

NAME OF ROTATION: Infectious Diseases

FOCUS OF THIS ROTATION

- The goal of this rotation is to provide the Internal Medicine trainee (PGY1s, PGY2s and PGY3s) with the opportunity to develop competencies in the assessment and management of patients with infectious disorders in the emergency department, on the ward, and in the ambulatory clinic setting.
- The goals listed will be completed, in part, during the subspecialty rotation. Completion of all goals is expected by the end of the PGY 3 year and will be accomplished through ongoing clinical exposure, participation in the formal academic curriculum and personal learning strategies. Residents are encouraged to prioritize goals during their initial focused clinical exposure to this discipline.

CBD stage(s) for this rotation:

- TTD
- FOD
- COD

Length of this rotation:

- 1 block

PGY Level(s) for this rotation:

- PGY1
- PGY2
- PGY3

Locations for rotation:

- SHSC
- SMH
- UHN-TGH/SHS (MSH)
- (UHN-TWH)

Required training experiences included in this rotation:

Required clinical training experiences (Foundations of Discipline = PGY1s):

- FOD 1 Clinical training experiences:
 - 1.1.3 Ambulatory care clinics in Infectious Diseases
 - 1.1.4 Acute care experience with patients presenting to emergency department with Infectious Diseases
- FOD 2 Other training experiences:
 - 2.1 Directed and/or independent learning experience, in topics about infectious diseases (e.g. use of journal clubs, online modules, academic rounds)

Other training experiences (Foundations of Discipline = PGY1s):

- FOD 3 Clinical training experiences:
 - 3.3.2 Consultation service in Infectious Diseases
 - 3.3.3 Care of the elderly with Infectious Diseases

Required training experiences (Core of Discipline = PGY2s and PGY3s)

- COD 1 Clinical training experiences:
 - 1.1.2 Ambulatory care: clinic, include experience with a broad spectrum of Infectious Diseases as well as patients with complex disorders
 - 1.1.3 Service providing Infectious Disease consultation to other disciplines or to medical subspecialty inpatient units
 - 1.1.4 Service providing Infectious Disease preoperative assessment and perioperative care
 - 1.1.5 After hours on call Infectious Disease coverage for a broad spectrum of inpatients and internal medicine consultation to the emergency department (SMH)
 - 1.1.6 Experience consulting on critically ill patients with Infectious Diseases. This must include ICU, CCU, and internal medicine consultation to the emergency department.

Other training experiences (Core of Discipline = PGY2s and PGY3s)

- COD 4 Clinical training experiences:
 - 4.4.1 Care for vulnerable/marginalized populations with Infectious Diseases: elderly, pregnant
 - 4.4.2 Interprofessional Infectious Disease ambulatory care

Blue = TTD (PGY1, Blocks 1-4); Yellow = FOD (PGY1, Blocks 5-13), Red = COD (PGY2-3)

EPAs Mapped to this rotation:	Total # of EPAs
TTD1 Performing histories and physical exams, documenting and presenting findings, across clinical settings for initial and subsequent care	3-4
FOD 2B Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part B: Communication with Patient/Family	3-4
FOD 2C Managing patients admitted to acute care settings with common medical problems and advancing their care plan: Part C: Handover	0-1 (can do)
FOD 7 Identifying personal learning needs while caring for patients, and addressing those needs	2 (1 if short rotation)
FOD 1 Assessing, diagnosing, and providing initial management for patients with common acute medical presentations in acute care settings	1-2
FOD 2A Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part A: Patient Assessment and Management	1-2
FOD 2B Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part B: Communication with Patient/Family	2
FOD 2C Managing patients admitted to acute care settings with common medical problems and advancing their care plan: Part C: Handover	0-1(can do)
FOD 7 Identifying personal learning needs while caring for patients, and addressing those needs	2 (1 if short rotation)
COD 2A Assessing and managing patients with complex chronic conditions: Part A: Assessment, Diagnosis, and Management	1
COD 8 Caring for patients who have experienced a patient safety incident (adverse event)	Do whenever possible
COD 1 Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations	0-1
COD 2A Assessing and managing patients with complex chronic conditions: Part A: Assessment, Diagnosis, and Management	1
COD 2B Assessing and managing patients with complex chronic conditions: Part B: Patient Education/Communication	0-1
COD 3A Providing internal medicine consultation to other clinical services: Part A: Patient Assessment and Decision-Making	2
COD 3B Providing internal medicine consultation to other clinical services: Part B: Written Communication:	2

EPAs Mapped to this rotation:	Total # of EPAs
COD 3C Providing internal medicine consultation to other clinical services: Part C: Oral Communication	1
COD 7 Discussing serious and/or complex aspects of care with patients, families, and caregivers	0-1 (can do)
COD 8 Caring for patients who have experienced a patient safety incident (adverse event)	Do whenever possible
COD 10 Implementing health promotion strategies in patients with or at risk for disease	2

	Other assessments during this rotation:	Tool Location / Platform (e.g. POWER, Entrada):
1.	ITAR	POWER

	Key Objectives for this Rotation:	CanMEDS Role(s):
1.	Perform an accurate and appropriately detailed history and physical examination to elicit details of common infectious disease disorders.	Medical Expert
2.	Correlate relevant pathophysiology to the ordering and interpretation of laboratory and imaging investigations commonly used in the assessment of infectious disease disorders.	Medical Expert
3.	Effectively apply knowledge of medications commonly used in the management of infectious diseases including indications, dosing adjustments for comorbidities, potential side-effects, appropriate monitoring and contraindications.	Medical Expert
4.	Engage in antimicrobial stewardship and appreciates the appropriate use of broad versus narrow spectrum antimicrobials, intravenous versus oral therapy and long versus short course therapy.	Leader
5.	Identify and act on opportunities for patient counseling and education, including recommendations for immunization and safer sexual practices.	Health Advocate
6.	Identify social factors that may impact the acquisition and management of infectious diseases, including housing, substance use disorders or dependency, access to medical care and medications.	Health Advocate
7.	Effectively apply knowledge and demonstrates understanding of principles and practices of infection prevention and control to reduce the transmission of infectious diseases.	Leader

Royal College Internal Medicine Competencies emphasized on the Infectious Diseases rotation.

Numbers refer to items identified in the Royal College Competencies document

Symptoms

Identify the causes and be able to use history, physical exam and investigations to arrive at a differential and provisional diagnosis for each of the following:

- o Fever of unknown origin 1.4.12.1.11.
- o Fever in the immuno-compromised host 1.4.12.1.12.
- o Fever in the hospitalized patient 1.4.12.1.13.
- o Fever, skin diseases, and diarrhea in the returning traveler 1.4.12.1.14.

Investigations

- o Recognizes the role of the microbiology laboratory in the investigation and management of infectious diseases including:
 - Advice on the appropriateness of test ordering, specimen submission and test interpretation
 - Limitations of culture techniques
 - Interpretation of the Gram-stain results
 - Interpretation of common serological tests including serologies for HIV and viral hepatitis

- Awareness of rapid diagnostic tests, including enzyme immunoassays, PCR, rapid antigen detection tests and MALDI-TOF

Disorders

Using results of history, physical examination and investigations, be able to confirm the diagnosis of each of the following, and propose a management plan. The plan may include further investigations and treatment, taking into account the underlying cause and any complications.

- Infective endocarditis 1.4.12.1.1.
- Pneumonia 1.4.12.1.2.
- Infectious diarrhea 1.4.12.1.3.
- Clostridium difficile colitis 1.4.12.1.4.
- Intra-abdominal infections 1.4.12.1.5.
- Urosepsis 1.4.12.1.6.
- Meningitis and encephalitis 1.4.12.1.7.
- Bone and joint infections 1.4.12.1.8.
 - Diabetic Foot infection
- Cellulitis and other skin infections 1.4.12.1.9.
- Necrotizing soft tissue infections 1.4.12.1.10.
- Human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) and its treatment and complications, including but not limited to:
 - Fever 1.4.12.1.15.1.
 - Weight loss 1.4.12.1.15.2.
 - Dyspnea, cough, hemoptysis 1.4.12.1.15.3.
 - Dysphagia, diarrhea 1.4.12.1.15.4.
 - Anemia, neutropenia, thrombocytopenia 1.4.12.1.15.5.
 - Metabolic derangements 1.4.12.1.15.6.
 - Opportunistic infections 1.4.12.1.15.7.
- Malaria 1.4.12.1.16.
- Sexually transmitted infections 1.4.12.1.17.
- Tuberculosis, including intradermal testing and interpretation 1.4.12.1.18.

Therapies

Integrate knowledge of the indications/contraindications, side-effects and pharmacokinetics of the following therapies in the care of patients with cardiac disorders:

- Spectrum of activity, adverse effects, and dose adjustments for antibiotics 1.4.12.2.1.a
 - HIV antiretroviral therapy, including drug classes, initiation, monitoring, toxicities and metabolic complications
 - Antimicrobial therapy, including classes of common antimicrobial agents for bacterial, viral and fungal infections and their toxicities
 - Dosing of antimicrobial therapy in abnormal physiological states, including hepatic dysfunction and renal dysfunction (renal insufficiency, end-stage renal disease, dialysis and SLED)
 - Antimicrobial therapy in pregnancy and early lactation, including drug safety.
 - Appropriate timing to transition from intravenous to oral therapy
- Antimicrobial stewardship 1.4.12.2.2.
 - Infection Control practices, including modes of microbial transmission within hospitals, hand hygiene, routine practices and additional precautions
- Infection control in the hospital setting 1.4.12.2.3