

## **PREAMBLE**

Team 4 Pediatrics at St. Joseph's Healthcare includes Level 2 Nursery and outpatient neonatal follow-up clinic. This rotation should give senior pediatric residents the opportunity to manage a wide variety of conditions in neonates, both in the acute environment of delivery rooms and L2N, as well as in neonatal follow-up clinic.

## **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 neonatal and 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 neonatal and 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.
5. Be able to diagnose and manage a variety of medical conditions including:
  - a. Newborn illnesses – including jaundice, sepsis, seizures, feeding problems, failure to thrive, hypoglycemia, RDS, TTN, neonatal resuscitation, prematurity and developmental concerns. Understand the rationale for newborn screening – PKU/hypothyroidism/hearing screening and the expanded newborn screening program.

- b. Respiratory illnesses – including asthma, croup, bronchiolitis, cystic fibrosis and pneumonia.
  - c. Cardiac disease – including innocent and pathologic murmurs, congenital heart disease, arrhythmias, congestive heart failure and Kawasaki disease.
  - d. CNS disease – including seizures, headaches, acquired brain injury and specific diseases affecting development (eg. cerebral palsy).
  - e. Gastrointestinal diseases – including gastroenteritis and dehydration, malabsorption and constipation.
  - f. Infectious diseases – including all common viral and bacterial infections.
  - g. Dermatology – including eczema, urticaria, newborn and erythematous rashes.
  - h. Hematology – including anemia and thrombocytopenia.
  - i. Child neglect and maltreatment – including skeletal injuries, skin lesions, sexual abuse and shaken baby syndrome.
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
  7. Demonstrate proficiency in insertion of naso gastric feeding tubes.
  8. Recognize the need for developmental surveillance of premature babies and babies born with minimal antenatal care
  9. Recognize symptoms of neonatal withdrawal syndrome and its management

**For the above Medical Expert knowledge and skills, the junior resident should be starting to acquire the knowledge and skills listed 1-7 and be able to manage these patients with supervision.**

## **COMMUNICATOR**

1. Convey pertinent information on the neonatal and 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.

## **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.

## **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.

## **HEALTH ADVOCATE**

1. The resident should be an injury prevention and preventative health advocate which includes:
  - a. Giving accurate information with respect to immunizations.
  - b. Promoting safety in the home and on the street.
  - c. Counseling re smoking and substance abuse.

## **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.

## **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.

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