INTERNAL MEDICINE ROTATION PLAN

NAME OF ROTATION: IM Gastroenterology

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 gastrointestinal and hepatic disorders in the emergency department, on the ward, and in the ambulatory clinic setting.
- This rotation will be completed by residents at any level within the Internal Medicine training program. The objectives listed will be completed, in part, during the subspecialty rotation. Completion of all objectives is expected by the end of the PGY3 year and will be accomplished through ongoing clinical exposure, participation in the formal academic curriculum and personal learning activities. Residents are encouraged to prioritize objectives 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 (Unity Health)
- SHS (MSH)
- UHN-TGH
- UHN-TWH
- WCH

Required training experiences included in this rotation:

- Required clinical training experiences (Foundations of Discipline = PGY1s):
  o FOD 1 Clinical training experiences:
    ▪ 1.1.3 Ambulatory care clinic in Gastroenterology
    ▪ 1.1.4 Acute care experience with patients presenting to emergency department
    ▪ 1.1.5 After-hours coverage for a broad spectrum of inpatients and Gastroenterology consultation to the emergency department
  o FOD Other training Experiences
    ▪ 2.1.5 Directed and/or independent learning experience, in topics such as medical ethics, critical appraisal, and wellness (e.g. use of journal clubs, online modules, academic rounds)

- Recommended training experiences (Foundations of Discipline = PGY1s):
  o FOD 3 Clinical training experiences
    ▪ 3.3.2 Consultation service in Gastroenterology (in-patient wards, emergency, ICU)
  o FOD 4 Other training experiences include:
    ▪ 4.4.1 Instruction or experience in procedural skills (may use simulation) – Paracentesis
- **Required training experiences (Core of Discipline = PGY2s and PGY3s)**
  - **COD 1 Clinical training experiences:**
    - 1.1.2 Ambulatory care: clinic in Gastroenterology. This must include experience with a broad spectrum of conditions as well as patients with complex disorders
    - 1.1.3 Service providing Gastroenterology consultation to other disciplines or to medical inpatient units
    - 1.1.5 After hours coverage for inpatients and internal medicine consultation to the emergency department for Gastrointestinal or liver disorders
    - 1.1.6 Experience with critically ill patients, including gastroenterology consultations for ICU, CCU, and the emergency department

- **Other training experiences (Core of Discipline = PGY2s and PGY3s)**
  - **COD 4 Clinical training experiences:**
    - 4.4.2.1 Care for vulnerable/marginalized populations
    - 4.4.1 Telehealth
    - 4.4.2 Interprofessional ambulatory care

**Blue = TTD PGY1, Blocks 1-4; Green = FOD PGY1, Blocks 5-13, Orange = COD, PGY2 and 3**

<table>
<thead>
<tr>
<th>EPAs Mapped to this rotation</th>
<th>Total # of EPAs 4+ per block</th>
</tr>
</thead>
<tbody>
<tr>
<td>TTD1 Performing histories and physical exams, documenting and presenting findings, across clinical settings for initial and subsequent care</td>
<td>2</td>
</tr>
<tr>
<td>TTD2 Identifying and assessing unstable patients, providing initial management, and obtaining help.</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>FOD 2B Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part B: Communication with Patient/Family</td>
<td>1-2</td>
</tr>
<tr>
<td>FOD 7 Identifying personal learning needs while caring for patients, and addressing those needs</td>
<td>0-1</td>
</tr>
<tr>
<td>COD 5 Performing the procedures of Internal Medicine</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>FOD 1 Assessing, diagnosing, and providing initial management for patients with common acute medical presentations in acute care settings</td>
<td>1-2</td>
</tr>
<tr>
<td>FOD 2A Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part A: Patient Assessment and Management</td>
<td>1-2</td>
</tr>
<tr>
<td>FOD 2B Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part B: Communication with Patient/Family</td>
<td>2</td>
</tr>
<tr>
<td>FOD 2C Managing patients admitted to acute care settings with common medical problems and advancing their care plan: Part C: Handover</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>FOD 5 Assessing unstable patients, providing targeted treatment and consulting as needed</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>FOD 7 Identifying personal learning needs while caring for patients, and addressing those needs</td>
<td>0-1 (can do)</td>
</tr>
</tbody>
</table>
### EPAs Mapped to this rotation:

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<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Total # of EPAs</th>
</tr>
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<tbody>
<tr>
<td>COD 2A</td>
<td>Assessing and managing patients with complex chronic conditions: Part A: Assessment, Diagnosis, and Management</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>COD 5</td>
<td>Performing the procedures of Internal Medicine</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>COD 8</td>
<td>Caring for patients who have experienced a patient safety incident (adverse event)</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>COD 1</td>
<td>Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations</td>
<td>1</td>
</tr>
<tr>
<td>COD 2A</td>
<td>Assessing and managing patients with complex chronic conditions: Part A: Assessment, Diagnosis, and Management</td>
<td>1</td>
</tr>
<tr>
<td>COD 2B</td>
<td>Assessing and managing patients with complex chronic conditions: Part B: Patient Education/Communication</td>
<td>0-1</td>
</tr>
<tr>
<td>COD 3A</td>
<td>Providing internal medicine consultation to other clinical services: Part A: Patient Assessment and Decision-Making</td>
<td>1</td>
</tr>
<tr>
<td>COD 3B</td>
<td>Providing internal medicine consultation to other clinical services: Part B: Written Communication:</td>
<td>1</td>
</tr>
<tr>
<td>COD 3C</td>
<td>Providing internal medicine consultation to other clinical services: Part C: Oral Communication</td>
<td>0-1</td>
</tr>
<tr>
<td>COD 4A</td>
<td>Assessing, resuscitating, and managing unstable and critically ill patients.</td>
<td>Do whenever possible</td>
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<tr>
<td>COD 5</td>
<td>Performing the procedures of Internal Medicine</td>
<td>Do whenever possible</td>
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<tr>
<td>COD 6</td>
<td>Assessing capacity for medical decision-making</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 7</td>
<td>Discussing serious and/or complex aspects of care with patients, families, and caregivers</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 8</td>
<td>Caring for patients who have experienced a patient safety incident (adverse event)</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>COD 10</td>
<td>Implementing health promotion strategies in patients with or at risk for disease</td>
<td>0-1 (can do)</td>
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</table>

### Other assessments during this rotation:

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Tool Location / Platform (e.g. POWER, Entrada):</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ITAR</td>
<td>POWER</td>
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</table>

### Key Goals for this Rotation:

By the end of the rotation the resident should be able to …

1. Performs an accurate and detailed history and physical examination to elicit details of common gastrointestinal/liver disorders.  
   - **CanMEDS Role(s):** Medical Expert
2. Correlates relevant pathophysiology to the ordering and interpretation of laboratory and imaging investigations commonly used in the assessment of gastrointestinal/liver disorders.  
   - **CanMEDS Role(s):** Medical Expert
3. Demonstrates a cost-effective, patient-centred approach to and evidence-informed rationale for the management of common chronic gastrointestinal/liver disorders.  
   - **CanMEDS Role(s):** Medical Expert
4. Demonstrates how to effectively diagnose and manage acute gastrointestinal/liver disorders.  
   - **CanMEDS Role(s):** Medical Expert
Key Goals for this Rotation:
By the end of the rotation the resident should be able to …

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<th>CanMEDS Role(s):</th>
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<tr>
<td>5. Communicates effectively with physicians and other health care professionals in both oral and written formats, including well organized, timely and legible orders, progress notes and consult letters.</td>
<td>Communicator</td>
</tr>
<tr>
<td>6. Effectively collaborates with other health care professionals and medical staff to coordinate the patient’s care.</td>
<td>Collaborator</td>
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</tbody>
</table>

Royal College Internal Medicine Competencies emphasized on the Gastroenterology 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:

- Acute and chronic abdominal pain 1.4.4.1.1.
- Dysphagia 1.4.4.1.2.
- Nausea and vomiting 1.4.4.1.3.
- Regurgitation 1.4.4.1.4.
  - Dyspepsia, dysphagia,odynophagia, heartburn
- Acute and chronic constipation 1.4.4.3.1.
- Acute and chronic diarrhea 1.4.4.3.2.
- Hematemesis
- Intestinal obstruction
- Rectal bleeding
- Weight loss

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

- Ascites 1.4.4.2.1.
- Encephalopathy 1.4.4.2.2.
- Jaundice 1.4.4.2.3.

**Investigations**
Be able to order and interpret each of the following:

- Abnormal liver tests 1.4.4.2.4.
- Interpretation of hepatitis B and hepatitis C serology

Be able to perform and interpret the results of:

- Diagnostic and therapeutic abdominal paracentesis 3.4.2.7.

**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. Must be able to manage Gastrointestinal emergencies.*

- Bacterial peritonitis 1.4.4.3.3.
- Intestinal obstruction 1.4.4.3.4.
- Malabsorption syndromes 1.4.4.3.5.
- Upper and lower gastrointestinal bleeding 1.4.4.3.6.
- Esophageal 1.4.4.3.7.
  - Gastroesophageal reflux and its complications 1.4.4.3.7.1.
  - Hiatus hernia 1.4.4.3.7.2.
  - Motility disorders 1.4.4.3.7.3.
  - Varices 1.4.4.3.7.4.
  - Neoplasms 1.4.4.3.7.5.
- Gastroduodenal disease 1.4.4.3.8.
  - Functional Dyspepsia 1.4.4.3.8.1.
- Motility disorders 1.4.4.3.8.2.
- Peptic ulcers 1.4.4.3.8.3.
- Neoplasms 1.4.4.3.8.4.
  o Small and large intestine 1.4.4.3.9.
    o Diseases causing malabsorption, including celiac disease 1.4.4.3.9.1.
    o Diverticular disease 1.4.4.3.9.2.
    o Infectious diseases 1.4.4.3.9.3.
    o Pseudomembranous colitis
    o Inflammatory bowel disease 1.4.4.3.9.4.
    o Irritable bowel syndrome 1.4.4.3.9.5.
    o Vascular diseases of the bowel
      • Ischemic colitis, Mesenteric ischemia
  - Neoplasms: small intestine and colorectal 1.4.4.3.9.6.
  o Hepatic 1.4.4.3.10.
    - Acute and chronic hepatitis 1.4.4.3.10.1.
      • Hepatitis B
      • Hepatitis C
      • Fatty liver (NAFL and NASH)
      • Alcoholic liver disease
    - Primary biliary cholangitis, Primary sclerosing cholangitis, Autoimmune hepatitis
    - Hemochromatosis, Wilson disease
    - Cirrhosis and its complications 1.4.4.3.10.2.
      • Portal hypertension, Ascites, Variceal bleeding
      • Hepatic encephalopathy
      • Spontaneous bacterial peritonitis
      • Hepatorenal syndrome
    - Neoplasms: primary and metastatic 1.4.4.3.10.3.
    - Biliary tract disease 1.4.4.3.11.
  o Cholelithiiasis and its complications 1.4.4.3.11.1.
    - Sclerosing cholangitis 1.4.4.3.11.2.
    - Neoplasms 1.4.4.3.11.3.
  o Pancreatic disease 1.4.4.3.12.
    - Acute and chronic pancreatitis 1.4.4.3.12.1.
    - Neoplasms 1.4.4.3.12.2.

Therapies
Integrate knowledge of the indications/contraindications, side-effects and pharmacokinetics of the following therapies in the care of patients with GI disorders:
  o Proton Pump Inhibitors
  o Corticosteroids
  o Immunobiologic therapies
  o Immunotherapies
  o Artificial Nutrition: enteral and parenteral
    - indications and complications
  o Antiviral therapy for hepatitis B virus
  o Direct-acting antiviral therapy for hepatitis B virus
  o Prokinetics
  o (Novel) laxatives