UNC Pediatrics - Critical Care Pathway
Directors: Sofia Aliaga (Critical Care) and Ashley Sutton (Hospitalist)

WakeMed Neonatology Rotation

Rotation Contact:
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Rationale:
The WakeMed Neonatology rotation functions as a part of the UNC Pediatric Residency Critical Care pathway by providing PGY-2 and PGY-3 pediatric residents with the opportunity to function independently in a large community level IV NICU. This rotation is intended for residents interested in pursuing a pediatric sub-specialty training program, and specifically, will serve as an excellent rotation experience for the future neonatal-perinatal medicine fellow.

Learning Outcomes:
By the end of the rotation, residents will be able to:
- Understand the etiology, pathophysiology, presenting symptoms, differential diagnosis and treatment of common neonatal emergencies.
- Judge indications for transfer of infants into the NICU for a higher level of care.
- Understand advanced clinical care topics including care of the extremely low birth weight infant, mechanical ventilation, pre and postoperative care and convalescent care.
- Perform developmentally appropriate physical exams on preterm and term infants.
- Perform neonatal procedures such as neonatal intubation, umbilical line placement and lumbar puncture.
- Function effectively in a neonatal delivery/resuscitation team.
- Collaborate and communicate within an interdisciplinary NICU team and externally with colleagues from general pediatrics and labor and delivery.
- Explore the ethical dilemmas surrounding care at the limits of viability and withdrawal/limitation of care.
- Value the practice of emotionally supportive care to the families of critically ill infants.

The NICU clinical curriculum addresses the following ACGME competencies:

1. Patient Care: Residents will provide effective patient centered care to infants in the NICU and full-term nurseries including demonstrating competency with basic neonatal procedures and resuscitation.
2. Medical Knowledge: Residents will acquire knowledge of common neonatal pathophysiology including diagnosis and treatment of respiratory distress syndrome, meconium aspiration, congenital cardiac disease, sepsis, hypoxic-ischemic encephalopathy,
infant of diabetic mothers/hypoglycemia, hyperbilirubinemia, persistent pulmonary hypertension of the newborn, management of the late preterm infant, and a variety of neonatal surgical pathology.

3. Interdisciplinary Skills: Residents will demonstrate a high level of functioning in an interdisciplinary team of physicians, neonatal nurse practitioners, nurses and respiratory therapists and will demonstrate effective communication within this interdisciplinary team and families.

4. Professionalism: Residents will demonstrate a high level of respect for each other, interdisciplinary team members, and families while exemplifying the values of the WakeMed Division of Neonatology.

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**Rotation Outline**

Backup Doctor (BUD)- 1 week
Intensive Care Nursery (ICN)- 3 weeks

**Duties**

**BUD** (Hours: 0800-1630 daily M-F)

- Resident will be primary call for pediatric delivery team (meconium, instrumented delivery, STAT deliveries, preterm deliveries)- supported by ICN respiratory therapist, ICN stabilization nurse and attending neonatologist.

- Resident will be primary call for all newborn nursery triage issues (respiratory distress, hypoglycemia, poor feeding, any nursing/PNP concerns).

- Resident will attend daily OB/MFM Antepartum rounds with the neonatologist. Resident will complete prenatal consults as requested by OB team under the supervision of attending neonatologist.

- Resident will serve as primary admitting resident while morning rounds are ongoing. This will include the initial stabilization and management of any admissions from the delivery room, newborn nursery or infants transferred in from referral hospitals. Resident will complete admission orders, H+P and hand off care to primary ICN team.

- Resident will provide procedural support to rounding teams including intubation, umbilical line placement, lumbar puncture, peripheral arterial line placement, and peripheral IV placement.

**ICN**

Hours: 0800-1700 daily M-F)
4 weeknight calls (overnight through rounds following morning (1700-0900)
2 weekend calls (weekend day through rounds following day~24 hrs)

- Resident will cover one ICN team with average census of 7-10 patients supported by NNP’s and the supervising neonatologist
- Resident will participate in daily interdisciplinary teaching rounds with the attending neonatologist and NNP’s on service.
- Resident will prepare daily progress notes and daily orders for each patient.
- Resident will assist team in the admission of infants to the ICN.
- Resident will attend high risk stabilizations in the DR as available.