

Curriculum on Pediatric Infectious Diseases

Educational Purpose and Goals

Infectious Diseases physicians are often called on to serve as consultants to pediatric patients with a variety of Infectious Diseases. The purpose of this rotation is to allow the fellow to develop an in depth understanding of the pathophysiology of infectious diseases problems in pediatric patients, to develop skill as a consultant in pediatric situations, and to independently diagnose and manage inpatients with a broad range of pediatric infectious diseases problems. This is an elective rotation.

Principal Teaching Methods

Supervised direct patient care: This rotation occurs under the direction of Dr. Maria Patterson. Dr. Patterson is board certified in Pediatric Infectious Diseases and a member of the MSU College of Osteopathic Medicine. Other faculty in the Pediatric Infectious Diseases Division are Dr. Dele Davies and Dr. Ashir Kumar.

Training will be primarily through directly supervised patient care activities, as well as through assigned readings and case discussions. Infectious Diseases fellows will evaluate inpatients and outpatients as part of the rotation.

Educational Content

Mix of diseases: Fellows are exposed to a wide variety of infectious diseases problems on the inpatient rotation. These include, but are not limited to, the febrile patient, upper respiratory, pleuropulmonary, and bronchial infections, urinary tract infections, peritonitis and other intra abdominal infections, cardiovascular infections, central nervous system infections, skin and soft tissue infections, prosthetic device infections, infections related to trauma and bites, gastrointestinal infections, bone and joint infections, infections of the reproductive organs, viral hepatitis, sepsis syndromes, nosocomial infections, HIV related opportunistic infections, infections in immunocompromised or neutropenic patients, infections in patients with leukemia or lymphoma, and infections in parenteral drug abusers.

Patient characteristics: A diverse patient population is served at Sparrow Hospital. Patients include both gender groups as well as individuals of a broad spectrum of ethnic, racial and socioeconomic backgrounds. Patients are referred to the pediatric inpatient consultation service from numerous services. These include the MSU Pediatric Residency program, other residency programs sponsored or affiliated with MSU, the MSU Health Team, and private physicians.

Learning venues: Sparrow Hospital is the pediatric tertiary care facility for the region and has the only Neonatal ICU in the region. All inpatient activity will take place at Sparrow Hospital. General pediatric outpatients will be seen at the MSU clinical center. Additionally, the Pediatric Infectious Disease Division supervises a pediatric tuberculosis clinic 2 times per month at Ingham Regional Medical Center and fellows will be required to attend this clinic.

Structure of rotation: Fellows will attend the Department of Pediatrics Grand rounds and other appropriate conferences for the rotation. They will continue to rotate in their general Infectious Diseases and HIV/Virology clinics while on this rotation. Teaching will occur as a blending of teaching and management rounds and will occur at least 4 ½ hours per week.

Principal Ancillary Educational Materials

The principle text of the rotation is Mandell's Principles and Practice of Infectious Diseases. Fellows have access to web based resources and other texts and videos through the hospital libraries. Other reading assignments will be distributed by the rotation director.

Methods of Evaluation

Fellow Performance: Faculty will complete competency-based resident evaluation forms and provide feedback to the fellow. Evaluations are forwarded to the fellowship office for incorporation into the fellow's performance file and are discussed at the semi-annual review.

Each 6 months the faculty will perform medical record review of 3 randomly selected patient charts. Charts will be reviewed for quality of history documentation, accuracy of physical examination, quality of differential diagnosis generation, and management plan.

Semiannually the fellow will be evaluated by the program director in a formal, written evaluation session. These evaluations will be transcribed and signed by both the residency program director and the fellow.

Program and Faculty Performance: The fellow will summarize and accurately describe faculty performance, facilities, and experience and return it to the program office. The Fellowship Training and Evaluation Committee will review results annually.

Institutional Resources: Strengths and Limitations

Strengths: A commitment to high quality patient care and education. Sparrow Hospital is the pediatric tertiary care facility for the region and has the only Neonatal ICU in the region. Three faculty members are board certified in Pediatric Infectious Diseases.

Limitations: None

Rotation Specific Competency Objectives

Patient Care

Fellows are expected to precisely and logically obtain patient histories, efficiently perform accurate physical exams approaching the level of a sub-specialist, demonstrate sound clinical reasoning in ambiguous situations, possess knowledge of common ID syndromes/diseases sufficient to establish a differential diagnosis, establish patient monitoring procedures to determine need for changes in therapeutic programs, observe patients for adverse side effects, and apply public health policies to patient care.

Fellows will be responsible for medical record documentation, as appropriate, under the supervision of the medical attending.

Medical Knowledge

Fellows will possess knowledge of and demonstrate growing understanding of basic and clinical sciences, knowledge of urgent and non-urgent pediatric Infectious Disease conditions, lead teaching of residents and students. Fellows will display self-initiative to stay current with new pediatric medical literature, and demonstrate knowledge on the impact of study design on validity or applicability to practice. Fellows will read appropriate texts and articles and be prepared to discuss key literature.

Interpersonal and Communication Skills

Fellows will engage in shared decision making, conduct family meetings, as appropriate, successfully negotiate nearly all difficult patient encounters unaided, function as a team leader with minimal reliance upon attending physicians, thoroughly educate patients and their families using education as a form of intervention and partnering, effectively communicate with referring physicians. Fellows will be able to demonstrate appropriate consultative principles of communication with other physicians and responsiveness to professional consultative requests.

Professionalism

Fellows are expected to exhibit honesty and trustworthiness, reliability in their clinical duties, as well as demonstrate integrity, compassion, and respect in their interactions with patients and colleagues from the same or different cultures/ages/sexes. Fellows will be responsible for prompt completion of medical records and proper documentation in the medical record.

Practice Based Learning and Improvement

Fellows will use consulting services to improve patient care and self knowledge, appraise and assimilate scientific literature, integrate evidence based medicine, expert opinion and professional judgment, suggest and utilize data driven protocols, respond to the questions of the consulting physician, demonstrate self-initiative in the use of information technology available via the hospital library, the MSU electronic library, or the internet to access and retrieve materials for performance improvement. Fellows are expected to show progressive self-learning throughout the rotation, with emphasis on learning from any cognitive or procedural errors.

Systems Based Practice

Fellows will demonstrate leadership in management of complex pediatric patients, as appropriate, partner with case managers and other health providers to identify and act on improvement opportunities in the health care system, practice within external regulations and expectations, contain cost and conserve resources while preserving high quality care, ensure effective communication between providers.