

**Pediatric Intensive Care Unit (PICU) - ROTATION SPECIFIC OBJECTIVES Pediatric Emergency
Medicine Subspecialty Residency - University of Calgary**

ROTATION SPECIFIC OBJECTIVES

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert

Knowledge:

- Physiology of CPR.
- Pharmacology of resuscitation drugs, inotropes/pressors.
- Thorough knowledge of PALS guidelines and ATLS guidelines (as pertain to consults on trauma patients).
- Physiology of shock and fluid resuscitation.
- Early goal directed therapy for septic shock.
- Respiratory failure/arrest.
- Stabilization of patients with congenital heart disease.
- Tracheostomy care.
- Initiation of ventilator settings.
- Post-arrest management.
- Intubation and extubation management.
- Indications and contraindications for ECLS/ECMO.

Skills – demonstrated with competence (if opportunity available during rotation):

- Bag/mask ventilation.
- Insertion of airway devices, including LMA/OPA/NPA.
- Modified rapid sequence intubation.
- Endotracheal intubation.
- Intraosseous insertion.
- Arterial puncture.
- Needle decompression of chest.
- Chest tube insertion.
- CPR.
- Defibrillation/Cardioversion.
- Peripheral Venous Access (+/- ultrasound guided).
- *Central venous access (competency not expected but exposure if possible).*

Communicator:

- Establish therapeutic relationships with patients/families.
- Discuss end of life decisions with families.
- Obtain and synthesize relevant history from patients/families.
- Discuss appropriate information with patients/families and the health care team.

- Communicate effectively using a written health record, electronic medical record, or other digital technology.
- Disclose harmful patient safety incidents to patients and their families accurately and appropriately.

Collaborator:

- Consult effectively with other physicians and health care professionals.
- Contribute effectively to interdisciplinary team activities.
- Lead interprofessional resuscitation team through human patient simulation.
- Hand over the care of a patient to another health professional to facilitate continuity of safe patient care.

Leader:

- Utilize resources effectively to balance patient care, learning needs, and outside activities.
- Allocate finite health care resources wisely, specifically with respect to PICU beds and transport resources.
- Work effectively and efficiently with demonstration of leadership skills in a health care team.
- Utilize information technology to optimize patient care, life-long learning and other activities.
- Contribute to a culture that promotes patient safety.

Health Advocate:

- Identify the important determinants of health affecting patients.
- Contribute effectively to improved health of patients and communities.
- Recognize and respond to those issues where advocacy is appropriate.

Scholar:

- Develop, implement and monitor a personal continuing education strategy.
- Critically appraise sources of medical information.
- Facilitate learning of patients, medical trainees/students and other health professionals.

Professional:

- Deliver highest quality care with integrity, honesty and compassion.
- Exhibit appropriate personal and interpersonal professional behaviors.
- Practice medicine ethically consistent with obligations of a physician.
- Demonstrate a commitment to patient safety and quality improvement.

ROTATION SPECIFIC INFORMATION

Vacation Policies

1. We do not suggest taking days off within the first week of the PICU rotation. There are orientation-teaching sessions that occur daily during that time which serve as important introductions /refreshers to key areas in the PICU world that are important to attend.
2. Please find attached the dates during which vacation requests are accepted for each block. In order to create a request timeframe that is fair for all residents we accept vacation requests starting three blocks in advance of your time in PICU. We then accept vacation requests up until the eight week cut off as delineated by PARA. Please note for the first block we will accept vacation requests from the date the master ROTA is released up until eight weeks prior to the start of the block.
3. Please send your requests for time off to Mary.Fras@albertahealthservices.ca and Jaime.Blackwood@albertahealthservices.ca. We endeavor to respond to your requests as promptly as we are able, but please recognize that we receive many emails with multiple requests so if you have not heard back from us, we encourage you to email again as a reminder. We appreciate your patience as we ensure we are granting requests in an appropriate and fair manner.

Procedures in the PICU

PEM educational leadership is in discussion with PICU educational leadership to ensure procedural opportunities are available for PEM residents. The main procedures targeted will be intubations, IV starts, and long IV starts with US guidance. To help facilitate this:

1. PICU educational leadership will reinforce that PEM residents are senior residents and should be given the opportunity to perform procedures as described above, especially on their own patients.
2. When a procedural opportunity is available, PEM residents will advocate to the PICU attending by discussing their interest in the procedure, their skill level, and their comfort with the procedure.
3. PEM residents can also seek out other procedural opportunities such as through the transport team when the resident has completed their rounding for the day.