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., tracheotostomy, 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 (i.e., 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:
  o PGY1-3: awareness of CTAS scores
  o 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.