

Rotation:
Infectious Diseases Subspecialty Selective

Goals:

To demonstrate competence appropriate for a general internist in the diagnosis and management of both inpatient and outpatient infectious diseases.

Objectives:

By the end of the Infectious Diseases Subspecialty Selective, PGY-1 residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Evaluate and manage common infectious disease problems of adults in the hospital setting: Rational Use of Antimicrobial Agents Prevention and treatment of Central Line Infections <ul style="list-style-type: none"> • Febrile Neutropenia • Nosocomial and Community Acquired Pneumonia • Cellulitis • Chronic Wound Infections • Endocarditis • Infections in Solid Organ Transplant Patients • Multi-drug Resistant Organisms such as MRSA and VRE • Sepsis Syndrome • Meningitis • FUO 	ID Team Attending Rounds ID Clinical Conference Reading Lists Core Curriculum Conference	Written exam ABIM global assessment	
	Apply the principles of HIV/AIDS treatment: <ul style="list-style-type: none"> • Diagnosis of HIV • Initial Evaluation • Selection of Antiretroviral Agents • Prevention and Treatment of Opportunistic Infections 	ID Team Attending Rounds ID Clinical Conference Reading Lists Core Curriculum Conference	Written exam ABIM global assessment	
Describe the basic principles of hospital epidemiology: <ul style="list-style-type: none"> • Hand Hygiene 	ID Team Attending Rounds	Written exam		

	<ul style="list-style-type: none"> • Isolation Guidelines 	<p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>ABIM global assessment</p>	
	<p>Evaluate and manage the common outpatient infectious disease problems of adults:</p> <ul style="list-style-type: none"> • STDs • Diarrhea • Rashes 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
	<p>Describe emerging Infectious Diseases:</p> <ul style="list-style-type: none"> • West Nile Virus • Bioterrorism 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
	<p>Develop expertise in patient care and the medical knowledge base required to manage the following aspects of Infectious diseases:</p> <ul style="list-style-type: none"> • Febrile patients presenting with rash or FUO • Upper respiratory tract infections • Pleuropulmonary and bronchial infections. • Urinary tract infections • Peritonitis and other intra-abdominal infections • Cardiovascular infections • Central nervous system infections • Skin and soft tissue infections • Infections related to trauma, burns, and human and animal bites • Gastrointestinal infections and food poisoning syndromes • Bone and joint infections 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	

	<ul style="list-style-type: none"> • Infections of reproductive organs • Sexually transmitted diseases • Infections of the eye • Viral hepatitis • Sepsis syndromes • Nosocomial infections • Infectious and non-infectious complications of HIV infection and acquired immunodeficiency syndrome • Infections in the immunocompromised or neutropenic hosts • Infections in acute leukemia and lymphoma • Transplant-related infections, including bone marrow and solid organ • Infections in geriatric patients • Infections in travelers • Infections related to intravenous drug abuse 			
Medical Knowledge	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>Demonstrate an understanding of the following:</p> <ul style="list-style-type: none"> • Mechanism of action and adverse reactions to antimicrobial agents • Clinical pharmacology of antimicrobial agents • Assessing antimicrobial activity of drugs in appropriate clinical setting. • Recognize emerging infections/epidemics; principles and practice of hospital infection control. • Principles of chemoprophylaxis and immunoprophylaxis • Principles and practice of hospital control • Mechanisms of action of monoclonal antibodies, cytokines, interferons, interleukins, and colony-stimulating factors/applications; side effects • Introduce basic concepts of immunology, host defense mechanisms, • Utility of procedures for specimen collection relevant to ID including but not limited to bronchoscopy, thoracentesis, arthrocentesis, lumbar puncture, and aspiration of abscess cavities. 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
Practice Based Learning and Improvement	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>See General Internal Medicine Objectives for a comprehensive list.</p>			
Interpersonal and	<p>SPECIALTY SPECIFIC OBJECTIVES</p>			

Communication Skills	See General Internal Medicine Objectives for a comprehensive list.			
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			

By the end of the Infectious Diseases Subspecialty Selective, PGY-2 residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Evaluate and manage common infectious disease problems of adults in the hospital setting: Rational Use of Antimicrobial Agents Prevention and treatment of Central Line Infections <ul style="list-style-type: none"> • Febrile Neutropenia • Nosocomial and Community Acquired Pneumonia • Cellulitis • Chronic Wound Infections • Endocarditis • Infections in Solid Organ Transplant Patients • Multi-drug Resistant Organisms such as MRSA and VRE • Sepsis Syndrome • Meningitis • FUO 	ID Team Attending Rounds ID Clinical Conference Reading Lists Core Curriculum Conference	Written exam ABIM global assessment	
	Apply the principles of HIV/AIDS treatment: <ul style="list-style-type: none"> • Diagnosis of HIV • Initial Evaluation • Selection of Antiretroviral Agents • Prevention and Treatment of Opportunistic Infections 	ID Team Attending Rounds ID Clinical Conference Reading Lists Core Curriculum Conference	Written exam ABIM global assessment	
	Describe the basic principles of hospital epidemiology:	ID Team Attending Rounds	Written exam	

	<ul style="list-style-type: none"> • Hand Hygiene • Isolation Guidelines 	<p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>ABIM global assessment</p>	
	<p>Evaluate and manage the common outpatient infectious disease problems of adults:</p> <ul style="list-style-type: none"> • STDs • Diarrhea • Rashes 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
	<p>Describe emerging Infectious Diseases:</p> <ul style="list-style-type: none"> • West Nile Virus • Bioterrorism 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
	<p>Develop expertise in patient care and the medical knowledge base required to manage the following aspects of Infectious diseases:</p> <ul style="list-style-type: none"> • Febrile patients presenting with rash or FUO • Upper respiratory tract infections • Pleuropulmonary and bronchial infections. • Urinary tract infections • Peritonitis and other intra-abdominal infections • Cardiovascular infections • Central nervous system infections • Skin and soft tissue infections • Infections related to trauma, burns, and human and animal bites • Gastrointestinal infections and food poisoning syndromes • Bone and joint infections 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	

	<ul style="list-style-type: none"> • Infections of reproductive organs • Sexually transmitted diseases • Infections of the eye • Viral hepatitis • Sepsis syndromes • Nosocomial infections • Infectious and non-infectious complications of HIV infection and acquired immunodeficiency syndrome • Infections in the immunocompromised or neutropenic hosts • Infections in acute leukemia and lymphoma • Transplant-related infections, including bone marrow and solid organ • Infections in geriatric patients • Infections in travelers • Infections related to intravenous drug abuse 			
Medical Knowledge	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>Demonstrate an understanding of the following:</p> <ul style="list-style-type: none"> • Mechanism of action and adverse reactions to antimicrobial agents • Clinical pharmacology of antimicrobial agents • Assessing antimicrobial activity of drugs in appropriate clinical setting. • Recognize emerging infections/epidemics; principles and practice of hospital infection control. • Principles of chemoprophylaxis and immunoprophylaxis • Principles and practice of hospital control • Mechanisms of action of monoclonal antibodies, cytokines, interferons, interleukins, and colony-stimulating factors/applications; side effects • Introduce basic concepts of immunology, host defense mechanisms, • Utility of procedures for specimen collection relevant to ID including but not limited to bronchoscopy, thoracentesis, arthrocentesis, lumbar puncture, and aspiration of abscess cavities. 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
Practice Based Learning and Improvement	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>See General Internal Medicine Objectives for a comprehensive list.</p>			
Interpersonal and	<p>SPECIALTY SPECIFIC OBJECTIVES</p>			

Communication Skills	See General Internal Medicine Objectives for a comprehensive list.			
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			

By the end of the Infectious Diseases Subspecialty Selective, PGY-3 residents are expected to expand and cultivate skills and knowledge learned during previous training and to achieve the following objectives based on the six general competencies. The resident should exhibit an increasing level of responsibility and independency as he or she progresses throughout the year.

Competency	Required Skill(s)	Teaching Method(s)	Formative Evaluation Method(s)	Frequency of Evaluation
Patient Care	SPECIALTY SPECIFIC OBJECTIVES			
	Evaluate and manage common infectious disease problems of adults in the hospital setting: Rational Use of Antimicrobial Agents Prevention and treatment of Central Line Infections <ul style="list-style-type: none"> • Febrile Neutropenia • Nosocomial and Community Acquired Pneumonia • Cellulitis • Chronic Wound Infections • Endocarditis • Infections in Solid Organ Transplant Patients • Multi-drug Resistant Organisms such as MRSA and VRE • Sepsis Syndrome • Meningitis • FUO 	ID Team Attending Rounds ID Clinical Conference Reading Lists Core Curriculum Conference	Written exam ABIM global assessment	
	Apply the principles of HIV/AIDS treatment: <ul style="list-style-type: none"> • Diagnosis of HIV • Initial Evaluation • Selection of Antiretroviral Agents • Prevention and Treatment of Opportunistic Infections 	ID Team Attending Rounds ID Clinical Conference Reading Lists Core Curriculum Conference	Written exam ABIM global assessment	
	Describe the basic principles of hospital epidemiology:	ID Team Attending Rounds	Written exam	

	<ul style="list-style-type: none"> • Hand Hygiene • Isolation Guidelines 	<p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>ABIM global assessment</p>	
	<p>Evaluate and manage the common outpatient infectious disease problems of adults:</p> <ul style="list-style-type: none"> • STDs • Diarrhea • Rashes 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
	<p>Describe emerging Infectious Diseases:</p> <ul style="list-style-type: none"> • West Nile Virus • Bioterrorism 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
	<p>Develop expertise in patient care and the medical knowledge base required to manage the following aspects of Infectious diseases:</p> <ul style="list-style-type: none"> • Febrile patients presenting with rash or FUO • Upper respiratory tract infections • Pleuropulmonary and bronchial infections. • Urinary tract infections • Peritonitis and other intra-abdominal infections • Cardiovascular infections • Central nervous system infections • Skin and soft tissue infections • Infections related to trauma, burns, and human and animal bites • Gastrointestinal infections and food poisoning syndromes • Bone and joint infections 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	

	<ul style="list-style-type: none"> • Infections of reproductive organs • Sexually transmitted diseases • Infections of the eye • Viral hepatitis • Sepsis syndromes • Nosocomial infections • Infectious and non-infectious complications of HIV infection and acquired immunodeficiency syndrome • Infections in the immunocompromised or neutropenic hosts • Infections in acute leukemia and lymphoma • Transplant-related infections, including bone marrow and solid organ • Infections in geriatric patients • Infections in travelers • Infections related to intravenous drug abuse 			
Medical Knowledge	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>Demonstrate an understanding of the following:</p> <ul style="list-style-type: none"> • Mechanism of action and adverse reactions to antimicrobial agents • Clinical pharmacology of antimicrobial agents • Assessing antimicrobial activity of drugs in appropriate clinical setting. • Recognize emerging infections/epidemics; principles and practice of hospital infection control. • Principles of chemoprophylaxis and immunoprophylaxis • Principles and practice of hospital control • Mechanisms of action of monoclonal antibodies, cytokines, interferons, interleukins, and colony-stimulating factors/applications; side effects • Introduce basic concepts of immunology, host defense mechanisms, • Utility of procedures for specimen collection relevant to ID including but not limited to bronchoscopy, thoracentesis, arthrocentesis, lumbar puncture, and aspiration of abscess cavities. 	<p>ID Team Attending Rounds</p> <p>ID Clinical Conference</p> <p>Reading Lists</p> <p>Core Curriculum Conference</p>	<p>Written exam</p> <p>ABIM global assessment</p>	
Practice Based Learning and Improvement	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>See General Internal Medicine Objectives for a comprehensive list.</p>			
Interpersonal and Communication	<p>SPECIALTY SPECIFIC OBJECTIVES</p> <p>See General Internal Medicine Objectives for a</p>			

Skills	comprehensive list.			
Professionalism	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			
Systems-Based Practice	SPECIALTY SPECIFIC OBJECTIVES			
	See General Internal Medicine Objectives for a comprehensive list.			

Teaching methods:

- Attendance at daily teaching rounds with the subspecialty attending, and ID fellow.
- Evaluate new inpatient Infectious Disease consults and review their findings with the attending and fellow.

Mix of diseases:

- The mix of diseases encountered on the Inpatient Infectious Diseases consult rotation is broad and includes the evaluation and management of nosocomial and community-acquired infections in immunocompetent hosts as well as patients who are immunosuppressed due to cytotoxic chemotherapy and neutropenia, solid organ, and bone marrow transplants, and HIV infection.

Patient characteristics

- Adult patients with acute and chronic infectious problems

Types of clinical encounters, procedures and services

- Inpatient infectious disease consultations at the Med, VAMC, MUH, and Baptist

Learning Venues:

Reading lists and other educational resources:

At a minimum residents should complete the Infectious Diseases section in Harrison's textbook of Internal Medicine.

Additional supplemental reading pertinent to patients that are encountered during the rotation should be performed as appropriate with direction from the attending and/or fellow. Easily accessible resources include, but are not limited to:

- Up-to-Date
- Reading lists are provided on the ID division website.
- Reading will be supplemented by directed reading from the attending physician and fellows
- Additional resources pertinent to management of many commonly encountered ID problems (such as HIV/AIDS, febrile neutropenia, community-acquired pneumonia, tuberculosis) may be found on the IDSA website at <http://www.idsociety.org> under "Practice Guidelines"

ID Team Attending Rounds:

Daily, Monday through Friday

Residents review all culture data and other test results, as well as pertinent physical findings on their patients, and present to the attending. General supervision is provided for all inpatients and direct supervision for clinic patients by faculty.

ID Clinical Conference:

Friday 11 am: case presentation.

Residents will be expected to prepare at least one case with literature review per rotation.

Friday noon: core curriculum (includes basic science, core clinical concepts).

Competency Evaluation:

Written examination at the end of the rotation.

Formal written assessment of core competencies by attending/fellow.

Outcomes Assessment:

The educational success of our elective in infectious diseases will be based on performance with clinical assignments, performance on end of rotation examination, infectious diseases subsections scores on the in-service examination, and infectious diseases subsections scores on the ABIM certifying examination