Year 1 Pediatric Resident Rotations- MISERICORDIA COMMUNITY HOSPITAL (MIS) NICU

Goal: The primary goal of the MIS rotation for Year 1 Pediatric Residents is to provide introductory experiences in a Level II NICU. For most residents, this will be their first exposure to an NICU environment.

Learning Objectives:
The general pediatrics residency program is following a CBD framework, which organizes learning objectives into stages of training. NICU-relevant EPAs in first year of pediatric residency can be found within the stage "Foundation of Discipline " which spans over PGY1-PGY2, and include:

- FD1: ***Recognizing*** deteriorating and/or critically ill patients and ***initiating*** stabilization and management
- FD2: Managing ***low risk*** deliveries and ***initiating*** resuscitation
- FD3: Providing ***well newborn care***
- FD4: ***Assessing***, ***diagnosing***, and ***initiating*** management for newborns with common problems
- FD5: ***Assessing***, ***diagnosing***, and ***managing*** patients with common pediatric problems
- FD6: Providing primary and secondary ***preventive health care***
- FD7: Performing basic pediatric ***procedures*** (NICU relevant as follow)
    - Bag valve mask ventilation
    - Cardiopulmonary resuscitation
    - Changing tracheostomy tubes for obstruction or decannulation
    - Intraosseous injection
    - Lumbar puncture (at least 2 in neonates/infants)
    - Needle thoracostomy (at least 1 in a neonate, preferred in clinical setting but simulation acceptable)
- FD8: ***Communicating*** assessment findings and management plans to patients and families
- FD9: ***Documenting*** clinical encounters
- FD10: ***Transferring*** clinical information between health care providers during ***handover***
- FD11: ***Coordinating transitions*** of care for non-complex pediatric patients

Scheduled Rotation Learning:

1. Rotation Orientation:
    - All peds residents (PGY1-4) will meet on the first Monday of their NICU rotation to attend *NICU Bootcamp,* which consists of common procedural skills, simulation scenarios and a NRP refresher.
        - ***Of note, all pediatric residents will obtain formal NRP certification within the first 3 months of their residency program (Transition to Discipline), AND recertification as part of General Pediatrics Academic Half Day at the beginning of their R3 year.

- Residents will subsequently go to their respective sites for unit specific orientation. Ideally this orientation will be done by the on- service neonatologist. The resident will then join the team for regular hours starting the first Tuesday of the rotation.

2. Friday '*Baby Talks*': these sessions are held via Zoom and are protected time for residents from *1:30-2:30pm every Friday.* The sessions serve to gather residents rotating through NICU at the various sites to discuss topics relevant to their learning objectives. The general topics to review for pediatric residents in their first year of training include:
    - Hyperbilirubinemia
    - Neonatal sepsis
    - Neonatal respiratory distress
    - Care of late preterm infant
    - Neonatal abstinence and drug withdrawal

It is expected that the neonatologist on service provides relevant ad hoc and/or bedside teaching during the rotation in addition to the above. Please consider objectives specific to the learner's stage of training when providing teaching.

Resident Evaluation:
Entrustable Professional Activities (EPAs) are the main modality of assessment. Ideally, EPAs will be completed with the resident in real time. If completing them after the fact, please try to ensure they are submitted. NICU rotations are the only opportunity the residents have to complete certain EPAs required for promotion to the next stage of training.

Service Objectives:
***Daytime service*:** PGY1s will be expected to take on an active role within the team. They will function as a housestaff alongside Neonatal Nurse Practitioners/NNP students and Associate Physicians.

- Appropriate patient assignments and level of resident independence should be determined and assessed on an individual basis

Calls: PGY1s will be expected to cover calls at the MIS, buddied with a senior housestaff. The level of independence during these shifts can be determined on an individual basis.

Procedures in the NICU:
Neonatal-perinatal procedures require specialized skills developed through practice and experience. Given the risks of adverse events and multiple attempts, it is essential for learners and trainees to achieve consistent competence before performing procedures on particularly vulnerable patients. NICU specific guidelines regarding learner progress in acquiring procedural skills, while consistently providing optimal care to patients in the NICU can be found here:

- Matching Learners to Procedural Opportunities in NICU
- Learner Participation in Procedures for Extremely Preterm Infants

ALL procedures should be supervised until the resident is deemed competent and has reviewed the relevant documents on the AHS NICU Insite (insite.albertahealthservices.ca/nicu/).

Rotation Information Provided to Residents:

Below is a link to the information provided to the residents prior to commencing their NICU rotations: https://sites.google.com/a/ualberta.ca/pediatric-education-external-learners---neonatal/resources-for-learners