



Infectious Disease Curriculum

NGMC- Family Medicine Residency Program
Gainesville, Ga

PGY: 3

Description of Rotation:

This is a four-week block infectious disease experience with direct supervision by board certified infectious disease specialist. Supplemental longitudinal learning in the FMP supervised by Family Physician Faculty is also expected.

Overall Goals of Infectious Disease Rotation:

Family physicians are often the first health care providers to whom individuals with infections turn for treatment. The diagnosis and treatment of patients with acute infections makes up an enormous part of primary care practice. In addition, we are uniquely suited through our efforts at preventive care to diagnose many chronic infectious diseases in their asymptomatic stage and coordinate intervention as the disease progresses. Likewise, family physicians are increasingly being called to provide primary care for patients with chronic infectious diseases such as HIV. It is therefore necessary that a family physician be knowledgeable about infectious disease and the multiple issues related to the care of patients with HIV infection.

Patient Care and Medical Knowledge Objectives and Competencies

- PC-1: Cares for Acutely ill or injured patients in urgent and emergent situations in all settings.
- PC-2: Cares for patients with chronic conditions.
- PC-3: Partners with the patient, family, and community to improve health through disease prevention and health promotion.
- PC-4: Partners with the patient to address issues of ongoing signs, symptoms, or health concerns that remain over time without clear diagnosis despite evaluation and treatment, in a patient-centered, cost-effective manner.
- MK-1: Demonstrate medical knowledge of sufficient breadth and depth to practice family medicine.
- MK-2: Applies critical thinking skills in patient care.

Objectives:

- Learn the common pathogens and the treatment for infections encountered in family practice.
- Understand the pharmacological principles of treatment for bacterial, viral, and fungal infections including choice of antimicrobial, major side effects, dosage adjustments based on metabolism of the drug or derangement in hepatic or renal function, and major drug-drug interactions.
- Learn the immunization recommendations for adults and children and how to access updated information.
- Be able to compare the spectrum of infections in immunocompetent hosts versus those seen in the immunocompromised host.
- Learn how to approach the febrile patient including fever of unknown origin both in the immunocompromised and immunocompetent host.
- Learn the screening principles for asymptomatic chronic infections.
- Be able to take a careful history including travel, sexual, occupational and environmental exposures.
- Learn and be able to describe the diagnosis, management and potential complications of:
 - CNS infections: bacterial meningitis, aseptic meningitis, and encephalitis.
 - ENT infections: sinusitis, otitis media, otitis externa, and pharyngitis.



- Respiratory infections: URI, bronchitis, community acquired pneumonia, nosocomial pneumonia, and aspiration pneumonia
- Cardiovascular infections: endocarditis
- Gastrointestinal and intraabdominal infections: gastroenteritis, colitis, cholecystitis, hepatitis, peritonitis, and appendicitis.
- Musculoskeletal infections: necrotizing fasciitis, septic arthritis, and osteomyelitis.
- Sexually transmitted diseases: HIV, syphilis, gonorrhea, chlamydia, herpes, trichomonas, and hepatitis B
- Genito-urinary infections: UTI, pyelonephritis, vaginitis, cervicitis, pelvic inflammatory disease, prostatitis, urethritis, and proctitis.
- Skin infections: impetigo, cellulitis, erythrasma, and the various fungal infections of the skin and nails.
- Be able to evaluate and manage patients with HIV infection in the asymptomatic and symptomatic stages with referrals made when appropriate.
 - The resident will be able to list and be familiar with conditions commonly encountered in the HIV population such as: candida, cryptococcus, cryptosporidiosis, CMV, HSV, M. tuberculosis, M. avium complex (MAC), M. kansasii, pneumocystis jiroveci (carinii), toxoplasmosis, Kaposi's sarcoma, progressive multifocal leukoencephalopathy, HIV dementia, and HIV wasting syndrome.
 - The resident will know the appropriate health maintenance recommendations for patients with HIV including additional immunizations and prophylactic therapy.
- Residents will strive to perform and gain competence in the following:
 - Gram staining and interpretation
 - Wet prep/KOH and interpretation
 - Lumbar puncture
 - Urinalysis with microscopic evaluation and interpretation

Interpersonal and Communication Skills Objectives and Competencies

- C-1: Develop meaningful, therapeutic relationships with patients and families.
- C-2: Communicates effectively with patients, families, and the public.
- C-3: Develops relationships and effectively communicates with physicians, other health professionals, and health care teams.
- C-4: Utilizes technology to optimize communication

Objectives:

- Learn to communicate to the patient and family members a diagnosis, treatment plan, and prognosis in a way that is comprehensible and compassionate.
- Learn how to effectively provide counseling to adults regarding immunizations and screening.
- Learn how to effectively provide pre and post-test counseling to patients regarding HIV testing.
- Learn how to effectively and efficiently communicate and coordinate with infectious disease consultants.

Practice Based Learning and Improvement Objectives and Competencies:

- PBLI-1: Locates, appraises, and simulates evidence from scientific studies related to the patients' health problems
- PBLI-2: Demonstrates self-directed learning
- PGLI-3: Improves systems in which the physician provides care

Objectives:



- Analyze practice experience and perform practice-based improvement activities using a systematic methodology.
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems.
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn.
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness.
- Use information technology to manage information, access on-line medical information; and support their own education.
- Learn to incorporate health promotion and disease prevention into patient care.
- Use evidence-based medicine, evaluation of available evidence, and use of best-available evidence at morning report meetings and during routine clinical care.

Professionalism Objectives and Competencies:

- PROF-1: Completes a process of professionalization
- PROF-2: Demonstrates professional conduct and accountability
- PROF-3: Improves systems in which the physician provides care

Objectives:

- Understand the need for continuing medical education to stay abreast of the constant changes in therapy for infectious diseases.
- Become familiar with resources available in the community for patients with chronic illness and learn how to incorporate them into the treatment plan when needed.
- Gain awareness of one's own attitudes towards sexuality, intravenous drug abuse, communicable diseases and death.
- Demonstrate integrity, honesty, respect and a commitment to excellence in all activities.
- Demonstrate sensitivity, respect and adapt appropriately to the social and cultural issues of each patient.
- Display initiative and resourcefulness in patient care and in solving problems.
- Be timely in attendance of activities and completion of tasks.
- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development.
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.
- Arrive at the rotation in a timely fashion.
- Work effectively as a member of a team.
- Respect patient privacy by guarding medical records and discussion of personal information about patients.
- Assist patients and their families in planning for future care needs and care decisions based on prognosis for the disease.
- Support the patient in their healthcare decisions.
- Demonstrate professional, respectful demeanor when addressing team members, patients, ancillary staff, and consultants.
- Appear professionally dressed and well groomed.
- Completes clinic notes in a timely fashion.
- Attends required conferences.

Systems Based Practice Objectives and Competencies



- SBP-1: Provides cost-conscious medical care
- SBP-2: Emphasizes patient safety
- SBP-3: Advocates for individual and community health
- SBP-4: Coordinates team-based care

Objectives:

- Learn the appropriate documentation and coding for screenings and immunizations.
- Understand the medico-legal aspects of diagnosing a patient with an infectious disease including your responsibility to the patient's close contacts and to the state.
- Understand the ethical and legal aspects of diagnosing a patient with an infectious disease as they relate to confidentiality.
- Learn OSHA guidelines for blood borne pathogens.
- Learn the different types of precautions used in the health care setting (universal, respiratory, contact)
- Residents will be able to use ancillary testing such as laboratory, imaging, and biopsy in a cost-effective manner to arrive at a timely diagnosis.