Gastroenterology In-patient Consult Services and Out-patient Clinic Curricula

The Gastroenterology division provides evaluation and consultative management of those patients with various Gastroenterological diseases who have been admitted to both medicine and non-medicine services including ICU patients, as well as patients seen at the request of their primary medical practitioners in the out-patient setting. The Gastroenterology division includes the following individuals:

Ronald D. Szyjkowski, MD- Chief and Program Director, Division of Gastroenterology
Uma K. Murthy, MD
David G. Heisig, MD, FACP
Savio John, MD
Sekou R. Rawlins, MD, FACP
Anand Gupta, MD- Chief of Gastroenterology at the Veterans Administration Medical Center
Osman Arif, MD
Divey Manocha, MD
Nuri Ozden, MD
Debra Farenga, NP

Professors Emeritus:
Philip G. Holtzapple, MD
Robert L. Levine, MD

Adjunct Faculty:
Ajoy Roy, MD

I. Educational Purpose
   a. Training in Gastroenterology via exposure to patients at the University Hospital, the Hill Medical Center and the Veteran's Administration Medical Center
   b. Exposure to routine gastrointestinal procedures including esophagogastroduodenoscopy, colonoscopy and flexible sigmoidoscopy
   c. Gastrointestinal didactic sessions in Pathology, basic sciences, clinic sciences, and Radiology
   d. Understand the indications for and interpretation of gastrointestinal laboratory and diagnostic imaging studies
   e. Honing of interviewing, physical exam and presentation skills with emphasis on differential diagnoses, assessments and care planning particular to patients with gastrointestinal illnesses

II. Learning Venues

a. In-patient Consult Services- University Hospital and the Veterans Administration Medical Center

   i. Rotation Description-The in-patient service offers concentrated exposure to acute gastrointestinal cases that require an elevated level of care at both the VA and University Hospital. These are constituted of inpatient consultations. The house-staff will be allowed to perform the initial interview, examination and assessment of these patients under the direct supervision of the attending staff in conjunction with the gastroenterology service fellow. House-staff will be expected to give detailed presentations on their patients with emphasis on differential diagnosis, assessment and comprehensive plans. They will be expected to recommend laboratory and procedural evaluations as a part of their overall plan. Whenever possible they will observe procedures performed on the patients they evaluate and will participate in these procedures at the discretion of, and under the supervision of, the faculty attending.

   ii. Resident Expectations-The inpatient resident will attend all didactic sessions required by the residency program. In addition they will attend gastroenterology service conferences. As assigned by the service attending, they will prepare and present mini-lectures, reviews of the literature, and case-focused discussions. All residents are encouraged to access the core curriculum, which is available via the university web page.

   iii. Teaching Methods

      1. Daily Rounds
      2. Recommended Reading
         a. Sleisinger & Fordtran's Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management. 10th Edition 2015.
         b. Yamada's Textbook of Gastroenterology. 6th Edition 2015.
      3. Mandatory Conferences
         a. Pathology Conference (Bi-Monthly, Friday AM) - Recent cases of teaching interest are reviewed with the staff pathologist. This allows correlation of endoscopic findings with histopathology. In addition, specific areas of interest are targeted for discussion with appropriate histologic material for review.
         b. GI Radiology Conference (Monthly-October-June Wednesday AM) - Cases are selected either by the Gastroenterology Service or by the Radiology staff presenting the conference. Common and uncommon radiologic features are reviewed. This may be on a selected interesting case or targeted topic basis. Normal anatomy as well as imaging techniques and general principles of radiology will also be covered.

c. Power Rounds (Weekly-Thursday AM) - The entire staff including house staff and fellow physicians meet to hear high-value presentations of import to the entire Department
d. GI Tumor Multi-Disciplinary conference (First Monday of each month AM)
e. Hepato-biliary Pancreatic Multi-Disciplinary Conf/GI Oncology – [(Weekly conference-Monday PM)* *Now optional*]
f. Core Lecture (Tuesday PM)
    i. A series of lectures, usually of didactic nature, on common clinical problems, diagnostic techniques or therapeutic modalities, are presented
    ii. Basic Science Conference (Bimonthly) - A series of lectures by both staff and fellow physicians, covering basic science and physiology topics
    iii. Journal Club (Monthly) - Articles from the general medical literature, as well as gastroenterology journals, are reviewed by the entire Service. Critical review of scientific articles is emphasized. Important articles and reviews are copied for lateral review and permanent files.
    iv. Process-Improvement Project report (Bi-annual)- The fellows report on projects that they have embarked upon with an eye to seeking out clinical questions, correcting inefficiencies within our practice with an eye towards publication under faculty supervision.

b. Out-patient- Clinics at the Hill Medical Center and the Veterans Administration Medical Center
    i. Rotation Description- The out-patient rotation offers exposure to patients presenting to the Hill Medical Center and Veterans Administration Medical Center at Syracuse for consultation regarding general gastrointestinal complaints. While emphasis will be placed on evaluation of new patients, exposure to follow up patients will also be offered. To ensure an adequate mix of patients and exposure to liver disease the house-staff will also see patients in the hepatology clinics of both the Veteran's Administration Medical Center at Syracuse and the University Health Care Clinic. The house-staff will be allowed to perform initial interview, examination and assessment of these patients under the direct supervision of the attending staff in conjunction with the gastroenterology fellow.
    ii. Resident Expectations- House-staff will be expected to give detailed presentations on their patients with emphasis on differential diagnosis, assessment and comprehensive plans. They will be expected to recommend laboratory and procedural evaluations as a part of their overall plan. They will observe procedures performed on the patients at Veteran's

Administration Medical Center at Syracuse and the University Endoscopy Suite. They will participate in these procedures at the discretion of and under the supervision of the service attending. When possible, direct training in diagnostic flexible sigmoidoscopy will be provided.

iii. Teaching Methods- Residents will be given the opportunity to review charts of patients with faculty prior to a clinical encounter. Having seen and assessed patients, they will return to discuss the case's clinical and educational merits pertinent to their level of intellectual development along a spectrum from reporter, to interpreter, to manager, to educator.

iv. Resident evaluation- Residents will be evaluated based on presentations, patient interviews and physicals, assessments, documentation and general knowledge per departmental standards as outlined in the Evaluation Processes of the Core Residency Program.

c. Research- Research activity within the division is available for resident house-staff on a case by case basis as arranged with individual faculty. Evaluation will also be individualized and based on preparation, participation and completion of the project.

III. Mix of diseases- Highest value topics to the Internal Medicine learner have been bolded

a. Basic approach to:
   - **i. Acute abdominal pain**
   - **ii. Chronic abdominal pain**
   - iii. Common esophageal disorders: **dysphagia**, odynophagia, globus sensation, **heartburn**
   - iv. Dyspepsia
   - **v. Nausea and Vomiting**
   - **vi. Diarrhea**
   - **vii. Intestinal gas**
   - **viii. Fecal incontinence**
   - **ix. Constipation**
   - **x. Gastrointestinal bleeding**
   - xi. Jaundice

b. Nutrition in Gastroenterology
   - **i. The malnourished patient**
   - ii. Nutrition in gastrointestinal disease
   - **iii. Obesity**
   - iv. Food allergies

c. Topics involving multiple organs
   - i. Diverticular diseases
   - ii. Abdominal hernias and gastric volvulus
   - iii. Foreign bodies and gastric bezoars
   - iv. Caustic injury to the upper gastrointestinal tract
   - **v. Abdominal abscesses and fistulae**
   - vi. Eosinophilic disorders of the gastrointestinal tract
   - vii. Protein losing gastroenteropathy
   - viii. Gastrointestinal lymphomas

    ix. **Gastrointestinal stromal tumors**
    x. **Carcinoid tumors**
    xi. Endocrine tumors of the pancreas and gastrointestinal tract
    xii. Gastrointestinal consequences of HIV infection
    xiii. Gastrointestinal and hepatic complications of solid organ and hematopoietic stem cell transplantation
    xiv. Vascular lesions of the gastrointestinal tract
    xv. Surgical peritonitis and other diseases of the peritoneum, mesentery, omentum and diaphragm
    xvi. **Gastrointestinal and hepatic disorders in the pregnant patient**
    xvii. Radiation injury to the gastrointestinal tract
    xviii. Complications of gastrointestinal endoscopy

d. Esophagus
    i. **Achalasia**
    ii. Hypermotility disorders of the distal esophagus
    iii. Esophageal hypomotility disorders
    iv. **Gastroesophageal reflux disease and its complications**
    v. Esophageal disorders caused by medications, trauma and infection
    vi. Tumors of the esophagus

e. Stomach and duodenum
    i. **Gastric motor disorders**
    ii. **Helicobacter pylori**
    iii. Gastritis and gastropathies
    iv. **Peptic ulcer disease**
    v. Tumors of the stomach

f. Pancreas
    i. **Acute pancreatitis**
    ii. **Chronic pancreatitis**
    iii. **Pancreatic cancer, cystic pancreatic lesions, and other non-endocrine pancreatic tumors**

g. Biliary tract
    i. Congenital abnormalities of the biliary tract
    ii. Gallbladder dyskinesia
    iii. Sphincter of Oddi dysfunction
    iv. Disorders of the enterohepatic circulation
    v. **Gallstone disease**
    vi. Acalculous cholecystitis, cholesterolosis, adenomyomatosis, and polyps of the gallbladder
    vii. Sclerosing cholangitis and recurrent pyogenic cholangitis
    viii. **Tumors of the gallbladder, bile ducts and ampulla**
    ix. **Endoscopic and radiologic treatment of biliary disease**

h. Liver
    i. **Liver chemistry and function tests**
    ii. Hemochromatosis
    iii. Wilson disease
    iv. Other inherited metabolic disorders of the liver

v. Hepatitis A
vi. Hepatitis B and D
vii. Hepatitis C- with emphasis on emerging treatment strategies
viii. Hepatitis E
ix. Hepatitis caused by other viral agents
x. Bacterial, parasitic, and fungal infections of the liver, including liver abscesses
xi. Vascular diseases of the liver
xii. Alcoholic liver disease
xiii. Non-alcoholic liver disease
xiv. Liver disease caused by drugs
xv. Liver disease caused by anesthetics, toxins and herbal preparations
xvi. Autoimmune hepatitis
xvii. Primary biliary cirrhosis
xviii. Portal hypertension and gastrointestinal bleeding
xix. Ascites and spontaneous bacterial peritonitis
xx. Hepatic encephalopathy
xxi. Complications of liver disease, including hepato-pulmonary and hepato-renal syndromes
xxii. Acute liver failure
xxiii. Hepatic tumors and cysts
xxiv. Liver transplantation

i. Small and large intestine
i. Abnormalities in normal embryologic development
ii. Clinical consequences of disordered small intestinal motility
iii. Disorders of colonic motility
iv. Changes in water and electrolyte transport in colonic disease
v. Bariatric surgery: effect on digestion and absorption
vi. Maldigestion and malabsorption
vii. Enteric bacterial overgrowth
viii. Short bowel syndrome
ix. Celiac and refractory sprue
x. Tropical malabsorption and tropical diarrhea
xi. Whipple's disease
xii. Infectious enteritis
xiii. Antibiotic-associated diarrhea
xiv. Clostridium difficile colitis
xv. Intestinal protozoa
xvi. Intestinal worms
xvii. Crohn's disease
xviii. Ulcerative colitis
xix. Ileostomy, colostomy and pouches
xx. Intestinal ischemia
xxi. Ulcers of the small and large intestines
xxii. Appendicitis
xxiii. Colonic Diverticular disease

xxiv. **Irritable bowel syndrome**
xxv. Intestinal obstruction and ileus
xxvi. Acute and chronic pseudo-obstruction
xxvii. Small intestinal neoplasms
xxviii. Colonic polyps and polyposis syndromes
xxix. Malignant neoplasms of the large intestines
xxx. Diseases of the anorectum
xxxi. Miscellaneous diseases of the colon and rectum

j. Psychosocial factors
   i. A biopsychosocial understanding of gastrointestinal illness and disease
   ii. Palliative medicine in patients with advanced gastrointestinal and hepatic disease
   iii. Complementary and alternative medicine
   iv. The effects of chronic pain related to gastrointestinal disease
      1.
      2.

IV. Method of evaluation-Evaluations is based on the six core competencies. All team members are expected to complete formal evaluations at the end of each rotation using the web-based MedHub evaluation software. Residents at all levels of training are evaluated by their attending and peers.

1. Patient Care
2. Medical Knowledge
3. Professionalism
4. Interpersonal and Communication skills
5. Practice based learning
6. Systems based practice

Reviewed/Revised by: Dr. Sekou R. Rawlins

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