

## **Medicine-Pediatrics Goals and Objectives**

### **Outcome Measure for MedPeds specific Objectives:**

Monthly lunch time “Educational Session” during which the residents and attending physicians engage in discussion and didactic teaching regarding the objectives they were to have met on their most recent rotations.

### **Allergy and Immunology**

#### **1. Asthma**

**Goal:** Prepare residents to diagnose and manage both adults and children with asthma. (Patient care, Medical knowledge, Professionalism, Systems-based practice).

**Objectives:**

- a. Residents will learn the appropriate approach to the diagnosis of asthma and how to classify severity in both adults and children.
- b. Residents will discuss the treatment of asthma in both adults and children and the medical management of asthma in both inpatient and outpatient settings.

#### **2. Allergy**

**Goal:** Prepare residents to diagnose and manage the various manifestations of allergic disease, which include rhinitis, conjunctivitis, atopic dermatitis, contact dermatitis, urticaria, anaphylaxis, etc. (Patient care, Medical knowledge, Professionalism, Systems-based practice, and Interpersonal and Communication Skills).

**Objectives:**

- a. Residents will discuss the appropriate management of the various manifestations of allergic disease.

#### **3. Immunodeficiency**

**Goal:** Prepare residents to understand the basic pathophysiology and diagnosis of common immunodeficiency syndromes. (Patient care, Medical knowledge, Professionalism, Systems-based practice, and Interpersonal and Communication Skills, Practice-Based Learning and Improvement).

**Objectives:**

- a. Residents will discuss the common immunodeficiency syndromes.

## **Medicine-Pediatrics Goals and Objectives**

### **Behavior and Development (Year 1)**

#### **1. Development and Behavior**

**Goal:** Teach residents to develop a working knowledge of typical development and behavior for all ages. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

#### **Objectives:**

- a. Residents will recognize normal growth and development of the child into adulthood.
- b. Residents will counsel parents about typical parenting issues (related to child development, behavior, health and safety and family adjustment)
- c. Residents will describe the spectrum of age appropriate development variations from typical for children and adults

## **Medicine-Pediatrics Goals and Objectives**

### **Child and Adolescent Psychiatry/Adult Psychiatry**

#### **1. Psychiatric illnesses**

Goal: Prepare residents to recognize and provide initial management of common psychiatric illness among their adult and pediatric patients. (**Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills**).

#### **Objectives:**

- a. Residents will describe common psychiatric illnesses and appropriate treatment.
- b. Residents will develop a management plan with patients and their families.
- c. Residents will adhere to ethical and legal principles and be sensitive to diversity.

## **Medicine-Pediatrics Goals and Objectives**

### **Critical Care-NICU, PICU, ICU**

#### **1. Goal: Nutrition**

Residents will identify proper nutrition in the critical care setting.  
Residents will identify indications for TPN from NICU through adult ICU  
**(Medical knowledge, patient care)**

##### **Objectives:**

- a. (PGY1) Resident will recognize the importance of nutrition in the pediatric and adult ICU settings
- b. (PGY2) Resident will identify the differences in nutritional goals for ICU patients as compared to floor patients.
- c. (PGY1/2) Resident will assess patients for proper nutritional intake.
- d. (PGY3/4) Residents will demonstrate proper adjustments in TPN orders/diet orders to ensure adequate caloric intake.

#### **2. Goal: Sedations**

Prepare residents to manage sedation in adult and pediatric patients. **(Medical knowledge and patient care)**

##### **Objectives:**

- a. (PGY1) Resident will recognize objective signs and symptoms to assess level of sedation.
- b. (PGY2) Resident will recognize and differentiate between choices of sedation.
- c. (PGY3/4) Resident will be able to adjust choices and dosages of sedation depending on the patients' clinical status.

#### **3. Goal: Mechanical Ventilation**

Prepare residents to manage mechanical ventilation in adult and pediatric patients. **(Medical knowledge and patient care)**

##### **Objectives:**

- a. (PGY1) Residents will recognize mode most appropriate for age and physiology.
- b. (PGY2/4) Resident will review evidence based medicine to support weaning methods.
- c. (PGY3/4) Residents will actively participate in the adjustment of ventilator settings based on clinical data and patient response.

#### **4. Goal: Diabetic Ketoacidosis (DKA)**

Prepare residents to manage DKA in adult and pediatric patients **(Medical knowledge and patient care)**

##### **Objectives:**

- a. (PGY1) Residents will discuss pathophysiology of glucose and insulin regulation in all age groups.
- b. (PGY2/4) Residents will differentiate between the management of DKA in adult and pediatric populations
- c. (PGY 1/4) Resident will differentiate fluid resuscitation in both pediatric and adult patients with DKA.

## **Medicine-Pediatrics Goals and Objectives**

### **Endocrinology**

#### **1. Goal: DKA**

To prepare residents to manage DKA in adult and pediatric patients (Medical knowledge and patient care)

Objectives:

- a. Residents will discuss the pathophysiology of glucose and insulin regulation in all age groups.
- b. Residents will discuss the management of DKA in adult and pediatric populations

#### **2. Goal: Thyroid disease**

To prepare residents to diagnose and manage both adults and children with thyroid disease. (Patient care, Medical knowledge, Professionalism, Systems-based practice)

Objectives:

- a. Residents will learn the appropriate approach to the diagnosis of the variety of thyroid diseases among adult and pediatric patient populations

## **Medicine-Pediatrics Goals and Objectives**

### **ENT**

#### **1. Goal: Hearing loss**

Residents will understand the morbidity of hearing loss, intervention strategies, and the primary care physician and other specialists' roles in prevention, recognition and management. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills)

Objectives:

- a. Residents will discuss the epidemiology and prevalence of conductive and sensorineural hearing loss in children and adults
- b. Residents will discuss the impact of hearing impairment on family including social, psychological, educational, and financial consequences.

#### **2. Goal:**

Residents will learn to evaluate and appropriately treat a number of common otolaryngological diseases. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills)

Objectives:

- a. Residents will recognize the presenting signs and symptoms are caused by common otolaryngologic condition, and then treat or refer when appropriate.
- b. Residents will identify the role and general scope of practice of the otolaryngologist; recognize situations where children benefit from the skills of pediatric specialists; and work effectively with these professionals in the care of children.

## **Medicine-Pediatrics Goals and Objectives**

### **Gastroenterology**

#### **1. Goal: Eosinophilic Esophagitis**

To prepare residents to differentiate, diagnose, and manage adults and pediatric patients with Eosinophilic Esophagitis. (Medical knowledge, and interpersonal and communication skills, system based practice, and patient care)

#### **Objective:**

- a. Residents will discuss the prevalence of Eosinophilic Esophagitis in our adult and pediatric patients.
- b. Residents will discuss the treatment of Eosinophilic Esophagitis in our adult and pediatric patients.

#### **3. Goal: Inflammatory Bowel Disease**

Prepare residents to differentiate, diagnose, and manage adults and pediatric patients with inflammatory bowel disease. (Medical knowledge, and interpersonal and communication skills, system based practice, and patient care)

#### **Objectives:**

- a. Residents will discuss the differences in the pathophysiology between Crohn's disease and Ulcerative Colitis.
- b. Residents will discuss the complications from Crohn's disease and Ulcerative Colitis.
- c. Residents will discuss the clinical manifestations of adult and pediatric patients with Crohn's disease and Ulcerative Colitis

## **Medicine-Pediatrics Goals and Objectives**

### **Hematology-Oncology**

#### **1. Goal: Hemolytic Anemia**

Prepare residents to diagnose and manage adults and children with hemolytic anemia (G6PD-deficiency, sickle cell anemia, hereditary spherocytosis, drug-induced hemolytic anemia, and MAHA). **(Patient care, medical knowledge, professionalism, interpersonal and communication skills, and Systems-based practice)**

#### **Objectives:**

- a. Residents will discuss the various etiologies of hemolytic anemia among pediatric and adult patients.

#### **2. Goal: Leukemia and lymphoma**

Prepare residents to diagnose and manage adults and children with leukemia and lymphoma.

#### **Objectives:**

- a. Residents will discuss the clinical manifestation and of leukemia and lymphoma.
- b. Residents will discuss the mortality and morbidity associated with leukemia and lymphoma in adult and pediatric patients.

## **Medicine-Pediatrics Goals and Objectives**

### **Infectious Disease**

#### **1. Goal: Pneumonia treatments**

Prepare residents to differentiate, diagnose, and manage adults and pediatric patients with community and hospital/nursing home pneumonia. (Medical knowledge, and interpersonal and communication skills, system based practice, and patient care)

##### **Objectives:**

- a. Residents will demonstrate appropriate management of pneumonia in adult and pediatric patients
- b. Residents will discuss the mortality and morbidity associated with pneumonia in pediatric and adult populations.

#### **2. Goal: Meningitis diagnosis and treatment**

Residents will demonstrate ability to recognize and provide treatment for meningitis among pediatric and adult populations.

##### **Objectives:**

- a. Residents will recognize the differences between aseptic meningitis, acute bacterial meningitis, and viral encephalitis in adult and pediatric patients.
- b. Residents will discuss the appropriate management of meningitis in adult and pediatric patients
- c. Residents will discuss the mortality and morbidity associated with meningitis in pediatric and adult populations.
- d. Residents will demonstrate ability to work with social workers and other agencies closely involved in the care of pediatric and adult patients when arranging outpatient antibiotic use.

#### **3. Goal: HIV diagnosis and treatment**

Residents will recognize the importance of HIV screening.

Residents will demonstrate ability to recognize and provide treatment for HIV among pediatric and adult populations.

Teach residents of the social service agencies available to their patients with HIV or AIDS and to their families.

(Medical knowledge, and interpersonal and communication skills, system based practice, and patient care)

##### **Objectives:**

- a. Residents will demonstrate appropriate screening and management of HIV in adult and pediatric patients
- b. Residents will discuss the mortality and morbidity associated with HIV in pediatric and adult populations.
- c. Residents will demonstrate ability to work with social workers and other agencies closely involved in the care of pediatric and adult patients with HIV.

#### **4. Goal: Sexually Transmitted Diseases**

Residents will demonstrate ability to recognize and provide treatment for sexually transmitted diseases.

##### **Objectives:**

- a. Residents will attend STD clinic at CHH Health Department and demonstrate ability to recognize and provide treatment for sexually transmitted diseases.

## **Medicine-Pediatrics Goals and Objectives**

### **In-Patient-Pediatric and Adult Hospital Service**

#### **1. Goal: Fluid Management**

To ensure that residents have adequate knowledge of the principles involved in appropriate fluid management in the inpatient setting. (Medical Knowledge and patient care)

##### **Objectives:**

- a. (PGY1) Residents will describe volume resuscitation in pediatric and adult populations
- b. (PGY1/2) Residents will demonstrate their management of fluid resuscitation in pediatric and adult populations while on the wards.
- c. (PGY3/4) Residents will recognize the importance of fluid balance both intake and output and the implications of that knowledge with appropriate management.

#### **2. Goal: Pain Control**

To ensure that residents have adequate knowledge of principles of pain management in pediatric and adult patients.

To ensure that residents incrementally build upon knowledge gained from their patient-care encounters.

(Medical Knowledge, practice-based learning and improvement)

##### **Objectives:**

- a. (PGY1) Residents will recognize the importance of appropriate pain management.
- b. (PGY1) Residents will demonstrate appropriate pain management based upon subjective pain scales and objective physical exam findings in pediatric and adult patients
- c. (PGY2) Residents will understand alternative pain management techniques and their indications.

#### **3. Goal: Palliative Care**

Residents will recognize the importance of hospice and to decide when hospice should be initiated.

To explore health-care delivery systems and social service agencies which are critical in caring for hospice/palliative-care patients.

(Medical knowledge, patient care, and interpersonal and communication skills)

##### **Objectives:**

- a. (PGY1/2) Residents will describe appropriate situations to initiate palliative care/hospice in pediatric and adult patients.
- b. (PGY3/4) Residents will appropriately initiate end-of-life/palliative care discussions with patients and families with the appropriate recommendations.

## **Medicine-Pediatrics Goals and Objectives**

### **International Health**

Goal: Medical Management

Residents will develop the skills to properly assess and manage patients with various culture differences. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

Objectives:

- a. Residents will learn to communicate effectively with patients from various cultures who speak a wide variety of languages.
- b. Residents will provide family centered patient care that is development and age appropriate, compassionate, and effective for treatment of various common international health illnesses.

Goal: Common Illnesses

Residents will learn to properly identify and treat the common diseases of a given area. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

Objectives:

- a. Residents will learn the limitations of medical resources while practicing in third world countries.
- b. Residents will identify the symptoms and clinical presentation of the common diseases of the area.

## Medicine-Pediatrics Goals and Objectives

### **International Medicine (India 2009)**

Goal:

1. Provide exposure to diseases not generally encountered during formal US medical training.
2. Develop medical skills with less reliance on modern technology.
3. Provide a cross cultural medical experience beyond what is possible in the US.
4. Allow the resident to develop and nourish his sense of altruism and compassion.
5. Expose the physician, early in his career to the possibilities of working in the developing world and/or under served populations.
6. Understand the interaction between health and social, cultural and environmental issues.

Objectives Based on Competencies:

Consistent with the overriding framework of the ACGME (6) competencies, the educational objectives are followed, in bold italics, by the specific competencies they promote. Competencies are abbreviated as follows: Patient Care (***PC***), Medical Knowledge (***MK***), Practice Based Learning and Improvement (***PLBI***), Interpersonal and Communication Skills (***IPCS***), Professionalism (***P***), Systems Based Practice (***SBP***)

By the end of the rotation, the resident will:

Demonstrate the ability to learn local customs and cultural mores (***IPCS, P***)

Behave in a culturally appropriate manner as a visiting foreigner (***IPCS, P***)

Provide culturally sensitive medical care (***PLBI, IPCS, P, SBP***)

Function as a team member in a medical team in a challenging environment (***PLBI, IPCS, P, SBP***)

Work with a health care provider from different cultures and perspectives (***PLBI, IPCS, P, SBP***)

Develop and improve clinical diagnosis based on history and physical (***PC, MK***)

Develop and expand the differential diagnosis of outpatient complaints (***PC, MK***)

Improved understanding of the effect of socioeconomic conditions on health and disease (***PC, MK, SBP***)

Modify treatment plans to available resources (***PC, MK, SBP***)

Write a short paper and make a presentation on the subject of: Health care in the slums of India (***PLBI, IPCS, P, MK***)

Text:

Pediatric Complaints and Diagnostic Dilemmas: A Case Based Approach

Ludwig, Stephen and Samir Shah

Lippincott Williams & Wilkins

## **Medicine-Pediatrics Goals and Objectives**

### **Nephrology**

#### **1. Goal: Glomerular Disease**

To prepare residents to differentiate, diagnose, and manage adults and pediatric patients with glomerular disease (Medical knowledge, and interpersonal and communication skills, system based practice, and patient care)

##### **Objectives**

- a. Residents will demonstrate ability to discuss the treatment and complications of nephrotic and nephritic syndrome among pediatric and adult populations.
- b. Residents will discuss pathophysiology of nephritic and nephrotic syndromes and will discuss the treatment and complications of nephrotic syndrome among pediatric and adult populations.

#### **2. Goal: Hypertension**

To ensure residents have adequate knowledge of principles of screening and age appropriate treatment for hypertension among adult and pediatric patients. (Medical knowledge, professionalism interpersonal and communication skills, practice based learning and improvement, and patient care)

##### **Objectives:**

- a. Residents will discuss differences between screening and treatment for hypertension.

#### **3. Goal: Acute Renal Failure**

To prepare residents to differentiate, diagnose, and manage adults and pediatric patients with acute renal failure (Medical knowledge, and interpersonal and communication skills, system based practice, and patient care)

##### **Objectives:**

- a. Residents will discuss the etiology of ARF in adult and pediatric patients
- b. Residents will discuss the diagnosis of ARF in adult and pediatric patients.
- c. Residents will demonstrate appropriate management of HIV in adult and pediatric patients.

## **Medicine-Pediatrics Goals and Objectives**

### **Neurology**

#### **1. Goal: Seizure disorders**

Prepare residents to diagnose and manage seizure disorders in adult and pediatric patients. To ensure that residents incrementally build upon knowledge gained from their patient-care encounters. Explore health-care-delivery systems and social service agencies which are critical to care of pediatric and adults patients suffering from neurological disorders. (**Medical knowledge, patient care, and interpersonal and communication skills**)

#### **Objectives:**

- a. Residents will be able to discuss the differences between seizure presentation in adults and children.
- b. Residents will be able to discuss the differences between causes of seizures in adults and children.
- c. Residents will be able to discuss the differences between diagnoses and treatments in adults and children.

#### **2. Goal: Headaches**

Prepare residents to diagnose and manage headaches in adult and pediatric patients. (**Medical knowledge and patient care**)

#### **Objectives:**

- a. Residents will be able to describe various headache presentations based upon age.
- b. Residents will be able to compare the differential diagnosis of severe headache in adult and pediatric patient populations.
- c. Residents will be able to describe treatment of acute headache based upon age in inpatient and outpatient settings.

#### **3. Goal: Neurological Examination**

Ensure that residents demonstrate professionalism and communicate effectively with patients while performing neurological examinations. (**Medical knowledge, patient care, professionalism, and interpersonal and communication skills**)

#### **Objectives:**

- a. Residents will be able to discuss differences in the neurological examination between adult and pediatric patients.
- b. Residents will discuss barriers to performing neurological examinations in each patient population and how to overcome them.

## **Medicine-Pediatrics Goals and Objectives**

### **Newborn Nursery (Year 2)**

#### **1. Newborn care**

Goal: To prepare residents to provide excellent care to the newborn patient and the appropriate knowledge base and interpersonal skills to work with parents (Patient care, Medical knowledge, Professionalism, Systems-based practice, and Interpersonal and Communication Skills).

Objectives:

- a. Residents will be able to concisely and completely instruct parents on feeding techniques, safety precautions, infant-parental bonding, basic newborn care, etc.

#### **2. Newborn examination**

Goal: To ensure that residents are able to perform a thorough newborn examination and subsequently to communicate any abnormal findings with parents in an empathetic way (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

Objectives:

- a. Residents will be able to detect and diagnose any abnormal physical findings.
- b. Residents will have a basic understanding of physical anomalies and genetic associations.

## **Medicine-Pediatrics Goals and Objectives**

### **Outpatient-Medicine and Pediatric clinics**

#### **1. Goal: Immunizations**

To ensure that resident have adequate knowledge of immunization schedules.

(**Medical knowledge, patient care, interpersonal and communication skills**)

#### **Objective**

- a. (PGY1) Residents will describe the immunization schedule for both pediatric and adults patients including travel and delayed immunizations.
- b. (PGY2) Residents will identify contraindications to immunizations and appropriate institute alternative therapy if indicated.

#### **2. Goal: Age appropriate screening for adults and pediatric populations**

To ensure that residents have adequate knowledge of principles of health maintenance and prevention through age appropriate screening. (**Medical knowledge and patient care**)

#### **Objective:**

- a. (PGY1) Residents will recognize the importance of continuing screening and preventive measures in healthy adults and pediatric patients.
- b. (PGY2) Residents will understand guidelines for specific screenings for adults/pediatrics and will appropriately institute those guidelines for their continuity patients.
- c. (PGY3/4) Residents will be able to appropriately interpret results of screening studies and make appropriate therapeutic decisions based on those results.

#### **3. Goal:**

Residents will gain awareness of resources for Smoking cessations programs for adolescent and adult patients.

To explore health-care delivery systems and social outreach programs which aim to help pediatric and adult patients with tobacco cessation. (**Systems-based practice**)

#### **Objective:**

- a. (PGY1) Resident will become familiar with programs such as WV Quitline and Y NOT QUIT and offer its services to patients.
- b. (PGY2) Residents will understand the importance of tobacco cessation in adolescents to prevent long term complications in adult populations.

#### **4. Goal: Adult with congenital disabilities**

To prepare residents to diagnose and manage adults with congenital disabilities.

To teach residents of the social service agencies available to their patients with congenital diseases.

(**Medical knowledge, system based practice, and patient care**)

#### **Objective:**

### **Medicine-Pediatrics Goals and Objectives**

- a. (PGY1) Residents will discuss the mortality and morbidity of their adult patients with congenital disabilities.
- b. (PGY1) Residents will perform the age and disease appropriate screening for their adult patients with congenital disabilities.

## **Medicine-Pediatrics Goals and Objectives**

### **Pediatric Cardiology (Year 2-4)**

#### **1. Goal: Congenital Heart Disease**

Prepare residents to diagnose and manage adults with congenital heart disease. (Patient care, medical knowledge, professionalism, interpersonal and communication skills, and Systems-based practice)

##### **Objectives:**

- a. Residents will be able to discuss the morbidity and mortality associated with adults and children with congenital heart disease.
- b. Residents will demonstrate knowledge of the critical differences among the clinical presentations of children and adults with congenital heart disease.

#### **2. Goal: Hyperlipidemia**

Ensure residents have adequate knowledge of principles of screening and treatment for hyperlipidemia among adult and pediatric patients. (Medical knowledge, interpersonal and communication skills, practice based learning and improvement, and patient care)

##### **Objectives:**

- a. Residents will be able to discuss current guidelines for screening for hyperlipidemia in adults and children.
- b. Residents will be able to discuss treatment options for hyperlipidemia in adults and children.

#### **3. Goal: Hypertension**

Ensure residents have adequate knowledge of principles of screening and age appropriate treatment for hypertension among adult and pediatric patients. (Medical knowledge, professionalism interpersonal and communication skills, practice based learning and improvement, and patient care)

##### **Objectives:**

- a. Residents will be able to discuss current guidelines for hypertension screening in adults and children.
- b. Residents will be able to discuss differences in treatment of hypertension in adults and children.

## **Medicine-Pediatrics Goals and Objectives**

### **Pediatric Surgery (Year 2)**

Goal: Abdominal pain

Residents will learn to differentiate normal conditions of the abdomen from pathologic ones requiring surgical intervention. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

Objective:

- a. Residents will distinguish acute abdominal pain related to transient events when compared to surgical conditions.
- b. Residents will create a strategy to recognize, stabilize and initiate management of an acute surgical abdomen and provide prompt referral.

Goal: Surgical Clearance

Collaborate with surgeons in the pre-operative evaluation and management of pediatric and adult patients. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

Objective

- a. Residents will evaluate patients pre-operatively to provide medical clearance for surgery.

## **Medicine-Pediatrics Goals and Objectives**

### **Pulmonary**

#### **Goal: Cystic Fibrosis**

Prepare residents to diagnose and manage adults with cystic fibrosis (Patient care, medical knowledge, professionalism, interpersonal and communication skills, and Systems-based practice)

#### **Objectives:**

- a. Residents will be able to discuss the morbidity and mortality associated with adults and children with cystic fibrosis.
- b. Residents will demonstrate knowledge of the critical differences between children and adults with cystic fibrosis.

#### **Goal: Asthma**

Prepare residents to diagnose and manage adults with asthma (Patient care, medical knowledge, professionalism, interpersonal and communication skills, and Systems-based practice)

#### **Objectives:**

- a. Residents will be able to discuss the morbidity and mortality associated with adults and children with asthma.
- b. Residents will demonstrate knowledge of the critical differences in treatment of children and adults with asthma.

## **Medicine-Pediatrics Goals and Objectives**

### **Radiology**

#### **Goal**

To prepare residents to identify the common fractures of adults and children. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

#### **Objectives:**

- a. Residents will discuss the common radiographic features of the common fractures of children and adults.
- b. Residents will demonstrate ability to identify the common fractures of adult and children.

#### **Goal**

To prepare residents to become familiar with various radiological and diagnostic testing. (Patient care, Medical knowledge, Professionalism, and Interpersonal and Communication Skills).

#### **Objectives:**

- a. Residents will demonstrate ability to read various diagnostic imaging.