

# CanMEDS Rotation Objectives – Pediatric Emergency Medicine

## RCPS Emergency Medicine Residency Program

### Department of Emergency Medicine

#### University of Alberta

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*\*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, 5<sup>th</sup> 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.