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

ROTATION DESCRIPTION

Rotation length

Standard rotation length is 16 shifts over 4 weeks. Shift reduction 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).

To maximize the learning potential on this block, PEM residents have been specifically scheduled with attendings who work both PEM/AEM. This will allow the attending to recognize the strengths of pediatrics-trained residents but also areas where they can benefit from more exposure (trauma, resuscitation, toxicology, procedures. Please contact the scheduling physician Dr. Claire Acton (calgaryerelectives@gmail.com) to facilitate this process.

Assessment

Residents should send daily shift evals to their attending using one45. At the end of the rotation, the daily evals are compiled into an ITAR by Dr. Acton.

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	**1**	Assessing and Providing Initial Management for Patients who are Critically Ill
FOD	**2**	Assessing and Providing Initial Management for Patients with a Suspected Multi-System Trauma
FOD	**3**	Managing Patients with a Common and Uncomplicated Presentation
FOD	**4**	Communicating with Patients and Families About Assessment Findings and Management Plans
FOD	**5**	Working Effectively with Other Members of the Interprofessional Team
*CORE	**1**	Providing Resuscitation for Patients who are Critically Ill
*CORE	**2**	Managing Patients with an Acute Injury
CORE	**3**	Managing Patients with a Complex Presentation of an Acute Illness
CORE	**4**	Managing Patients with a Mental Health Emergency
CORE	**5**	Managing Patients with a Acute Toxic Ingestion or Exposure
CORE	**7**	Providing Sedation and Systemic Analgesia for Patients Undergoing Procedures in the ED
CORE	**8**	Performing the Procedures of Pediatric Emergency Medicine
CORE	**9**	Performing and Interpreting Point-Of-Care Ultrasound to Guide Patient Management
CORE	**10**	Managing a Personal Clinical Workload of Patients in the Pediatric Emergency Department

CORE	**11**	Managing Emotionally Charged Interactions with Patients, Families and/or Other Health Care Professionals
CORE	**12**	Coordinating Care with Other Services
CORE	**13**	Providing Clinical Teaching and Supervision

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)
Cardioversion/Defibrillation (1)*
Casting Without Reduction Lower Limb (1)
Casting Without Reduction Upper Limb (1)
Chest Tube Placement - Percutaneous (1)*
Chest Tube Placement - Traditional (1)*
Endotracheal Intubations (3) *- Min 1 adolescent/adult*
Gastrostomy Tube Replacement/Temporization (1)*
Incision and Drainage of Abscess (1)
Intraosseous Insertion (1)*
Lumbar Puncture in a Child or Adolescent/Adult (1)
Laryngeal Mask Airway Insertion (1)
Surgical Airway (1)*
Reductions of an Extremity Fracture (3)
Wound Repair - Simple (2)
Wound Repair - Complex (2)

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

1.3.11. Acute care, including emergencies and critical care

1.3.11.3. Assessment and management of major trauma, including advanced trauma life support (ATLS) guidelines or equivalent

1.3.13. Clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications, and prognosis of illnesses in the following categories

1.3.13.1. Allergic
1.3.13.2. Cardiovascular
1.3.13.3. Endocrinologic
1.3.13.4. Gynecologic and obstetrical
1.3.13.5. Gastrointestinal and hepatobiliary
1.3.13.6. Hematologic
1.3.13.8. Infectious
1.3.13.9. Neurologic
1.3.13.10. Oncologic
1.3.13.11. Ophthalmic
1.3.13.12. Orthopedic
1.3.13.13. Otolaryngologic
1.3.13.14. Psychiatric and behavioural
1.3.13.15. Renal and genitourinary
1.3.13.16. Respiratory
1.3.13.17. Rheumatologic

1.3.14. Social determinants of health

1.3.14.1. Impact of poverty and food and housing insecurity

1.3.14.2. Factors influencing access and barriers to healthcare

1.3.14.3. Factors placing children at risk of maltreatment and neglect

1.3.15. Factors impacting the health of Indigenous peoples

1.3.15.1. Effects of colonization on and the healthcare disparities of Indigenous peoples

1.3.15.2. Historical agreements and legislation that govern healthcare

1.3.15.3. Epidemiology of medical conditions affecting Indigenous children, and recommendations for screening

1.3.15.4. Jordan’s Principle

1.3.15.5. Traditional healing practices

1.3.15.6. Truth and Reconciliation Commission of Canada: Calls to Action report and implications f or health care

1.4. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner

1.5. Carry out professional duties in the face of multiple competing demands

1.5.1. Triage and prioritize when dealing with single or multiple critically ill patient(s)

1.5.2. Work efficiently in an environment with large patient volumes and rapidly changing priorities, including simultaneous performance of multiple tasks and appropriate change in focus

2. Perform a patient-centred clinical assessment and establish a management plan

2.1. Prioritize issues to be addressed in a patient encounter

2.1.1. Recognize and manage crisis situations and critical illness or injury

2.2. Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion

2.2.2. Elicit the history in a timely manner

2.2.3. Gather information about psychosocial and family considerations relevant to the presentation

2.2.4. Use collateral sources of information to complete or substantiate clinical information

2.2.5. Perform a mental health assessment to determine a patient's risk for self-harm or harm to others

2.2.6. Perform clinical assessments in a manner that recognizes and minimizes pain and distress

2.2.7. Perform timely and selective clinical reassessments to optimize and facilitate patient care

2.2.9. Select investigations with attention to diagnostic utility, safety, availability, and cost

2.2.10. Interpret the results of laboratory investigations

2.2.11. Interpret the following investigations

2.2.11.1. Electrocardiograms

2.2.11.2. Medical imaging, including

2.2.11.2.1. Radiographs

2.2.11.2.1.1. Abdominal

2.2.11.2.1.2. Chest

2.2.11.2.1.3. Skull

2.2.11.2.1.4. Spine and extremity

2.2.11.2.2. Critical findings of

2.2.11.2.2.1. Abdominal/pelvic computed tomography (CT) and ultrasound

2.2.11.2.2.2. Chest CT

2.2.11.2.2.3. Cranial CT

2.2.11.2.2.4. Imaging done as a part of a trauma protocol

2.2.11.2.3. POCUS examinations

2.2.12. Use sound clinical reasoning and judgment to guide diagnostic and management decisions, including in circumstances where complete clinical or diagnostic information is not immediately available

2.2.13. Recognize and mitigate the risk of over-investigation and over-diagnosis

2.4. Establish patient-centred management plans for:

2.4.1. Resuscitation of critically ill presentations

2.4.1.1. Airway emergencies

2.4.1.2. Cardiopulmonary arrest

2.4.1.3. Respiratory failure or arrest

2.4.1.4. Anaphylaxis

2.4.1.5. Shock

2.4.1.6. Sepsis

2.4.1.7. Trauma

2.4.1.7.1. Blunt and penetrating injuries

2.4.1.7.2. Burns: chemical, electrical, and thermal

2.4.2. Acute medical and surgical presentations and findings, including

2.4.2.1. Systemic

2.4.2.1.1. Acute intoxication and withdrawal

2.4.2.1.5. Hypertension

2.4.2.1.9. Toxidromes

2.4.2.2. Cardiovascular

2.4.2.2.1. Chest pain

2.4.2.2.2. Congestive heart failure

2.4.2.2.4. Dysrhythmias

2.4.2.2.5. Heart murmurs

2.4.2.2.6. Syncope

2.4.2.12. Obstetric

2.4.2.12.1. First trimester nausea and vomiting, including hyperemesis gravidarum

2.4.2.12.2. Pelvic pain

2.4.2.12.3. Vaginal bleeding

2.4.2.18. Respiratory

2.4.2.18.1. Apnea

2.4.2.18.2. Chest pain

2.4.2.18.3. Cough

2.4.2.18.4. Dyspnea

2.4.2.18.5. Hemoptysis

2.4.2.18.6. Inhalational injury

2.4.2.18.7. Stridor

2.4.2.18.8. Wheeze

2.4.2.20. Conditions presenting in special populations, including

2.4.2.20.1. Patients with

2.4.2.20.1.1. Cancer

2.4.2.20.1.2. Complex or chronic pain

2.4.2.20.1.3. Medical complexity, including children dependent on technology

2.4.2.20.1.4. Neurodevelopmental disorders and intellectual complexity

2.4.2.20.2. Patients who are

2.4.2.20.2.1. At the end of life

2.4.2.20.2.2. Gender diverse

2.4.2.20.2.3. Immunocompromised, including transplant recipients

2.4.2.20.2.4. Victims of neglect or physical or sexual abuse or assault

2.4.2.20.3. Recent immigrants, international adoptees, and refugees

2.4.2.20.4. Returning travelers

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, a proposed procedure or therapy

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

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

3.4.2. Trauma life support

3.4.2.1. Cervical spine immobilization

3.4.2.2. Control of exsanguinating external hemorrhage

3.4.2.3. Needle decompression of chest

3.4.2.4. Pericardiocentesis

3.4.2.5. Thoracostomy: finger and tube

3.4.2.6. Application of pelvic binder

3.4.3. Vascular access

3.4.3.1. Peripheral

3.4.3.2. Central

3.4.3.3. Intraosseous

3.4.3.5. Venipuncture for sampling

3.4.3.6. Arterial puncture for sampling

3.4.3.7. Arterial puncture for line placement

4. Establish plans for ongoing care and, when appropriate, timely consultation

4.1. Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation

4.1.1. Determine the need for and provide vaccination or post-exposure prophylaxis

4.1.2. Determine the need for consultation with another physician

4.1.3. Determine the need for referral to mental health or psychological services

4.1.4. Determine the need for referral for social supports

4.1.5. Coordinate outpatient care and follow-up for a discharged patient

4.1.6. Provide follow-up for diagnostic test results that become available after a patient's discharge from the emergency department

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