



# Entrustable Professional Activities

## EPA 1 for Neonatal-Perinatal Medicine

### EPA 1: Manage Patients with Acute, Common Single System Diseases in an Inpatient Setting

#### Supervision Scale for This EPA

1. Trusted to observe only
2. Trusted to execute with direct supervision and coaching
3. Trusted to execute with indirect supervision for most simple and some complex cases
4. Trusted to execute with indirect supervision but may require discussion of information conveyed for a few complex cases
5. Trusted to execute without supervision

#### Description of the Activity

The ability to manage neonates and infants requiring hospitalization for common acute disease processes is a key activity of a neonatologist. This includes performance of all indicated procedures associated with the subspecialty.

The specific functions which define this EPA include:

1. Gathering essential information through history taking, physical exam, and judicious laboratory evaluation
2. Using sound clinical reasoning to develop a prioritized differential diagnosis that allows the proper diagnostic tests to be performed
3. Knowing or acquiring knowledge of the evidence related to the primary problem, taking gestational age into consideration as appropriate
4. Applying the evidence to the patient's care in developing a management plan that addresses the primary problem, the need for hospitalization, plans for nutritional support, discharge criteria, and follow-up plans
5. Placing the patient at the center of all management decisions to provide patient and family centered care by engaging in bidirectional communication with caregivers and parents
6. Disseminating the therapeutic plan and clinical reasoning in a manner that is transparent to all members of the health care team

#### Judicious Mapping to Domains of Competence

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice
- Personal and Professional Development

#### Competencies Within Each Domain Critical to Entrustment Decisions

PC 1:	Gathering information
PC 2:	Organizing prioritizing responsibilities



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PC 5:	Performing complete physical exams
PC 6:	Using optimal clinical judgment
PC 7:	Developing management plans
PC 8:	Performing procedures
ISC 1:	Communicating with patients/families

### Context for the EPA

**Rationale:** Neonatologists must be able to provide care for neonates and infants who present with a broad range of illnesses, including those that predominantly affect a single organ system. Care of these patients must take into consideration relevant pregnancy and delivery circumstances and the gestational age of the infant. Common, single-system diseases can evolve to include multiples systems and greater complexity. The neonatologist must anticipate these potential complications and recognize when they occur. It is beyond the scope of this document to attempt to identify all of the single system diseases for which a neonatologist would be responsible; rather, it includes common, illustrative problems that a practicing neonatologist will see commonly.

**Scope of Practice:** Care of newborns and infants with illnesses included in this EPA is provided in a number of different contexts. In some cases, the neonatologist may act as a consultant to a general pediatrician or family physician who is primarily responsible for these babies. In other cases, the neonatologist may be the primary provider.

### Curricular Components That Support the Functions of the EPA

1. Gathering essential information through history taking, physical exam, and judicious laboratory evaluation
  - Gathers information efficiently, utilizing pattern recognition when appropriate
  - Recognizes pertinent positives and negatives as well as broad diagnostic categories
  - Performs, elicits, recognizes, and interprets the findings of physical exam maneuvers. Recognizes the relevance of test results in relation to care of the patient
2. Using sound clinical reasoning, allowing development of a prioritized differential diagnosis to allow the proper diagnostic tests to be performed
  - Establishes pattern recognition leading to the ability to identify discriminating features between similar patients and avoids premature closure
  - Develops a well-organized and comprehensive yet focused management plan based on a prioritized differential diagnosis
  - Considers cost implications of testing when developing management plans
3. Knowing or acquiring knowledge of the evidence related to the primary problem, taking gestational age into consideration as appropriate
  - Evaluates knowledge/level of evidence and uses it appropriately in a given encounter to develop meaningful clinical management plans
  - Aware of limits; effectively searches literature to support decision-making



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- Learns from experience; analyzes a situation and evaluates what worked well and what did not work well in the past
  - Adapts management plan based on gestational age of the infant and circumstances of birth
  - Recognizes benefit of and employs established protocols/care pathways in providing care, when appropriate
4. Applying the evidence to the patient's care in developing a management plan
- Incorporates pertinent evidence in establishing management plan
  - Provides care to newborns with a broad spectrum of diseases that primarily affect a single organ system and are of lower complexity and acuity. Examples include (but are not limited to) the following problems:
    - Respiratory distress syndrome/surfactant deficiency
    - Transient tachypnea of the newborn
    - Congenital pneumonia
    - Pneumothorax
    - Cleft lip and/or palate
    - Isolated airway anomalies
    - Cardiac arrhythmias
    - Non-cyanotic congenital heart defects
    - Gastroesophageal reflux
    - Seizures
    - Stroke
    - Neural tube defects
    - Isolated intracranial hemorrhage
    - Palsies (birth-related or congenital)
    - Urinary tract infection
    - Acute and chronic kidney disease
    - Omphalitis
    - Cellulitis
    - Meningitis
    - Hyperbilirubinemia
    - Hemolytic diseases
    - Hypoglycemia
    - Hypo/hyperthyroidism
    - Individual, low acuity issues associated with moderate prematurity, including:
      - Thermoregulation
      - Feeding difficulties
      - Apnea and bradycardia
  - Demonstrates the ability to anticipate and recognize the potential involvement of other organ systems
  - Demonstrates knowledge and skills required to initiate/apply multiple therapies, including:
    - Arterial and venous access
    - CPAP and other non-invasive modes of respiratory support
    - Endotracheal intubation and provision of surfactant



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- Ventilator management (conventional modes)
  - Intravenous fluids and nutrition
  - Enteral nutrition
  - Antibiotics
  - Needle thoracentesis and chest tube placement
  - Phototherapy
  - Exchange transfusion
5. Placing the patient at the center of all management decisions
- Incorporates parents' assumptions and values into management plans through bidirectional communication with little interference from personal biases
  - Includes family in a shared decision-making process
6. Disseminating the therapeutic plan and clinical reasoning in a manner that is transparent to all members of the health care team
- Establishes and maintains a therapeutic alliance with parents and families
  - Tailors communication appropriately to colleagues, staff, and families
  - Identifies and effectively mitigates cultural, social, and psychological barriers to communication

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### Curricular Components Author

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