

ACGME Program Requirements for Graduate Medical Education in Pediatric Infectious Diseases

Effective: July 1, 2009

Introduction

Int.A. Scope of Training

Pediatric infectious diseases programs must provide fellows with the background and experience that will enable them to provide optimal care and consultation to pediatric patients with infectious diseases. To achieve this, the clinical and technical training must include properly balanced, well-organized, and progressive teaching, research, and consultative experiences. The educational program also must encompass basic concepts in microbiology, immunology, epidemiology, clinical pharmacology, and infection control.

VIII. Program Personnel and Resources

VIII.A. Faculty

VIII.A.1. There must be at least two pediatric infectious diseases teaching staff to ensure adequate time for administrative, clinical, and research activities involved in the education of fellows. Clinical supervision must be on a 24-hour-a-day, 7-day-a-week basis.

VIII.A.2. The following physician faculty from other disciplines, must be available including:

VIII.A.2.a) allergy-immunology

VIII.A.2.b) dermatology

VIII.A.2.c) microbiology

VIII.A.3. Consultants in clinical and laboratory aspects of mycology, virology, parasitology, and clinical pharmacology should be available.

VIII.B. Resources

VIII.B.1. Outpatient and Inpatient Facilities

The following facilities must be available at the primary teaching site:

VIII.B.1.a) An ambulatory facility for appropriate evaluation and care of patients from the newborn period to early adulthood;

VIII.B.1.b) An inpatient facility with full pediatric (including adolescent) and related services that are staffed by pediatric residents and faculty, and that includes:

- VIII.B.1.b).(1) facilities for isolation of patients with infectious diseases;
- VIII.B.1.b).(2) pediatric and neonatal intensive care units; and
- VIII.B.1.b).(3) support services including comprehensive diagnostic and imaging facilities.

VIII.B.2. Laboratories

There must be access to clinical microbiology laboratories that include techniques for identification of infections caused by bacteria, mycobacteria, fungi, viruses, rickettsiae, chlamydiae, and parasites in tissues and body fluids.

VIII.B.3. Infection Control Program

There must be an infection control program with a physician leader who has knowledge of epidemiology of pediatric infectious diseases, written protocols for prevention of infection and its spread, an active surveillance system, and an intervention plan for outbreak control.

VIII.B.4. Patient Population

VIII.B.4.a) There must be an adequate volume and variety of patients with infectious diseases, ranging in age from newborn through young adulthood available to the training program to ensure that each fellow achieves competence in patient care. This patient population must include inpatients, outpatients, and patients with chronic diseases.

VIII.B.4.b) Fellows' experiences must encompass longitudinal care, and provide the opportunity for observation of the course of illness and the benefits and risks of therapy.

VIII.B.4.c) The clinical population must include but not be limited to patients with:

VIII.B.4.c).(1) Primary and acquired immunodeficiency;

VIII.B.4.c).(2) Immunosuppression secondary to malignancies and to chemotherapeutic or immunosuppressive agents;

VIII.B.4.c).(3) Prematurity, low-birth-weight; and,

VIII.B.4.c).(4) Infections associated with surgery.

IX. Educational Program

IX.A. Patient Care

Fellows must have clinical experience in the application and interpretation of

diagnostic tests and indications, contraindications, risks, and interpretation of the results of therapeutic procedures. This must involve experience with management of outpatients and inpatients having infectious diseases or clinical conditions such as:

- IX.A.1. Upper respiratory tract infections
- IX.A.2. Lower respiratory tract infections
- IX.A.3. Central nervous system infections
- IX.A.4. Urinary tract infections
- IX.A.5. Cardiovascular infections
- IX.A.6. Bone and joint infections
- IX.A.7. Skin/soft tissue/muscle infections
- IX.A.8. Gastrointestinal tract/intra-abdominal infections
- IX.A.9. Hepatic/biliary infections
- IX.A.10. Ocular infections
- IX.A.11. Reproductive tract infections
- IX.A.12. Sexually transmitted infections
- IX.A.13. Foreign-body and catheter-related infections
- IX.A.14. HIV infection
- IX.A.15. Healthcare-associated infections
- IX.A.16. Surgical and traumatic wound infections
- IX.A.17. Congenital and neonatal infections
- IX.A.18. Infections in transplant patients
- IX.A.19. Prolonged and recurrent fever
- IX.A.20. Bloodstream infections and sepsis
- IX.B. Medical Knowledge
 - IX.B.1. The program must have a well-developed, formally structured curriculum that is designed to:
 - IX.B.1.a) provide fellows with the information and experience necessary to

diagnose and manage pediatric patients with a wide variety of acute and chronic infectious diseases, including disorders of host defense;

- IX.B.1.b) prepare fellows to understand and manage the principles of disease control, prevention of healthcare-associated infections, emerging pathogens, immunization programs, and/or vaccine-preventable diseases;
- IX.B.1.c) teach basic epidemiologic and biostatistical methods and their application to clinical research and patient care; and,
- IX.B.1.d) teach fellows the functions and appropriate utilization of diagnostic microbiology, immunology, virology, mycology, and parasitology laboratories;
- IX.B.2. Fellows must receive training in:
 - IX.B.2.a) the appropriate use of antimicrobial agents in a variety of clinical settings, their mechanisms of action, pharmacokinetics, and potential adverse reactions;
 - IX.B.2.b) microbiological and immunologic factors that determine the outcome of the interaction between host and microbe;
 - IX.B.2.c) microbiology laboratory techniques, including culture techniques, rapid diagnostic methods, and molecular methods for identification of bacteria, mycobacteria, fungi, viruses, rickettsiae, chlamydiae, and parasites in clinical specimens;
 - IX.B.2.d) the effects of underlying disease states and immunosuppressive therapies on host response to infectious agents;
 - IX.B.2.e) mechanisms of protection against infection, eg; active or passive immunization and immunomodulating agents;
 - IX.B.2.f) clinical pharmacology of antimicrobial agents including drug interactions, adverse reactions, dose adjustments for abnormal physiology, and principles of pharmacokinetics and pharmacodynamics;
 - IX.B.2.g) methods of determining activity of antimicrobial agents and techniques to determine their concentrations in blood and other body fluids;
 - IX.B.2.h) indications for diagnostic procedures and the interpretation of results. For example, bronchoscopy, thoracentesis, arthrocentesis, lumbar puncture, and aspiration of abscess cavities and soft tissues;
 - IX.B.2.i) the sensitivity, specificity, efficacy, benefits, and risks of

contemporary technologies, such as those for rapid microbiologic diagnosis and for diagnostic imaging;

IX.B.2.j) the principles and practice of hospital epidemiology and infection control and prevention;

IX.B.2.k) the currently recommended immunization schedules for young infants, children, and adolescents, with knowledge of protective efficacy, risks and benefits of routinely administered vaccines, including the use of immunizations in special situations and immunocompromised hosts;

IX.B.2.l) the understanding of adverse events attributed to immunomodulators; and,

IX.B.2.m) emerging infectious diseases and public health issues pertinent to pediatric infectious diseases.

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