

PREAMBLE

A rotation on the General Pediatric wards at McMaster Children's Hospital should give residents the opportunity to become familiar with a wide variety of conditions requiring admission to hospital. The range of problems span the spectrum of newborn care, infancy through adolescence, with each age having its own unique challenges

MEDICAL EXPERT

1. The resident should have an understanding of the applied anatomy and physiology with respect to the problems and conditions found on the wards.
2. Demonstrate the unique communication skills necessary to obtain thorough, focused pediatric histories from children, parents or other caregivers.
3. Elicit key physical signs in children despite potential poor compliance.
4. The pediatric resident should be able to:
 - a. Recognize the unique natural history of pediatric diseases.
 - b. Recognize the heat regulation problems in infants and the need for careful environmental control during evaluation.
 - c. Recognize limited host resistance and high risk of nosocomial infections in newborns.
 - d. Recognize the need to individualize drug dosage and fluid administration on the basis of weight, and be able to calculate expediently nutritional and fluid and electrolyte requirements using standard formulas.
 - e. Recognize and accommodate for the altered physiological drug administration.
 - f. Recognize the normal range and wide variation with respect to diagnostic tests involving infants and children of different ages.
 - g. Recognize the unique needs of the complex patient with chronic conditions.
5. Be able to diagnose and manage a variety of medical conditions including:
 - a. Respiratory illnesses – including asthma, croup, bronchiolitis, cystic fibrosis and pneumonia.
 - b. Cardiac disease – including innocent and pathologic murmurs, congenital heart disease, arrhythmias, congestive heart failure and Kawasaki disease.

- c. CNS disease – including seizures, headaches, acquired brain injury and specific diseases affecting development (eg. cerebral palsy).
 - d. Gastrointestinal diseases – including gastroenteritis and dehydration, malabsorption and constipation.
 - e. Infectious diseases – including all common viral and bacterial infections.
 - f. Dermatology – including eczema, urticaria, newborn and erythematous rashes.
 - g. Hematology – including anemia and thrombocytopenia.
 - h. Child neglect and maltreatment – including skeletal injuries, skin lesions, sexual abuse and shaken baby syndrome.
 - j. Management of issues around the complex patient with chronic conditions.
6. Demonstrate aseptic technique in performing medial procedures including:
- lumbar puncture
 - bladder catheterization
 - arterial and venous blood sampling
 - insertion of umbilical venous and arterial lines

For the above Medical Expert knowledge and skills, the junior resident should be starting to acquire the knowledge and skills listed 1-6 and be able to manage these patients with supervision. The Senior resident should be competent in his/her knowledge and skills above. The Senior resident should be able to begin to independently manage the patients and make independent treatment decisions.

COMMUNICATOR

1. Convey pertinent information on the pediatric inpatients in different circumstances (over the phone, during ward rounds and case conferences).
2. Provide accurate and concise written information to other health professionals by means of dictated summaries and consultation notes.
3. Appreciate the importance of communicating not only with the child, but also the child's parents and other family members.
4. Understand the crucial role the patient's primary care physician plays not only during the hospitalization, but also after discharge, and communicates with them on a regular basis.

In addition for Senior Residents:

- 5. Learn to share and convey favourable and unfavourable information to patients and families and provide updated and accurate medical information if requested to do so.**

COLLABORATOR

1. Involve pediatric sub-specialists in diagnosing and managing children with multisystem complex medical issues.
2. Work together with fellow residents and medical students to ensure sharing of responsibility and workload in a pleasant and collegial working environment.
3. Recognize the key role the ward nursing staff play in ensuring optimal care for infants and children in hospital.

In addition for Senior Residents:

- 4. Be able to coordinate care involving many different medical and allied health professionals.**

MANAGER

1. Appreciate the issues surrounding informed consent and refusal of treatment in children and adolescents and the right of adolescents to confidentiality.
2. Understand the costs and cost effectiveness of treatments and interventions for infants and children in a hospital setting.

In addition for Senior Residents:

- 3. Be able to manage the difficult task of ensuring timely admission and discharge of patients on busy active inpatient units.**
- 4. Ensure the smooth and efficient transfer of patients from other hospitals to the ward, and recognize when transfer from the ward to the step down unit or intensive care unit is warranted.**
- 5. Be able to triage consults from the ER and ensure efficient management of these patients.**
- 6. Ensure fellow residents and students are timely for clinical and teaching rounds.**

HEALTH ADVOCATE

1. The resident should be an injury prevention and preventative health advocate which includes:
 - a. Ensuring appropriate primary care follow up.
 - b. Ensuring appropriate community resources are in place.
 - c. Identifying high-risk families and arranging appropriate community supports.
 - d. Promoting appropriate nutrition/dental hygiene/safe child care practices

SCHOLAR

1. Recognize the importance of self-assessment, self-directed learning and personal continuing education combined with integrated patient care.
2. Be able to critically appraise medical literature and apply these skills in practicing evidence-based medicine.

In addition for Senior Residents:

- 3. Value the critical need for ongoing systems of peer review, maintenance of competence, and evaluation of outcomes in the management of sick infants and children.**
- 4. Teach the principles of neonatal and pediatric illnesses to medical students, fellow residents and other health professionals.**

PROFESSIONAL

1. Appreciate the particular emotional and ethical issues surrounding the care of a sick infant or child and the need to involve parents, children's advocates and other caregivers in providing support in difficult situations and circumstances.
2. Be aware of the life-long significance of serious or chronic illnesses in children and their impact on quality of life.
3. Demonstrate appropriate attitudes with respect to gender, culture and ethnicity.

In addition for Senior Residents:

- 4. Appraise the ethics of research concerning children.**

