large pads x2, small pads x2, peri bottle) and urine hat
- Call Bell, thermometer (oral and temporal), flashlight, reflex hammer
- Code cart in hallway with first responder box on top
- Extra pillows
- IV pump
- Monitor
- Neonatal code cart and emergency meds (per facility set up)
- Over-the-bed table
- WOW

For PP/ANTE

- Bassinet with bulb suction in bed
  - Top drawer; neonatal ambu bag, pink basin with bath supplies (yellow comb, J&J soap, dry washcloths) diapers and wipes, shirts, blankets
- Breast pump and parts

Supplies for Neonatal Emergency SIM	
Manikin: **Female and high fidelity female baby**	• **BABY:** o Bassinet with blue bulb suction, and crib card o Check that baby has: ID Band, Hugs Tag, diaper, swaddle blanket. o Baby in mothers arms, loosely swaddled • **MOTHER:** o IV infusion capability; IV (18 gauge) in left arms. o IV pump with 30 units of oxytocin in LR at 150 ml/hr; left arm o Patient ID band and baby band, BP cuff on, sat monitor, and gown on patient o Postpartum belly with hard fundus at 2 below the umbilicus o Cell phone on bedside table
Tech	• Recording equipment ready- if available • Manikin specific control software ready to go • Facilitator guide
Medication and Supplies **– Place in "med room"**	• NRP medications
Runner: **Supplies to be placed in control room**	• Facilitator guide (marked as revision guide) • Handoff/SBAR • Labs

Conference Room	• Flipchart and Markers • Facilitator Guide • Learners Roles and Responsibilities • NRP Algorithms

PREBRIEF

- Introduce yourself
- Check in with residents
- **WHAT ARE WE EXPECTING TO OBSERVE IN BABIES WHO ARE "TRANSITIONING WELL" AND "STABLE FOR TRANSFER TO PP"?**
- **WHAT ARE SOME OF THE RISK FACTORS THAT WE LOOK FOR THAT PUT THE NEWBORN AT HIGHER RISK?**
    - In pregnancy?
    - During labor?
    - Immediately after delivery?
- **HOW CAN WE MITIGATE SOME OF THESE RISK FACTORS (OF POST-DELIVERY) TO AVOID COMPLICATIONS WITH NEWBORN TRANSITION?**
- **WHAT WOULD CONSTITUTE A CALL TO THE PROVIDER?**
- **WHAT WOULD CONSTITUTE A TRANSFER TO A HIGHER LEVEL OF CARE?**
- **HOW DO WE SUPPORT MOTHER-BABY BONDING AND BREASTFEEDING WHILE HAVING TO INTERVENE FOR ANY OF THE ABOVE SIGNS AND SYMPTOMS?**
- Review: **WHAT ARE THE 3 H'S AND WHAT IS THE IMPORTANCE?**
    - Hypoglycemia, Hypoxia, Hypothermia
- Review: **WHAT ARE SOME SIGNS AND SYMPTOMS OF HYPOXIA?**
- Review: **HOW ARE THE 3 H'S INTER-RELATED?**
- Review: **HOW DO YOU DIFFERENTIATE BETWEEN INDIVIDUAL OR INTER-RELATED PROBLEMS WITH THE "3 H'S" AND SEPSIS?**

OBJECTIVES OF THIS SIM:

- Assesses and maintains safe and complete care of both mother and baby
- Performs head to toe physical assessment and focused assessments as indicated
- Recognizes differential diagnosis and communicates relevant clinical information to the LIP
- Recognizes escalating level of care and modifies the nursing plan as appropriate
- Utilizes Neonatal Resuscitation Guidelines for the assessment and intervention in an neonatal emergency
- Administers medications per protocol

REVIEW THE EXPECTATION OF SIMULATION

- When in doubt, "treat it as real"
- Operate as a TEAM
- Think OUT LOUD

- Use SBAR for all communication
- Educate the patient and family member
- Demonstrate caring and compassion
- Demonstrate excellent safety practices
    - Patient identification
    - Infection prevention “Gel in Gel out”
    - Skin management
    - Pain management
    - Fall prevention
    - Medication safety and double checks
- Care for yourselves
    - Wear gloves
    - Protect your body

ASSIGN ROLES FOR SIMULATION

- See Appendix for Roles descriptions

Give reminder about EPIC (signed and held orders, if applicable) and send to learners to break. Please let support staff know you are on break so they can finish preparation for SIM

Overview Chart of SIM Highlights

State 1- Initial Assessment **Maternal Patient:** **VS:** HR 90's, BP 120s/70s, RR 17, SPO2 100%, 98.6 temp **Uterus:** Firm, 2 below the umbilicus, light lochia		**Baby:** VS: HR 160, RR 48, Temp 97.2'F, glucose 54	
Learners	**Facilitator**	**Patient**	**TECH**
All entering room should gel hands 1. Introduce self to patient 2. Begin comprehensive postpartum assessment; VS, pain level, SpO_2 level, Fundal check 3. Performs pump checks; IV fluid Check baby vitals 4. Infant assessment, teaching family about cold stress and risk for hyperthermia 5. Place infant skin-to-skin 6. Documents information	**PRE-SIM: Prep family member to keep baby uncovered and without a hat until you receive great education on cold stress** Cues tech to transition to **State 2-Baby Feeding** after infant is placed skin- to skin and Announce 30 mins has passed	Alert, happy and excited to show off your new baby Excited about new baby Pain 0/10 Wants to be as natural as possible.	Start with newborn unwrapped with just a diaper, no hat and in mothers arms Baby skin appears cool if learner verbalizes visual assessment
LIP ORDERS: If RN calls for low temp, order a POC glucose if temp does not come up to WNL with warming measures per protocol **RUNNER:** Give ISBAR Report			

State 2- Baby Feeding **Maternal Patient:** Unchanged from State 1 **VS:** HR 90's, BP 120s/70s, RR 17, SPO2 100% **Uterus:** Firm, 2 below the umbilicus, light lochia		**Baby:** **VS:** HR 150s, RR 52, Temp 97.9'F if baby is still on mom's chest, glucose 54	
Learners	**Facilitator**	**Patient**	**TECH**
All entering room should gel hands 1. Reassess baby temperature and other vitals if indicated 2. Perform appropriate post-delivery maternal assessment including fundal checks 3. Assist and support with breast feeding including education, positioning, and latch 4. Ensure safety for newborn during breastfeeding 5. Documents data	Cue tech to transition to **State 3 – Infant Apneic** after feeding appears successful	Voice of Patient responding to RN's questions Wants to try breastfeeding Once education is completed and baby is on breast state "she is sucking good" and then get on your phone	
LIP ORDERS: **RUNNER:**			

State 3 – Infant Apneic **Maternal Patient:** Unchanged from State 1 **VS:** HR 90's, BP 120s/70s, RR 17, SPO2 100% **Uterus:** Firm, 2 below the umbilicus, light lochia	**Baby:** Appears blue around the mouth (circumoral cyanosis) **VS:** HR 70s, RR 0, Temp 96.8'F, SPO2 40%

Learners	**Facilitator**	**Patient**	**TECH**
All entering room should gel hands 1. Calls Neonatal code 2. Starts NRP per protocol • Stimulate and move to resuscitation bed • SPO2 on • Begin PPV and continue for at least 20 sec • MRSPOA as needed • Reassess for HR and respirations according to NRP • Continues to monitor infant 3. SBAR report to code team 4. Document information	**DO NOT allow PPV to be effective on first attempt!** Cue tech to transition baby to increase vitals once MRSOPA steps have been initiated and learners are doing **effective** PPV Cue tech to transition to **State 4- Improvement** during SBAR handoff to neonatal code team	State loudly "I think something is wrong!! She looks grey or funny!" Scared and anxious- escalate if no one is comforting mother Worried about the baby, wants to know what happened	Ensure cyanosis is on and infant appears blue Once learners begin **effective** PPV (per facilitator)- turn off blue and over 20 seconds increase the HR to 110, SPO2 to 89. At 20 seconds initiate infant cough and make RR 68

LIP ORDERS:

RUNNER: As Neonatal code team- enter room after infant is in recovery and ask for report

State 4 – Improvement/transfer to higher level of care **Maternal Patient:** Unchanged from State 1 **VS:** HR 90's, BP 120s/70s, RR 17, SPO2 100% **Uterus:** Firm, 2 below the umbilicus, light lochia		**Baby:** **VS:** HR 140s, RR 58, Temp 98.4'F, SPO2 98, glucose 50	
Learners	**Facilitator**	**Patient**	**TECH**
All entering room should gel hands 1. Continue SBAR report 2. Provide support and teaching to family about transfer to a higher level of care 3. Prepare infant for transfer 4. Reassess mother	Simulation Complete at facilitators discretion	Responds to RN's questions. Wants to know how baby is doing. Complain of "feeling really wet on my peri-pad" if RN's have not reassessed fundus/flow during sim.	Quiet and sleepy baby
LIP ORDERS: **RUNNER:** As neonatal code team receive handoff report- State "let's transfer her to the NICU to watch her a little closer."			

DEBRIEF

The goal of the debrief is to provide the opportunity for the residents to share and reflect as a group on areas for improvement and recognize practice behaviors that demonstrate excellence.
Remember to:

- Remind residents that the debrief is a safe place and the purpose is for them to learn from their experiences
- Try to use the video (if applicable) when it fits
- Ask the family member their observations
- Use standards as needed for clarity/guidance
- Use "what if" questions
- **Embrace** the silence
- END with: What one thing are you going to take away from this experience?

The template below is available for groups that struggle to facilitate the debrief on their own…

REVIEW OBJECTIVES FOR THIS SIM

- Assesses and maintains safe and complete care of both mother and baby
- Performs head to toe physical assessment and focused assessments as indicated
- Recognizes differential diagnosis and communicates relevant clinical information to the LIP
- Recognizes escalating level of care and modifies the nursing plan as appropriate
- Utilizes Neonatal Resuscitation Guidelines for the assessment and intervention in an neonatal emergency
- Administers medications per protocol

Additional Questions Specific to this SIM:

- What do you think was going on with the baby?
    - Discuss the 3 H's (reviewed in pre-brief) and the baby's hypothermia – sign of sepsis perhaps? Why or why not?
    - Discuss breastfeeding as an alternative cause (or concurrent) for apneic event
- What was happening just before you found the baby apneic that may have led to the incident?
- What did your team do to be successful with ventilation? (MRSOPA)
- How will you counsel the mother and help her maintain bonding/breastfeeding with baby in the NICU?

General

- What worked, what didn't work and what will you do differently next time?
- What was the experience like for you?
- What happened and why?
- What did you do and was it effective?
- Discuss your interventions (technical and non-technical).
    - Were they performed appropriately
    - Were they performed in a timely manner?
- How did you decide on your priorities for care and what would you change?

- How did patient safety concerns influence your care? What did you overlook?
- In what ways did you personalize your care for this patient and family members (recognition of culture, age, concerns, anxiety)?
- Discuss your teamwork. How did you communicate and collaborate?
- **WHAT ARE YOU GOING TO TAKE AWAY FROM THIS EXPERIENCE?**

Appendix

References:

- Micromedix
- AWHONN. (2014). *Perinatal nursing*. (4th Ed.). Simpson, K.R. and Creehan, P.A. (Eds.). Philadelphia, PA: Lippincott Williams & Wilkins.
- http://www.babyfriendlyusa.org
- Higgins, R. D., Saade, G., Polin, R. A., Grobman, W. A., Buhimschi, I. A., Watterberg, K., . . . Raju, T. N. (2016). Evaluation and Management of Women and Newborns With a Maternal Diagnosis of Chorioamnionitis. Obstetrics & Gynecology, 127(3), 426-436. doi:10.1097/aog.0000000000001246
- Tita, A. T., & Andrews, W. W. (2010). Diagnosis and Management of Clinical Chorioamnionitis. Clinics in Perinatology, 37(2), 339-354. doi:10.1016/j.clp.2010.02.003
- Kattwinkel, J., & Bloom, R. S. (2011). Textbook of neonatal resuscitation, 6th edition. Elk Grove Village, Ill.: American Academy of Pediatrics and American Heart Association.

SAFETY /QUALITY OBSERVER CHECKLIST

As the safety and quality observer, it is your job to watch for the safety and quality of care given to the patient, as well as ask questions and advocate for the patient. Please make note of the following safety/quality behaviors, plus any other observations you think could enhance the learning of your team.

Were they observed? How often? What was done well, what could have been done better?

	RN1	RN2	Data
Hand washing			
Introduction to patient Bedside report Whiteboard			
Initial safety check & ID checks			
Assessment of skin, pain, environment, falls risk, etc.			
Appropriate choice of equipment/supplies			
Medication administration & Medication double checks (using the 5 rights)			
Aseptic technique & Infection control			
Explanation & education to patient Sharing of information			
Team communication & delegation			

Other notes to share with the team:

Learners Roles and Responsibilities

Role	Responsibility
RN 1 Primary nurse assigned to the patient	Coordinates overall care of the patient including triage and focused assessments Demonstrates effective and efficient collaboration and communication with team members Obtains history/admit information in the EPIC ED Navigator Delegates interventions and tasks appropriate for situation Family and patient support and education Utilizes resources appropriately (charge nurse, RT, preceptors, providers, code teams)
RN 2 Partners with primary nurse to provide patient care	Actively assists with triage assessments and admit tasks Prioritizes interventions and tasks Gathers supplies and equipment as needed Family and patient support and education Demonstrates effective and efficient communication Utilizes resources appropriately (charge nurse, RT, preceptors, providers, code teams)
RN 3 & Data Collector Facilitates communication and participates as additional support	Performs and manages patient care as directed by primary nurse Gathers supplies and equipment as needed Family and patient support and education Demonstrates effective and efficient communication Ongoing data collection and documentation (included but not limited to assessment, labs, observations) Analyzes data collected for trends and missing information
Family Member Patient Advocate and Safety Observer	Advocates for patient and self Asks questions and expects services, support, and education Acts as Safety Observer: May prompt team if gaps are noted *<u>Examples:</u> Safety* ▪ Hand hygiene ▪ Patient identifiers ▪ Medication administration ▪ Environmental awareness *Patient satisfiers* ▪ Introductions completed by all staff / name and role ▪ Pain management ▪ Receives information regarding treatment plan *Communication* ▪ Delegation ▪ Closed loop communication ▪ Sharing of information Expected to report back to team observations during debrief

Insert patient sticker here

S	B	A	A	R
Dx_1 hr post SVD_ **G_1__P_1___** **EDC___Gest Age** 37.2_ **AROM – 11 hours prior to delivery** **Epis/Lac-** intact **EBL** 200 Assessment: **A&O, Cardiac-**WNL, **Lungs** CTA, **GI-**WNL, **Skin -** CDI Still recovering from epidural – Unable to straight leg raise **Fundus**: Firm at U/1 w/ Light lochia rubra **Last Vitals:** BP 120/70's HR 90's RR 16-18 (Teens) SpO2 99% RA Temp 98.8 Max temp prior to delivery 101.6 with HR 110's and fetal tachy in the 170's	**Allergies**: None **Type/Rh**__O neg_**Rub**: Immune **HepB**_Neg__ **VDRL/RPR**: Neg **GBS**_Pos___ -Tx 4 hrs prior? Y / N Labs_____ _____ Med /Surg Hx____None_____ _____ _____ _____ Medication (home)____PNV__ _____ Culture/Social (Interpreter) Married, working full-time but planning to stay home after baby is born. Has a lot of supportive family. Complications:	Foley removed prior to delivery, Clear yellow urine, bladder non-distended. *No void yet **IV/LR**:__500 ml of LR with 30 of pit infusing @ 150 ml/hr via L FA._____ Pitocin:__1st bag_____ Anesthesia__Epidural____ -Duramorph_____ -Zofran_____ -Toradol_____ -PCA_____ **PAIN = 0/10** V/S due___Now_____ Labs due:_____ Pain Meds_____ Max Temp(labor)_____ Abx_____	Ped___PMG_____ M F "Ethan" Lbs___6___oz__2____ (2.8 kg) Apgars__8__/__9___ Breast / Bottle P F W Last Feed: 15 min_ago, ate well for 20 min__ V/S due_*NOW*____ Void_*X*___Stool_No Sepsis/Chorio/Glucose Hep____Vit K_____ Eyes ____Bath____ Hearing___PKU___ Other_____ _____ **Hugs#**	Fall Precautions/Skin _____ _____ Consults_____ _____ _____ Patient Educ_____ _____ _____ Vaccines_____ _____ **Last Baby Vitals:** HR 160 RR 48 Temp 97.4 Baby is quiet, alert, placed skin-to-skin on mom with hat to warm up a bit. **Recommendations:** Post Vag delivery care per protocol. Continue assessing mom & baby and support bonding and breastfeeding.