EDUCATIONAL GOALS AND OBJECTIVES BY COMPETENCY

**Competency I: Clinical Science-Medical Knowledge**

**Goal:** Fellows will demonstrate knowledge about established and evolving medicine that is critical to the practice of gastroenterology.

**Knowledge** - A comprehensive well-grounded knowledge base in general GI/Hepatology, examples include:

a) Gastrointestinal bleeding – upper, lower, occult, associated with liver disease
b) Complicated inflammatory bowel disease – Crohn’s disease, ulcerative colitis, proctitis, extraintestinal manifestations, perianal disease (including the use of new immunomodulating therapies)
c) Acute and chronic diverticulitis
d) Mesenteric vascular events – colonic ischemia, acute mesenteric infarction, chronic mesenteric ischemia
e) Gastrointestinal infections
t) Pancreaticeco-biliary disease including cholelithiasis, acute and chronic pancreatitis, cancer of the pancreas and biliary system, bile duct obstruction, islet cell tumors of the pancreas,
g) Acid-peptic disease – GERD, PUD, gastrinoma
h) Motility disturbances – irritable bowel syndrome, functional dyspepsia, achalasia, esophageal spasm, fecal incontinence, constipation
i) Liver disease – acute and chronic, fulminate hepatic failure, assessment for liver transplantation, chronic viral hepatitis, liver cancer
j) Screening and surveillance for (in) – Barrett’s esophagus, colorectal cancer, ulcerative colitis, cirrhosis

These disorders will be understood with an emphasis on the following: epidemiology, the etiology of the disorder (including contributing medical, genetic, and social factors), pathophysiology of the disorder, diagnostic criteria and cost-effective appropriate evaluation, interpretation of histology or radiology related to the disease, clinical course and prognosis, cost-effective treatment strategies, and theoretical basis for clinical intervention.

**Skills:**

Fellows will demonstrate the ability to:

1. Perform effective consultation and (when needed) continuing care for patients presenting with gastrointestinal and liver disorders.
2. Perform the following:
   - Routine diagnostic and therapeutic upper and lower intestinal gastrointestinal endoscopy – including: control of acute GI bleeding (variceal and non-variceal), biopsy, polypectomy, dilation of stenosis, foreign body removal,
   - Diagnostic and therapeutic ERCP (by time of graduation) for routine diagnostic and therapeutic purposes (e.g. stone removal)
   - Percutaneous endoscopic gastrostomy
Paracentesis – diagnostic and therapeutic
Percutaneous liver biopsy including the use of the sonosite ultrasound methodology
3. Independently understand the role in management and interpret:
   a. GI and Liver Pathology
   b. Laboratory data
   c. Motility studies – Esophageal, anorectal
   d. Endoscopic ultrasound
   e. Imaging studies of the GI tract (video esophagogram, UGI series, barium enema, small bowel follow through, CT of abdomen, MRI of abdomen including MRCP, mesenteric angiography, radionuclide bleeding studies)
   f. Interventional radiography (TIPS, angiography to stop bleeding,)
   g. Nutritional therapies and counseling

Attitudes:

Fellows will maintain and apply an investigatory and analytic thinking approach to all clinical and educational and scholarly situations demonstrated by:
   1) traditional Socratic interaction with attendings during the course of inpatient and outpatient management of patients
   2) faculty review of interpretation/assessment sections of written/dictated consultation notes or letters to referring physicians
   3) the completion for score of the DDSEP learning module by the end of the fellowship.

Competency II. Patient Care

Goal: Fellows will be able to provide patient care that is compassionate, appropriate, and effective for the treatment of gastrointestinal problems.

Knowledge - Fellows will demonstrate knowledge of:
   1. Available treatment methods for the major clinical gastrointestinal disorders (above) and the evidence which supports their use.
   2. Preventive interventions used in gastroenterology.
   3. The effects of cultural background, ethnicity, and poverty on the presentation, diagnosis, and care of patients
   4. Their role as the patient’s advocate, understanding potentials for conflict of interest (e.g. industry)

Skills: Fellows will demonstrate the ability:
   1. To perform and document a comprehensive history and examination to include as appropriate: chief complaint, history of present illness, past medical history, family history, social history, review of systems, complete physical examination.
   2. To demonstrate an understanding of the impact of ethnicity, cultural background, social standing on the presentation and management of patients
   3. To create a full differential diagnosis related to the patient’s complaints, and to create
an evidence based diagnostic management protocol related to that differential diagnosis, with particular emphasis on the utility of endoscopic procedures.
4. To evaluate, assess, and recommend a cost-effective treatment plan for patients.
5. To be recognized as a knowledgeable, compassionate, and effective member of the endoscopy team.
6. To be thought of as a knowledgeable and thoughtful consultant by referring physicians.
7. To demonstrate an understanding of the impact of disease and therapeutic options on the patient's overall well-being and family.

**Attitudes**

Fellows will:
1. Be strong advocates for the patient's best interest.
2. Be courteous and collegial with all referring physicians, emphasizing clear communication of recommendations.
3. Strive to provide quality care within attainable resources, recognizing the importance of all members of the care team who are part of that care process.
4. Be sensitive to cultural, and social differences.
5. Be sensitive to confidentiality and content issues.

**Demonstrated by:**
1) Direct observation of clinical care in the inpatient and outpatient setting with focused case discussions with faculty;
2) evaluation of written communication to referring physicians;
3) in depth case presentations and reviews at conferences;
4) self-initiated independent learning;
5) independent evaluations by non-physician professional and clerical staff

**Competency III. Interpersonal and Communication Skills**

**Goal:** Fellows will demonstrate the knowledge, skills, and attitudes necessary to develop and maintain appropriate interpersonal relationships and to communicate effectively with physicians requesting consultations, patients, families, non-physician personnel, colleagues and the public. Additionally, fellows will be expected to develop the necessary abilities to be a team leader for residents/students.

Knowledge: Fellows will demonstrate knowledge of effective use of oral, written, visual communication techniques

**Skills:**
Fellows will be able to:
1. Demonstrate the ability to obtain, interpret, and evaluate consultations from other medical specialties. This shall include:
   a) knowing when to solicit consultation and having sensitivity to assess need for consultation
   b) discussing consultation findings with requesting physicians, patients and their families
   c) evaluating the consultation findings in the overall context of the patient
and their family

2. Serve as an effective consultant to other medical specialists and community agencies. This shall include:
   a. communicating effectively with the requesting party to refine their consultation question
   b. maintain the sanctity of the primary provider role
   c. communicate clear and specific recommendations
   d. respect the knowledge and expertise of the requesting party

3. Demonstrate the ability to communicate effectively with physicians, patients and their families by:
   a) gearing all communication to the educational intellectual levels of physicians, patients and their families
   b) providing explanations of gastrointestinal disorders and treatment (both verbally and in written form)
   c) respecting all cultural, ethnic, and economic backgrounds (including recognizing the need for effective interpreters when needed)
   d) developing and enhancing rapport and a working alliance with physicians, patients and families.

4. Maintain medical records and written prescriptions that are legible and up-to-date. These records must capture essential information

**Attitudes:**
Fellows will:
1) maintain an attitude of respect for others, including those with differing points of view,
2) exhibit culturally sensitive, professional, ethically sound behavior in all patient and professional interactions,
3) maintain an attitude of interdisciplinary collaboration
4) maintain a polite and courteous attitude at all times.
5) Demonstrated by:
   a) chart documentation;
   b) direct observation;
   c) teaching others;
   d) professional relationships;
   e) formal presentations;
   f) independent learning;
   g) seeking feedback on communication and performance

**Competency IV. Practice Based Learning and Improvement**

Fellows will:
1) demonstrate the knowledge, skills, and attitudes necessary to initiate self-directed and independent learning
2) keep abreast of current information and practices relevant to gastroenterology
3) be able to monitor, evaluate, and evolve the outcomes of their practice of clinical gastroenterology after they leave this program.

Knowledge:
Fellows will demonstrate knowledge of:
1. Research methodology, including critical assessment of professional journal articles. 
2. Principles of outcomes research, and evidenced-based medicine related to gastroenterology in general, and in specific cases.
3. Awareness of available information technologies and the ability to access them.

Skills:
Fellows will be able to:
1. Demonstrate the ability to obtain, analyze, and evaluate the most current information from the broad body of literature applicable to our specialty that can assist in the quality care of patients. This shall include, but not be limited to:
   a) The fellow shall demonstrate an ability to critically evaluate the relevant medical literature, by assessing the applicability of research findings to patients in relation to their socio-demographic, cultural, and other clinical characteristics.
   b) Evaluate caseload and practice experience in a systematic manner. This may include: case-based learning, review of patient records and outcomes, and obtaining appropriate supervision and consultation

Attitudes:
Fellows will:
1. Maintain an attitude of inquiry and scholarship, recognizing the need for lifelong learning.
2. Maintain openness and flexibility in treatment approaches with patients, assimilating new knowledge in patient care practices.
3. Impart knowledge to peers, colleagues, and patients in an understandable manner.

Demonstrated by:
1) self-directed inquiry guiding clinical care of patients;
2) formal presentations at journal club which include literature review, and teaching others;
3) case based focused discussion with attending; and
4) active participation in rigorous practice evaluation during morbidity and mortality conference.

Competency V. Professionalism and Ethical Behavior

Goal: Fellows will demonstrate the knowledge, skills, and attitudes necessary to practice
professionally responsible, ethical and compassionate care in gastroenterology.

Knowledge:
Fellows will demonstrate knowledge of:
1. The impact of gender, culture, religion, socioeconomic factors, family structures, and social systems on issues pertaining to gastroenterology.
2. The different roles (consultant, ongoing collaborative care, providing principle care on an ongoing basis) a gastroenterologist might fulfill in different settings.
3. Legal and ethical issues, including: risk management; appropriate uses of percutaneous endoscopic gastrostomy (PEG); informed consent; conflict of interest (interaction with industry); and maintenance of patient confidentiality and autonomy.
4. Ethical issues important in the conducting of research with humans and animals, including the role of the institutional review board for the protection of patients (COMIRB).

Skills:
Fellows will be able to:
1. Respond to communications from patients and health professionals in an appropriate and timely manner. If unavailable, the physician shall establish and communicate back-up arrangements.
2. Use medical records for appropriate documentation of the course of illness and its treatment, including the rapid completion of all medical records so that they can be forwarded to referring physicians.
3. Demonstrate ethical behavior, integrity, honesty, professional conduct, compassion and confidentiality in the delivery of patient care, including obtaining informed consent/assent, and declaring conflict of interest.
4. Demonstrate respect for patients and colleagues as individuals, by showing sensitivity to their age, culture, disabilities, ethnicity, gender, socioeconomic background, religious beliefs, political affiliations, and sexual orientation.
5. Demonstrate appreciation of end-of-life care and issues regarding provision or withholding of care.
6. Acknowledge responsibility for his or her decisions and demonstrate commitment to the review and remediation of his or her professional conduct.
7. Promote the highest standards of medical healthcare to the public and participate in the review of the professional conduct of his or her colleagues.

Attitudes:
Fellows will:
1. Maintain an attitude of inquiry and scholarship, recognizing the need for life long learning.
2. Maintain openness and flexibility in treatment approaches with patients, assimilating new knowledge in patient care practices.

Demonstrated by:
1) being up to date on all medical records documentation;
2) completing the on-line tutorials on human subjects and patient confidentiality;
3) attendance and active participation at core curriculum lectures directed at ethical
and professional topics;
4) 360° evaluation of professional behaviors by professional and non-professional staff.

Competency VI. Systems Based Practice

Goal: Fellows will demonstrate the knowledge, skills, and attitudes necessary to manage effectively in multiple, diverse, complex systems of care to provide effective treatment, consultation and referrals for patients.

Knowledge:
Fellows will demonstrate knowledge of:
1. Ability to identify the unique/specific characteristics of medical setting for this rotation.
2. Basic concepts of theory, how the role of the Gastroenterology fellow on the Inpatient Consult Service relates to the Hospital as a whole, being a small unit of a much larger system, where all entities work together.
3. How fellows and residents' patient care practices and related actions impact component units of health care delivery.
4. Systems-based approaches for controlling health care costs and allocating resources, specifically the use of endoscopy and other related GI procedures
5. Examination of errors in practice and initiating preventive measures and improvements.

Skills:
Fellows will be able to:
1. Advocate for patients within a variety of systems.
2. Navigate the maze of insurance and managed care companies to meet patient needs.
3. Strive to practice cost-effective health care and resource allocation that does not compromise the quality of care.
4. Maintain a system for examining errors in practice and initiating improvements to eliminate or reduce errors

Attitudes:
Fellows will:
1. Maintain an attitude of interdisciplinary collaboration, advocacy and cooperation.
2. Maintain flexibility in adapting to the needs and expectations of different settings and systems.
3. Maintain the patient's best interest as the top priority.

Demonstrated by:
Adaptation to, constructive learning of, and effective incorporation into patient care of, the variety of electronic medical records and procedure documentation systems at the core hospital facilities,
use of these systems to monitor and improve own practice (e.g. procedure volume, complications).