

NEONATAL INTENSIVE CARE UNIT – UNMC, CUMC

Contact: Joy Higgins (559-9280)

When to contact: One month prior

Preceptors: Neonatologists on service

Where to meet: Arrive in time to write notes on the first day

Purpose:

The resident will be exposed to the critical care of sick and high-risk neonates and the convalescent care of recovering, growing neonates.

Objectives:

Emphasis will be placed on resuscitation of the high risk infant, recognition of signs and symptoms of neonatal illness with the formation of a differential diagnosis and treatment plan; monitoring of physiologic parameters; calculation of fluid, electrolyte and nutrition requirements; assessment of blood gases and respiratory treatment strategies. The resident will have the opportunity to participate with staff in minor procedures. Scheduling and assignment will be as per attending Neonatologist. Didactic instruction will be provided through daily rounds, conferences, and lectures. There is an average of 45 new admissions per month with an average of 24 patients per day.

Methods:

1. Residents are to attend high risk deliveries complicated by prematurity, multiple gestation, meconium staining, congenital anomalies and perinatal depression as well as routine cesarean sections. The goal is to provide students with exposure to neonatal resuscitation as outlined by the AAP and AHA.
2. Residents are expected to perform complete history and physicals including evaluation of the maternal obstetrical/medical history with subsequent development of a differential diagnosis, evaluation and treatment plan.
3. Residents will be involved in the daily evaluation, care and formulation of treatment plans of neonates in the NICU. This includes "work" rounds as well as formal rounds with the staff Neonatologist, and nursing staff.
4. The resident will be exposed to many of the neonatal problems requiring NICU care; i.e., prematurity, respiratory distress, congenital anomalies, perinatal depression, anemia, significant hyperbilirubinemia, hypoglycemia, sepsis, etc. The resident will also be exposed to some of the outcomes of neonatal intensive care.
5. The resident is to perform procedures; i.e., IV starts, intubation, catheter placement, chest tube placement, etc. on their patients. These will be supervised by a staff Neonatologist.
6. Residents will be members of a team communicating with referring physicians, consulting physicians and families regarding patient management.

7. Residents are expected to complete comprehensive discharge planning for each NICU graduate; i.e. follow-up appointments, tests, and communication with the primary physician.
8. The resident will gain experience with a variety of ventilatory strategies including high frequency oscillators, Nitric Oxide, and ECMO

Implementation:

1. A selective reading handout on specific topics is available in the UNMC Residency Library (UH 5160) to check out.
2. Nelson's "Essentials of Pediatrics", 2nd Edition
 - ♦ Chapter 2, Page 59-62
 - ♦ Chapter 4, Page 130-132
 - ♦ Chapter 6, Page 157-213
 - ♦ Chapter 11, Page 412-413
 - ♦ Chapter 17, Page 629-630
 - ♦ Chapter 19, Page 714-716
3. Goldsmith & Karotkin, "Assisted Ventilation of the Neonate", 3rd Edition

Evaluation:

A multiple choice exam of 5-10 questions during the last week of the rotation will be administered. Successful completion of the rotation will be based upon the resident's demonstrated exceptional knowledge of neonatal disorders and neonatal treatment strategies; the resident actively participates in patient discussion and management; and the resident clearly demonstrates self-study beyond requirements with appropriate application to NICU care.