

NEONATOLOGY ROTATION OBJECTIVES

MATERNAL-FETAL MEDICINE FELLOWSHIP

University of New Mexico

1. Description and Goals

The following are goals and objectives for the UNM one month neonatology rotation, undertaken in the first (PGY5) year of fellowship.

1. Goals:
 - A. Institute immediate care of the baby in the delivery room.
 - B. Describe neonatal adaptation
 - C. Perform clinical evaluation of the newborn, including assessment of gestational age
 - D. Describe and perform resuscitation of the newborn, including:
 - a. Intubation and ventilation
 - b. Drug use
 - c. Cardiac massage
 - d. Volume replacement
 - e. Temperature control
 - f. Interpretation and management of acid-base and blood gas status
 - g. Ex-utero intrapartum treatment (EXIT procedure)
 - E. Describe the etiology, management, sequelae, and if appropriate, prevention of:
 - a. Respiratory diseases including meconium aspiration syndrome and persistent fetal circulation
 - b. Hyperbilirubinemia
 - c. Infection
 - i. Sepsis
 - ii. Pneumonia
 - d. Hypoxic ischemic encephalopathy
 - e. Periventricular leukomalacia
 - f. Seizures
 - g. Metabolic abnormalities including hypoglycemia and hypocalcemia
 - h. Hemorrhagic disorders
 - i. Hypothermia
 - j. Heart disease
 - k. Intracranial hemorrhage
 - l. Necrotizing enterocolitis
 - m. Significant anomalies
 - n. Alloimmune thrombocytopenia
 - o. Hydrops
 - F. To describe developmental problems of the newborn and childhood
 - a. Very low birth weight infants
 - b. Low birth weight infants
 - c. Small for gestational age infants
 - d. Growth restricted infants

- G. Describe the use of surfactant therapy
- H. Describe critical care management involving:
 - a. Mechanical ventilation
 - b. Extracorporeal membrane oxygenation
- I. Describe indications, complications of and success of neonatal surgery for common congenital anomalies

2. Learning Objective Upon Completion of:

A. Medical Knowledge: Upon completion of this rotation, fellows will:

- 1. Discuss and describe resuscitation of the neonate and critical care management as outlined above.

B. Patient Care: and procedure skills

- 1. Demonstrate clinical competency in the delivery room resuscitation and intensive care management of the neonate.
- 2. Formulate appropriate management plans for critically ill neonates.
 - a. Cite published effectiveness rates for different ventilation modalities and ECMO.
 - b. Explain frequency and types of side effects and complications for all intervention
 - c. Evaluate the level of evidence for treatment success and complication rates
 - d. List costs of treatment regimens
 - e. Understand and interpret invasive monitoring parameters and results
 - f. Understand standard terminology, normal values, and test reliability

C. Practice-based Learning and improvement:

- 1. Demonstrate ability to perform self-assessment and incorporate feedback into improving clinical practice
- 2. Critically analyze and understand appropriate clinical management plans and identify areas for improvement
- 3. Use information technology to locate scientific studies from literature on medical and surgical management options and apply these to improve practice and patient care

D. Interpersonal and Communication Skills: Fellows are expected to:

- 1. Demonstrate ability to communicate test results to patients and families
- 2. Use effective listening skills to elicit and then provide information to patients and families
- 3. Work effectively, interact, and communicate appropriately with all members of the care team, including residents, fellows, and intensive care specialists, medical and surgical subspecialists.

E. Professionalism: Fellows are expected to:

- 1. Demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population

2. Demonstrate respect, compassion, and integrity in interactions with patients, families, and other health care professionals
3. Demonstrate sensitivity and responsiveness to patient's culture, age, gender, and disabilities
4. Demonstrate respect, compassion, and integrity in interactions with patients' families. Demonstrate respect, compassion, integrity and sensitivity in discussion with families surrounding perinatal care in the peri-viable period as well as in discussions surrounding withdrawal of support.

F. Systems-Based Practice:

1. Practice cost-effective healthcare and demonstrate knowledge of resource allocation that does not compromise quality of care, especially in the use of diagnostic tests
2. Coordinate patient care among different health care providers, including residents, neonatologists, pediatric medical and surgical subspecialists.