

CanMEDS Rotation Objectives – Pediatric Emergency Medicine

RCPS Emergency Medicine Residency Program

Department of Emergency Medicine

University of Alberta

**While all objectives may not be accomplished in a single rotation, the aim is for the resident to actively seek learning opportunities to fulfill these objectives while on a particular rotation. Many of these objectives will overlap with other rotations. By the end of the residency program, all objectives should be covered.*

Medical Expert

The learner should:

- Develop knowledge of normal growth and development parameters, including vital signs, at different ages
- Develop clinical assessment skills in the undifferentiated pediatric patient at various age groups (i.e., infant, toddler, school aged child and adolescent).
- Develop clinical assessment skills in the uncooperative pediatric patient
- Develop appropriate differential diagnoses for different patient presentations
- Develop skills in leading a pediatric resuscitation (including real patients OR simulated)
- Gain knowledge of conditions common in pediatric emergency medicine:
 - The febrile child or neonate
 - Respiratory conditions (URTI, pneumonia, croup, bronchiolitis, asthma, AOM, pharyngitis)
 - GI conditions (constipation, gastroenteritis)
 - Common surgical concerns in pediatrics (appendicitis, incarcerated hernia, testicular torsion, intussusception)
 - Feeding problems in the infant
 - Seizures (febrile and non-febrile)
 - Head injury and concussion
 - Headache
 - The irritable or inconsolable child
 - Musculoskeletal trauma
 - Pain management in the child
 - Urinary tract infection
- Gain knowledge of (and where applicable, exposure to) conditions unique to pediatric emergency medicine or with special implications in the pediatric population:
 - Ingestions and overdose
 - Trauma (minor and major)
 - Child abuse/neglect
 - The septic child or neonate
 - Diabetic ketoacidosis
 - Respiratory emergencies (foreign body aspiration, epiglottitis)

- Fluid and electrolyte disorders
- Congenital and acquired heart disease
- Infectious diseases in the pediatric population (roseola, 5th disease, soft tissue infections) including basic knowledge of immunizations
- Febrile neutropenia
- Jaundice in the neonate
- Developmental and syndromic disorders
- The technologically dependent child (e.g., tracheostomy, G-tubes, etc.)

The learner should gain experience in the following technical skills:

- Suturing
- Reduction of uncomplicated fractures and dislocations
- Procedural sedation, including becoming familiar with appropriate medication selection and appropriate pediatric dosing
- Interpretation of pediatric (radiographs), including:
 - Identification of normal pediatric developmental findings (ie thymus gland)
 - Identification of growth plates
 - Cervical spine

The learner should gain knowledge of, and where applicable, experience in the following technical skills:

- Airway management
 - Includes airway assessment and knowledge of differences of the pediatric airway compared to the adult airway
- Intravenous access
- Intraosseus access
- Tube thoracostomy
- Nasogastric/nasojejunal tube placement
- Lumbar puncture
- Wound management (including glue, suturing, steristrip application)
- Foreign body removal (ear, nose)

Communicator

The learner should develop communication skills to:

- Effectively communicate with children according to their age
- Effectively communicate with families
- Chart accurately, efficiently and in an organized manner

Collaborator

The learner should strive to:

- Effectively interact with other members of the emergency department team
- Be able to collaborate effectively with consultant services for better patient care
- Observe telephone advice given by pediatric emergency physicians to outside physicians, and where applicable, give advice under supervision
- Provide effective leadership in the ED

Leader

The learner should strive to:

- Understand appropriate use of diagnostic imaging and laboratory investigations
- Identify patients who need hospital admission or emergency department consultation
- Identify the need for and arrange appropriate outpatient follow-up
- Manage multiple patients safely and effectively
- Understand principles of ED triage in relation to pediatrics:
 - PGY1-3: awareness of CTAS scores
 - PGY4-5: awareness of triage issues specific to pediatric patients
- Understand principles of security and safety in the ED (i.e., management of the intoxicated or violent child or parent)
- Understand principles of patient flow and overcrowding

Health Advocate

The learner should strive to:

- Be an effective patient advocate
- Recognize situations potentially indicative of child abuse and neglect and who to contact in these situations
- Understand and be able to advocate for childhood immunizations
- Be aware of the determinants of health and their impact on patients
- Recognize issues of child safety at home and in public places

Scholar

The learner should develop:

- Proficiency in critical appraisal of emergency medicine and relevant specialty literature
- Ability to integrate current literature into daily practice
- Ability to effectively access information technology for patient care during and after a shift
- Skills in managing and teaching junior learners
- Self directed learning skills

Professional

The learner should:

- Demonstrate integrity and honesty
- Demonstrate compassion and respect in all patient encounters
- Learn and apply ethical principles appropriately
- Be aware of personal limitations and seek assistance when appropriate
- Participate in educational activities outside of clinical duties.