Pediatric Anesthesia – ROTATION DESCRIPTION AND EXPECTATIONS (RDE)
Pediatric Emergency Medicine Subspecialty Residency Program - University of Calgary

ROTATION DESCRIPTION

Rotation structure

- Four-week rotation in the Alberta Children's Hospital operating rooms working directly one-on-one with pediatric anesthesiologists.
- Option to spend two to three days with the Acute Pain Service – to arrange this please contact Dr Maggie Livingston *in advance* of the rotation.
- Option to spend two to three days in the Chronic/Complex Pain Clinic – to arrange this please contact Dr. Nivez Rasic *in advance* of the rotation.
- As a supplementary learning activity, complete the following Pediatric Pain Curriculum offered by Toronto Sick Kids Hospital: http://www.sickkids.ca/pain-centre/Health-care Professionals/Online%20Pain%20Curriculum/index.html
- Connect with the anesthesia resident on rotation and the OR respiratory therapist to advocate for the typesof OR rooms that would be of most use to achieve the specific objectives listed below.
- For continued practice after the formal rotation, residents can individually pursue a half-day session in the OR every six months on Thursday afternoons free from other educational commitments. This can be arranged through Pediatric Anesthesia's administrator, Kristin Ross (kristin.ross@ahs.ca). Please contact Kristen about two to three weeks prior to the desired date.

Rotation length

Standard rotation length is 16 OR days over 4 weeks. Vacation is allowed per the PEM Vacation and Education and Leave Policy (https://docs.google.com/document/d/1pQddx9VLT74sny263koOMLAg_MWns9Au/edit?usp=sharing&ouid=100114742872973660072&rtpof=true&sd=true).

Assessment

Daily shift evals will be sent via one45 to the attending at the end of each shift. At the end of the block, the daily shift evals will be compiled and an ITAR will be created by the Anesthesia Evaluation Coordinator (Dr. Lindsay McMillan).

EPAs

The following EPAs have been mapped to this rotation and can be obtained:
**Refers to EPAs that must be prioritized on this rotation, very likely to occur*

FOD	**5**	Working Effectively with Other Members of the Interprofessional Team
*CORE	**7**	Providing Sedation and Systemic Analgesia for Patients Undergoing Procedures in the ED
*CORE	**8**	Performing the Procedures of Pediatric Emergency Medicine
CORE	**11**	Managing Emotionally Charged Interactions with Patients, Families and/or Other Health Care Professionals
CORE	**12**	Coordinating Care with Other Services

The following procedural EPAs have been mapped to this rotation and can be obtained:
**Refers to EPAs that must be prioritized on this rotation, very likely to occur*

Bag/Valve/Mask Ventilation (2)*
Endotracheal Intubations (3) *- Min 1 adolescent/adult*
Laryngeal Mask Airway Insertion (1)
Surgical Airway (1)*

ROTATION EXPECTATIONS (PEM Competencies 2023)
At the completion of training, the resident will have acquired the following competencies and will function effectively as:

Medical Expert:

1. Practise medicine within their defined scope of practice and expertise

1.1. Demonstrate a commitment to high-quality care of their patients

1.2. Integrate the CanMEDS Intrinsic Roles into their practice of Pediatric Emergency Medicine

1.3. Apply knowledge of the clinical and biomedical sciences relevant to Pediatric Emergency Medicine

1.3.2. Anatomy, physiology, and pathophysiology as related to clinical presentations in Pediatric Emergency Medicine

1.3.2.2. Physiology and pathophysiology as it applies to the cardiovascular, pulmonary, gastrointestinal and hepatobiliary, genitourinary, gynecologic, endocrine, neurological, musculoskeletal, hematologic, immunologic and integumentary systems, including pregnancy

1.3.7. Non-pharmacologic approaches to the management of pain

1.3.8. Pharmacology as it relates to the pharmacokinetics, pharmacodynamics, mechanism of action, routes of delivery, and adverse effects of the following:

1.3.8.1. Analgesics and sedatives

1.3.8.3. Cardiovascular medications

1.3.8.6. Medications used in resuscitation

1.3.8.8. Respiratory medications

1.3.11. Acute care, including emergencies and critical care

1.3.11.4. Invasive and non-invasive mechanical ventilation

3. Plan and perform procedures and therapies for the purpose of assessment and/or management

3.1. Determine the most appropriate procedures or therapies

3.2. Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, proposed procedure or therapy

3.3. Prioritize procedures or therapies, taking into account clinical urgency and available resources

3.4. Perform procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances

3.4.1. Neonatal and pediatric resuscitation

3.4.1.1. Oxygen delivery and suctioning

3.4.1.2. Airway adjuncts and positioning techniques

3.4.1.3. Bag and mask ventilation

3.4.1.4. Placement of laryngeal mask airway (LMA)

3.4.1.5. Rapid sequence intubation

3.4.1.6. Direct and indirect laryngoscopy

3.4.1.7. Management of the difficult airway

3.4.1.8. Removal of supraglottic foreign body

3.4.1.9. Emergency cricothyrotomy and transtracheal ventilation

3.4.1.10. Initiation of mechanical ventilation

3.4.3. Vascular access

3.4.3.1. Peripheral

3.4.3.2. Central

3.4.5. Procedural sedation and analgesia

3.4.5.1. Administration of local and regional anesthesia

3.4.5.2. Systemic sedation and analgesia

For Communicator, Collaborator, Leader, Health Advocate, Scholar, Professional competencies, please review the appropriate section of the Pediatric Emergency Medicine Competencies document at: https://www.royalcollege.ca/content/dam/documents/ibd/pediatric-emergency-medicine/pem-competencies-e.pdf