

Gastroenterology Elective
Inova Fairfax Medical Campus
Internal Medicine Residency Program
PGY-2/PGY3 level

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1. Educational Purpose and Goals

- a. Expose residents to the diagnosis and management of a broad range of gastrointestinal and liver disorders .
- b. Develop clinical skills in obtaining an accurate history and performing a detailed physician exam in patient with gastroenterological complaints.
- c. Learn to appropriately order and interpret laboratory and imaging studies for common gastrointestinal disorders.
- d. Learn the typical endoscopic features of common gastrointestinal disorders and develop a rational diagnostic and therapeutic approach to problems in gastroenterology
- e. Recognize the need for appropriate gastroenterology or surgical consultation for gastrointestinal diseases.

2. Principal Teaching/Learning Methods

- a. *Supervised patient care:* Residents will encounter patients during the gastroenterology consult service and in outpatient gastroenterology and hepatology clinics. In the inpatient setting, the team will typically consist of an attending, fellow (if available), physician extender and, possibly, medical student(s). Residents will perform initial gastroenterology consultations when requested by the attending or fellow. Residents will formulate and document a hypothesis and treatment plan and present it to the attending. Both the resident and attending will examine the patient and discuss the plan of care. Residents will continue to follow patients after the initial consultation. Residents will have an opportunity to learn about and observe GI procedures such as esophagogastroduodenoscopy (EGD), colonoscopy, endoscopic ultrasound (EUS), and endoscopic retrograde cholangiopancreatography (ERCP). In the outpatient clinic, a faculty gastroenterologist will supervise the resident and residents will evaluate patients in the same fashion as above.
- b. *Didactics/Small group sessions*
 - i. Noon Conference and Grand Rounds pertaining to gastrointestinal and liver diseases.
 - ii. Didactic lectures on core topics in gastroenterology and hepatology presented by faculty and fellows at least weekly.
 - iii. Weekly GI oncology meeting when applicable.
 - iv. GI Journal club presented by fellows and/or faculty when applicable.
 - v. GI Case Conferences presented by fellows and/or faculty when applicable.
 - vi. GI Quality Improvement Conferences presented by fellows and/or faculty when applicable.

- vii. GI Multidisciplinary Conferences (GI, Hepatology, Pathology, Radiology, Surgery (colorectal, hepatico-pancreatico-biliary, transplant)) presented by fellows and/or faculty when applicable
- viii. GI Research Conferences presented by fellows and/or faculty when applicable

- c. *Brief (30 minutes) lecture* on a GI/hepatology topic – By the resident to the GI team. This will be part of the overall evaluation of the resident.
- d. *Independent reading* – All residents are expected to read about patients they see in the hospital and office (suggested resources below)

3. Educational Content

- a. Patient/Disease mix – Adult inpatients on any adult service within Inova Fairfax Hospital who have or are suspected of having a gastroenterological complaint or liver disease and adult patients in the gastroenterology or liver ambulatory clinic. Common disorders such as abdominal pain, gastrointestinal bleeding, esophageal disorders, peptic ulcer disease, inflammatory bowel disease (IBD), irritable bowel syndrome (IBS), diarrhea, acute diverticulitis, malabsorption, acute hepatitis, liver failure, cirrhosis, biliary disorders, and pancreatitis will be the focus. In the clinic setting, colorectal cancer screening and common outpatient GI problems such as gastroesophageal reflux disease (GERD), IBS, IBD, peptic ulcer disease and other chronic disorders will be the focus.
- b. Learning venues
 - i. Inova Fairfax Medical Campus
 - ii. Gastroenterology clinic at ICPH and multidisciplinary clinics at Inova Schar Cancer Institute
 - iii. GI lab – Inova Fairfax Hospital Endoscopy unit and GI endoscopy at, Inova Schar Cancer Institute
- c. Structure – The rotation is a typically a four-week block but in some cases may only be a two or three weeks long rotation. Residents will not be on call for this service, although they may be on disaster call for the program during this elective. There are no weekend duties. Residents will continue to attend their continuity clinic during this rotation. The educational coordinator will orient the resident to the rotation at the beginning of the block and will review the specific schedule at that time. Residents will spend 2-3 half days/week in the clinic. There will always be at least 4.5 hours of teaching attending rounds per week, and usually these will be integrated with work rounds. Residents will never work more than 14 hours in a day and typically will work for approximately 10 hours per day, five days per week.

4. Principal Educational Materials

- a. At the beginning of the rotation, the educational director will provide materials, including this curriculum, and a resource list.

5. Methods of Evaluation

- a. At the end of the rotation, a core faculty gastroenterologist will complete a web-based evaluation and review it with the resident.

- b. The residents will also evaluate faculty and the rotation in an anonymous fashion (summarized annually in a composite form).
- c. In training exam scores for self-assessment by the resident
- d. A nurse practitioner from the team will be chosen to evaluate the resident (360 degree component) if applicable.
- e. Lectures and resident presentations of patients will be part of the overall evaluation.

6. Resource List

- a. Harrison's Principles of Internal Medicine, "Disorders of the Gastrointestinal System." & Cardinal Manifestations of Disease section on Alterations in Gastrointestinal Function and chapter on abdominal pain.
- b. American Gastroenterological Association Website (medical position statements)
- c. American College of Gastroenterology Website (practice guidelines)
- d. ASGE web site. Practice Guidelines
- e. Annals of Internal Medicine – Update in Gastroenterology and Hepatology
- f. Hopkins modules www.peaconline.org – access code given by the department.
- g. Up to date (online access provided by Inova)
- h. American College of Gastroenterology: Applying to GI Fellowship Programs (<https://gi.org/trainees/resident-resources/>)

Learning Venues

- 1. Supervised patient care/Attending rounds/Attending review of cases in clinic
- 2. Small group and Didactic sessions
- 3. Lecture to GI group
- 4. Independent reading
- 5. Hopkins modules – access given by department.

Methods of Evaluation

- A. Attending evaluation
- B. 360 evaluations if applicable from students or physician extender
- C. Direct observation with feedback
- D. Lecture and presentation evaluation
- E. ITE scores for self-assessment.

The following progressive responsibility goals are applicable to PGY2 vs. PGY3 level residents rotating in this elective with regards to the competencies and evaluation tools listed.

PGY-2 Residents:

Second year residents should be experts in collection of data and information as well as interpretation of basic laboratory data and radiological exams. They should demonstrate understanding of the interpretation of more advanced medical testing (antigen testing, serologies, PCR, CT scan, etc). They should demonstrate understanding of both the

initial and ongoing management of common gastroenterological and liver diseases and begin to understand initial management of more complex and rarer digestive diseases.

PGY-3 Residents:

Third year residents should be proficient in all the responsibilities listed above for second year residents. Additionally, they should be experts in interpreting more advanced medical testing (antigen testing, serologies, PCR, CT scan, etc.). They should demonstrate understanding of both the initial and ongoing management of more complex and rare liver diseases. They should also be able to elucidate the pathophysiological basis of complicated gastroenterological and liver disease and management strategies.

Competency: Patient Care	Learning Venues	Evaluation methods
Demonstrate the ability to use history, physical exam, laboratory, and ancillary tests to assess the status of a patient with acute gastrointestinal hemorrhage	1,2,4,5	ACE
Demonstrate ability to generate differential diagnosis, diagnostic strategy, and define the appropriate therapeutic plan and ongoing modifications in a patient with abdominal pain, GI bleeding, esophageal disorders, peptic ulcer disease, inflammatory bowel disease, irritable bowel syndrome, diarrhea, malabsorption, acute hepatitis, liver failure, cirrhosis, biliary disorders, and pancreatitis	“	“
Competency: Medical Knowledge	Learning Venues	Evaluation Methods
Articulate the pathophysiology, evaluation and management of abdominal pain, GI bleeding, esophageal disorders, peptic ulcer disease, inflammatory bowel disease, irritable bowel syndrome, diarrhea, malabsorption, acute hepatitis, liver failure, cirrhosis, biliary disorders, and pancreatitis	1-5	ACDE
Competency: Interpersonal and Communication Skills	Learning Venues	Evaluation Methods
Interact in an effective way with physicians and nurses participating in the care of patients requiring gastroenterology consultation and care	1	ABC
Show understanding of differing patient preferences in diagnostic evaluation and management of gastrointestinal disorders	“	“
Competency: Professionalism	Learning Venues	Evaluation Methods
Treat team members, primary care givers, and patients with respect	1	ABC
Actively engage in the academic process	1-5	ACDE

Attend and participate in all scheduled conferences	2,3	ACD
Competency: Practice Based Learning	Learning Venues	Evaluation Methods
Identify limitations of medical knowledge in evaluation and management of patients with gastrointestinal disorders and use the medical literature, colleagues, ancillary staff, fellows, and attendings to address these gaps	1,2,3,4,5	ADE
Competency: Systems-Based Practice	Learning Venues	Evaluation Methods
Understand barriers to optimal care for patients with chronic liver disease, gastrointestinal malignancy and AIDs related gastrointestinal complications	1	AC
Understand the process and evaluation of patients seeking liver transplantation	1,2,4,5	AC
Understand need for effective communication between multiple caregivers and sites is essential for the proper care of patients with gastrointestinal diseases	1	ABC