

Resident Curriculum

PL-3

ICN

Patient Care

The competency of patient care includes:

- communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- gather essential and accurate information about their patients
- make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- develop and carry out patient management plans counsel and educate patients and their families
- use information technology to support patient care decisions and patient education
- perform competently all medical and invasive procedures considered essential for the area of practice
- provide health care services aimed at preventing health problems or maintaining health
- work with health care professionals, including those from other disciplines, to provide patient- focused care

Patient Care: Goals and Objectives

GOAL # 1: To develop residents' ability to evaluate and manage critically ill infants with a broad range of medical and surgical problems. The SCN is made up of the Intensive Care Nursery (ICN), and the Intermediate Care Nursery (IMCN). Residents will be introduced to the procedures required to care for sick newborns and given the opportunity to develop these skills.

Objectives:

- a. Residents will take a detailed perinatal history when possible, review prenatal records, and perform a complete physical examination upon the patient's admission. After evaluating the patient, they will formulate a differential diagnosis and plan appropriate diagnostic and therapeutic interventions, in coordination with the attending neonatologist, respiratory therapist and neonatal nurse.
- b. Through thoughtful review of diagnostic results and frequent reassessment of the patient, residents will reconsider the clinical status of the patient, along with the differential diagnoses on a continuing basis, making changes to the management plans as appropriate.
- c. At all time, it is the residents' responsibility to educate and work with the patient and family, maintaining a strong therapeutic alliance.
- d. Residents will be mindful of routine health care maintenance for infants under their care. They will order the Texas newborn screen, hearing screens, immunizations, car seat testing and ROP examinations as indicated.
- e. As medically indicated, residents will perform appropriate diagnostic and therapeutic procedures after obtaining informed consent from the mother, with supervision from the attending neonatologist or NNP. Residents will document procedures in the chart and in their personal logbooks. On this rotation, these procedures may include:
 - i. Arterial puncture

- ii. Endotracheal intubation
- iii. Intravenous catheter placement
- iv. Lumbar puncture
- v. Thoracentesis and chest tube insertion
- vi. Umbilical catheter placement
- vii. Venipuncture
- viii. Suprapubic catheterization

Medical Knowledge

The competency of Medical Knowledge includes:

- demonstrate an investigatory and analytic thinking approach to clinical situations
- know and apply the basic and clinically supportive sciences which are appropriate to their discipline

Medical Knowledge: Goals and Objectives

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Objectives:

- a. Residents will draw from a wide range of patient diagnoses requiring admission to a level III NICU to broaden their exposure to a wide range of complex disease processes. In developing a differential diagnosis, the resident will demonstrate his/her ability to apply analytical thinking to the clinical situation.
- b. During these four NICU rotations, it is expected that residents will manage infants diagnosed with, but not limited to:
 - ix. Congenital abnormalities
 - x. Congenital pneumonia
 - xi. Hyperbilirubinemia
 - xii. Meconium aspiration
 - xiii. Necrotizing enterocolitis
 - xiv. Neonatal infectious diseases caused by bacteria, viruses, and parasites
 - xv. Persistent pulmonary hypertension of the newborn
 - xvi. Pneumothorax
 - xvii. Prematurity (including apnea of prematurity, retinopathy of prematurity)
 - xviii. Respiratory distress syndrome
 - xix. Neonatal seizures
 - xx. Perinatal complications
- c. Residents will learn about the principles and application of parenteral and enteral nutrition, as well as fluid and electrolyte therapy in neonates.
- d. Residents will work with attendings, respiratory therapists and other team members to manage conventional and high frequency mechanical ventilation of sick neonates.

Practice- Based Learning and Improvement

The competency of Practice- Based Learning and Improvement includes:

- analyze practice experience and perform practice-based improvement activities using a systematic methodology
- locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- obtain and use information about their own population of patients and the larger population from which their patients are drawn
- apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- use information technology to manage information, access on-line medical information; and support their own education
- facilitate the learning of students and other health care professionals

Practice- Based Learning and Improvement :Goals and Objectives

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Objectives:

- a. In caring for patients, residents will utilize a broad range of published medical information available through web-based resources, as well as print textbooks and the medical school library. It is expected that decisions about patient care will be formed by review, synthesis and application of studies available in the literature. Daily work rounds will include discussion of information gathered from the literature by residents and other team members.
- b. Residents will attend or review lectures on topics important to the care of neonates given by the neonatology staff.
- c. Residents will take part in radiology rounds, reviewing radiologic imaging of their patients with the pediatric radiology attending and neonatology team.
- d. All residents will take an active role in teaching third and fourth year TTUHSC medical students or any other visiting student rotating on the neonatology service.

Systems Based Practice

The competency of System Based Practice includes:

- understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- practice cost-effective health care and resource allocation that does not compromise quality of care
- advocate for quality patient care and assist patients in dealing with system complexities

- know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance

Systems Based Practice :Goals and Objectives

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Objectives:

- Residents are expected to provide high quality, but cost-effective health care. They will collaborate with case managers and other team members to implement appropriate discharge plans.
- Residents will help arrange follow up with the Texas early child hood intervention (ECI), the Texas Tech High Risk Follow-up Clinic and specialists as indicated, in addition to the patient's primary care provider. Residents will communicate with the patient's primary care physician, especially near the time of discharge.

Professionalism

The competency of Professionalism includes:

- demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supercedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities

Professionalism :Goals and Objectives

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Objectives:

- Residents will interact with an extremely ethnically and socio-economically varied patient population that is treated in this SCN. Residents will care for patients independent of their ability to pay for services.
- Residents will provide compassionate, empathetic and culturally sensitive communication with parents. They will be particularly sensitive to the unique situation of parents of severely ill infants. They will demonstrate sensitivity and responsiveness at all times to parents' culture, gender, sexual orientation and disabilities.
- Maintenance of family confidentiality will be of highest priority.
- Residents will at all times demonstrate ethical and professional behavior. During this rotation, in particular, residents will deal with issues of end-of-life care and withdrawal of support, potential for long-term disabilities and chronic illness. Residents will take part in discussions between attending physicians and families about end of life care decisions.
- When appropriate, residents will utilize the Thomason Ethics Committee to facilitate team meetings to discuss difficult issues.
- Residents will ensure that families give informed consent for all aspects of care.

Interpersonal and Communication Skills

The competency of interpersonal and communication skills include:

- create and sustain a therapeutic and ethically sound relationship with patients
- use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- work effectively with others as a member or leader of a health care team or other professional group

Interpersonal and Communication Skills :Goals and Objectives

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Objectives:

- a. Residents will take part in daily collaborative interdisciplinary team rounds. They will provide innovative, state-of-the-art clinical care through a collaborative team of neonatologists, neonatal nurse practitioners, neonatal nurses, respiratory therapists, pharmacists, medical students, social workers, medical management, lactation specialists, occupational & physical therapists, speech therapists, chaplains and other support staff.
- b. Residents will meet regularly with parents to listen to their concerns and keep them updated on their child's condition and care plan.
- c. Residents will coordinate consult services and facilitate discussion among clinician members of the team the family.
- d. Daily Site of Care notes in the chart clearly documenting patients' progress, diagnostic results and ongoing plan will be completed in order to maintain an accurate medical record and share information among team members. When leaving the rotation, an off-service summary will be prepared and made part of the medical record.
- e. Residents will provide feedback to their co-residents, students and attendings on an ongoing basis throughout the rotation, completing written evaluations at the completion of the rotation. Similarly, they will receive regular verbal feedback and a final written evaluation from the attendings that will be placed in their permanent record. Residents will use constructive feedback to guide their efforts in ongoing learning and self-improvement.