Gastroenterology Fellowship Program

Outpatient Clinical Rotations

I. Overview

A. Three Year Continuity Clinic Experience

All gastroenterology fellows will be required to have a ½ day continuity clinic weekly throughout their 3 years of training as mandated by ACGME. First and second year fellows will have a general gastroenterology clinic at the Perelman Center for Advanced Medicine (CAM). Third year fellows will exchange their general continuity clinic at CAM for a 6 month hepatology clinic either at CAM or the Philadelphia VA Medical Center (PVAMC), and a 6 month general gastroenterology/inflammatory bowel disease clinic at Penn Presbyterian Medical Center (PPMC). In the future, Penn anticipates additional 6 month continuity clinic block rotations including but not limited to gastrointestinal motility, pancreaticobiliary diseases, and GI oncology. Once these clinics are set in place, fellows will be required to participate in general gastroenterology and hepatology clinics; however, they will have the option to meet their educational goals through selecting these other options while still satisfying the ACGME continuity clinic requirement.

B. General Gastroenterology Clinic

Penn gastroenterology fellows will be required to rotate through the outpatient continuity clinics at the Perelman Center for Advance Medicine (CAM), Penn Presbyterian Medical Center (PPMC), and The Philadelphia VA Medical Center (PVAMC). The fellow is also referred to other portions of this handbook and the Division of Gastroenterology, ACGME, and ABIM web sites for additional information. The fellow will be required to participate in at least ½ day continuity clinic weekly throughout the 3 year program which will satisfy the ACGME requirements for the continuity clinic rotation. Fellows must participate in this ½ day clinic experience regardless of whether they are on inpatient or outpatient rotations. The clinical rotations will meet the ACGME requirements for outpatient training and will be addressed more fully below. The outpatient clinics will provide fellows with exposure to patients with a variety of gastrointestinal, pancreaticobiliary, and liver diseases in the outpatient setting. There will be an adequate number of patients of both sexes and age ranges to satisfy the
ACGME requirements. During the outpatient clinic rotation, gastroenterology fellows will acquire expertise in performing a thorough history and physical examination and in evaluating laboratory tests, imaging studies, endoscopic studies, and liver biopsies. Fellows will also gain experience in assessing patients with dyspepsia, nausea and vomiting, diarrhea, intestinal gas, fecal incontinence, constipation, variceal and non-variceal gastrointestinal bleeding, jaundice, nutritional assessment, eating disorders, obesity, food allergies, gastrointestinal malignancies, vascular lesions of the gastrointestinal tract, gastrointestinal and hepatic diseases in the pregnant patient, radiation injury, complications of gastrointestinal endoscopy, GERD, gastrointestinal motor disorders, gastric secretion, helicobacter pylori, gastritis and gastropathies, peptic ulcer disease, pancreatic secretion, acute and chronic pancreatitis, pancreatic neoplasms, bile secretion, gallstone and gallbladder disorders, small bowel and colonic secretion, water and electrolyte transport, malabsorption, short bowel syndrome, celiac sprue, Whipple’s disease, infectious diarrhea, inflammatory bowel disease, appendicitis, diverticular disease, irritable bowel syndrome, intestinal obstruction and ileus, acute and chronic pseudoobstruction, intestinal polyps, and diseases of the anorectum.

Moreover, fellows will be exposed to a variety of patients with liver disease and portal hypertension with its complications. During the outpatient gastroenterology clinic rotation, fellows will develop expertise in assessing and managing patients with viral hepatitis, autoimmune liver diseases, metabolic liver diseases, alcoholic liver disease, non-alcoholic fatty liver disease, benign and malignant neoplasms of the liver, vascular diseases of the liver, liver diseases unique to pregnancy, and drug/toxin induced liver injury. Additional exposure to liver diseases will occur during the mandatory 6 month hepatology clinic rotation later in training. See information below for further details. Additionally, the fellow will demonstrate competence in the diagnosis and management of patients with hepatocellular carcinoma and cholangiocarcinoma. Gastroenterology fellows will interact closely with other services at HUP, PPMC, PVAMC, and CAM including but not limited to medical, surgical, and diagnostic services. Refer to the specific requirements below for details about the outpatient general hepatology clinics.

C. Hepatology Clinic

Gastroenterology fellows will be required to rotate through the outpatient hepatology clinics either at CAM or PVAMC. See the Division of Gastroenterology web site for additional details. The purpose of hepatology clinic is to provide the fellow with intense exposure to outpatients with a variety of liver diseases as addressed above. We anticipate that fellows will also gain exposure to patients with liver disease during their mandatory general gastroenterology clinics earlier in training. Hepatology clinic will satisfy the continuity clinic requirement as mandated by ACGME while also affording the fellow additional training in hepatology.
**D. Additional Clinics**

All senior gastroenterology fellows will be required to rotate through a 6 month continuity clinic block at PPMC. This 6 month block will satisfy ACGME requirements for the continuity clinic rotation. During this rotation, fellows will be exposed to a wide variety of patients with gastrointestinal, pancreaticobiliary, and liver diseases as addressed above. Moreover, fellows will also receive additional instruction on managing outpatients with inflammatory bowel diseases through interaction with faculty expert in managing these conditions.

In the future, Penn anticipates adding 6 month clinical rotations in gastrointestinal motility, GI oncology, inflammatory bowel diseases, and pancreaticobiliary disorders. Fellows will have the option to choose 6 month clinical experiences that match their educational goals. All fellows will be required to take the 6 month hepatology clinic rotation in addition to the above options. All 6 month outpatient rotations will satisfy ACGME requirements for continuity clinic.

**E. Procedural Experiences**

The gastroenterology fellow is expected to participate in a variety of endoscopic and non-endoscopic procedures at HUP, PPMC, PVAMC, and CAM. The fellow will work closely with either an inpatient or outpatient attending physician. During the 3 year fellowship, fellows will acquire expertise in the assessment and management of patients who present with a variety of gastrointestinal, pancreaticobiliary, and hepatic diseases. Please refer to other parts of this handbook, the ACGME website, and The Gastroenterology Core Curriculum which can be found on the AGA website.

**II. Specific Information about Clinical Rotations**

**A. General Gastroenterology Clinic**

The gastroenterology program will have on-site faculty whose primary responsibilities will include the supervision and teaching of fellows during the general gastroenterology clinics. Please refer to the current list of faculty on the Division of Gastroenterology website. Fellows will be able to obtain appropriate and timely consultation from other specialties for their ambulatory patients. Ancillary services will be provided including but not limited to nurses, medical assistants, physicians’ assistants, social workers, language interpreters, dieticians, and clerical personnel.
Gastroenterology fellows will have a continuity ambulatory clinical experience in the general gastroenterology clinics at CAM or PPMC, and the general hepatology clinics at CAM or PVAMC in order to develop a continuous healing relationship with patients for whom they provide care relevant to gastroenterology and hepatology. As per above, first and second year fellows will be at CAM for their general gastroenterology clinics. Third year fellows will have a 6 month hepatology clinic at CAM or PVAMC and a six month inflammatory bowel disease/general gastroenterology clinic at PPMC. These rotations will provide the fellow with experience in assessing and managing patients with gastrointestinal, pancreaticobiliary, and hepatic diseases. Gastroenterology fellows will be expected to attend continuity clinics at least ½ day weekly throughout the 3 year program regardless of whether they are on inpatient and outpatient rotations. Fellows will be responsible for 4 to 8 patients during each ½ day session. Over the course of the fellowship, the fellow’s panel of patients will include at least 25% from each gender. Fellows will participate in the evaluation and assessment of new patients referred to the continuity clinics and follow patients who have been previously seen in the clinics. Fellows will discuss all patient encounters with attending physicians. During the clinical experience, the fellow will have access to electronic medical records and other relevant medical information for new and previously seen patients during each encounter. There will be adequate examination space and work space for fellows to carry out their duties. Please refer to the Division of Gastroenterology website for additional details about clinic rotations.

B. Hepatology Clinic

The gastroenterology program will have on-site faculty whose primary responsibilities will include the supervision and teaching of fellows during the hepatology clinics. Please refer to the current list of faculty on the Division of Gastroenterology website. Fellows will be able to obtain appropriate and timely consultation from other specialties for their ambulatory patients. Ancillary services will be provided including but not limited to nurses, medical assistants, physicians' assistants, social workers, language interpreters, dieticians, and clerical personnel.

Gastroenterology fellows will have a continuity ambulatory clinical experience in the general gastroenterology clinics at CAM or PPMC, and the general hepatology clinics at CAM or PVAMC in order to develop a continuous healing relationship with patients for whom they provide care relevant to gastroenterology and hepatology. As per above, first and second year fellows will be at CAM for their general gastroenterology clinics. Third year fellows will have a 6 month hepatology clinic at CAM or PVAMC and a six month inflammatory bowel disease/general gastroenterology clinic at PPMC. These rotations will provide the fellow with experience in assessing and managing patients with
gastrointestinal, pancreaticobiliary, and hepatic diseases. In addition to general
gastroenterology clinics, the 6 month hepatology clinic block will afford the fellow
additional exposure to common problems seen in patients with liver disease in
the outpatient setting. Please refer to other portions of this handbook, The
Gastroenterology Core Curriculum, and the ABIM and ACGME websites for
additional details about hepatology training. This outpatient hepatology
experience will supplement inpatient training in hepatology. Gastroenterology
fellows will be expected to attend continuity clinics at least ½ day weekly
throughout the 3 year program regardless of whether they are on inpatient and
outpatient rotations. Fellows will be responsible for 4 to 8 patients during each ½
day session. Over the course of the fellowship, the fellow’s panel of patients will
include at least 25% from each gender. Fellows will participate in the evaluation
and assessment of new patients referred to the continuity clinics and follow
patients who have been previously seen in the clinics. Fellows will discuss all
patient encounters with attending physicians. During the clinical experience, the
fellow will have access to electronic medical records and other relevant medical
information for new and previously seen patients during each encounter. There
will be adequate examination space and work space for fellows to carry out their
duties. Please refer to the Division of Gastroenterology website for additional
details about clinic rotations.

C. Procedural Experiences

Gastroenterology fellows will develop a comprehensive understanding of the
indications, contraindications, limitations, complications, techniques, and
interpretation of results of diagnostic and therapeutic procedures integral to
gastroenterology and hepatology. We anticipate that fellows should perform
required procedures on their patients whom they see in the continuity clinic.
Gastroenterology fellows will have formal instruction and demonstrate
competence in the performance of procedures during the 3 year fellowship. A
skilled preceptor will be available to teach and supervise the fellows in the
performance of these procedures which must be documented in the fellow’s
record giving the indications, outcomes, diagnoses, and supervisor(s).
Assessment of procedural competence should not be based solely on a minimum
number of procedures performed, but on a formal evaluation process. These
evaluations will include objective performance criteria (e.g. rate of successful
cecal intubation for colonoscopy). Fellows will become proficient in the
performance of esophagogastroduodenoscopy (EGD) and they must perform a
minimum of 130 supervised studies. Fellows will become proficient in esophageal
dilation and they must perform a minimum of 20 supervised studies. Fellows will
become proficient in flexible sigmoidoscopy and they must perform a minimum of
30 supervised studies. Fellows will become proficient in colonoscopy with
polypectomy and fellows must perform a minimum of 140 supervised
colonoscopies and 30 supervised polypectomies. Fellows will become proficient in percutaneous liver biopsy and they must perform a minimum of 20 supervised studies. Fellows will become proficient in percutaneous endoscopy gastrostomy (PEG) and they must perform a minimum of 15 supervised studies. Fellows will become proficient in biopsy of the mucosa of the esophagus, stomach, small bowel, and colon as well as demonstrate proficiency in gastrointestinal motility studies and 24-hour pH monitoring. Fellows will become proficient in upper and lower gastrointestinal non-variceal hemostasis and they must perform 25 supervised cases including 10 cases with active bleeding. Fellows will become proficient in variceal hemostasis and they must perform a minimum of 20 supervised cases including 5 cases with active bleeding. Fellows will become proficient in other diagnostic and therapeutic procedures utilizing enteral intubation. Fellows will become proficient in moderate and conscious sedation.

The gastroenterology program at HUP, PPMC, PVAMC, and CAM will provide formal instruction and clinical experience in the interpretation of the following diagnostic and therapeutic techniques and procedures: gastric, pancreatic, and biliary secretory testing, enteral and parenteral nutrition, pancreatic needle biopsy, ERCP in its diagnostic and therapeutic applications, imaging of the digestive system including but not limited to ultrasound, endoscopic ultrasound, computed tomography, magnetic resonance imaging, vascular radiography, contrast radiography, nuclear medicine, and percutaneous cholangiography.

The gastroenterology program will have on-site faculty whose primary responsibilities will include the supervision and teaching of fellows during procedures. Please refer to the Division of Gastroenterology web site for the current list of faculty. HUP, PPMC, PVAMC, and CAM will provide ancillary services including but not limited to nurses, medical assistants, anesthesia support services, and clerical personnel during procedures. All procedures will either be performed at HUP, PPMC, PVAMC, or CAM.