### Entrustable Professional Activities for Gastroenterology Fellowship Training and

### Accompanying Comprehensive Toolbox

#### OWN (Oversight Working Network), Societies represented (in alpha order):

AASLDAmerican Association for the Study of Liver DiseasesACGAmerican College of GastroenterologyAGAAmerican Gastroenterological AssociationANMSAmerican Neurogastroenterology and Motility SocietyASGEAmerican Society for Gastrointestinal EndoscopyWith input from:NASPGHAN North American Society for Pediatric Gastroenterology,Hepatology and Nutrition and the GI Program Directors Caucus

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#### Entrustable Professional Activities for Gastroenterology Fellowship Training

With feedback from our societies, our education and training committees, and members of the GI/Hepatology community, OWN created a list of 13 EPA's that constitute the core of our profession as follows:

- 1. Manage common acid peptic related problems.
- 2. Manage common functional gastrointestinal disorders
- 3. Manage common gastrointestinal motility disorders
- 4. Manage liver diseases
- 5. Manage complications of cirrhosis
- 6. Perform upper and lower endoscopic evaluation of the luminal gastrointestinal tract for screening, diagnosis, and intervention
- 7. Perform endoscopic procedures for the evaluation and management of gastrointestinal bleeding
- 8. Manage biliary disorders
- 9. Manage pancreatic diseases
- 10. Manage common GI infections in non-immunosuppressed and immunocompromised populations
- 11. Identify and manage patients with noninfectious GI luminal disease
- 12. Manage common GI and liver malignancies, and associated extraintestinal cancers
- 13. Assess nutritional status and develop and implement nutritional therapies in health and disease

Each EPA is accompanied by a comprehensive toolbox that includes:

- 1. A detailed description
- 2. Specific behavioral objectives in:
  - a. Knowledge
  - b. Skills
  - c. Attitudes
- 3. A checklist of the ACGME competencies applicable to the EPA
- 4. The specific subcompetencies that are needed to achieve mastery of the EPA
- 5. A dedicated space for the Program Director to identify the stage of training at which supervision level 4 is expected to be reached
- 6. Potential information sources/assessments that can be used to gauge progress
- 7. Identification of who will provide the basis for the formal entrustment decision by the Clinical Competency Committee (CCC)
- 8. Implications of entrustment for the trainee

### 1. EPA Title: Manage common acid peptic related problems

| erosive foregut disease<br>and complications of t<br>should have an in dept<br>pathophysiology and e<br>appropriate history ar<br>investigative tests incl | Acid peptic diseases include peptic ulcer disease, gastroesophageal reflux, other<br>es where gastric acid contributes to the pathogenesis, acid hypersecretory states,<br>hese processes. At the completion of fellowship training, the GI consultant<br>th understanding of the physiology of gastric acid secretion, and the<br>etiopathogenesis of acid peptic diseases. The consultant should be able to extract<br>ad physical examination findings to identify acid peptic diseases, apply<br>uding endoscopy to diagnose and treat these diseases and their complications,<br>riate management plans to manage these disorders and prevent complications.  |
|--|--|
|  | Descrite a set of the side of the second set of the set of the second set of the sec |
| Knowledge  | <ul> <li>Recognize anatomy and physiology of the esophagus, stomach and duodenum, and pathophysiology of gastric acid secretion in health and disease, including hypersecretory states</li> <li>Describe the natural history, epidemiology and complications of acid-peptic disorders</li> <li>Develop understanding of molecular and genetic basis for certain complications, including Barrett's esophagus, gastric cancer, gastrinoma."</li> <li>Associate the role of Helicobacter pylori infection and NSAID use in the pathophysiology of acid-peptic disorders, including detailed understanding of epidemiology, pathophysiology, diagnosis and management of Helicobacter pylori infection</li> <li>Recall the pharmacology, efficacy, appropriate use, routes of administration, and appropriate use of medications for acid-peptic diseases, including antacids, histamine-2 receptor antagonists, proton pump inhibitors, mucosal protective agents, prostaglandin analogues, prokinetic agents, and antibiotics</li> </ul>  |
|  | <ul> <li>Recognize the pathophysiology of gastroesophageal reflux disease, presentation, manifestations, investigation including reflux monitoring, complications, appropriate choice of management options, and potential for premalignant conditions including Barrett's esophagus</li> <li>Recall conditions that may mimic or confound the diagnosis of acid peptic disorders, including eosinophilic esophagitis, stress ulcer syndrome, achlorhydria and pernicious anemia, gastric polyps and neoplasia, other esophageal and gastric inflammatory disorders, and elevated gastrin</li> <li>Describe appropriate use of endoscopy and reflux monitoring for diagnosis and therapy of acid peptic diseases and their complications; understand clinical indications, cost effectiveness and complications; make appropriate screening and surveillance recommendations</li> <li>Recognize situations where surgical management is indicated in acid peptic diseases, both for short term and long term management of these disorders</li> <li>Obtain a comprehensive history pertaining to acid peptic disorders</li> </ul>  |
| <ul> <li>Skills</li> <li>Perform a physical examination that assesses for manifestation</li> </ul>   |  |

|  | <ul> <li>particularly, complications of acid peptic disorde</li> <li>Order appropriate laboratory studies, radiologic<br/>the evaluation of acid peptic disorders and their of</li> <li>Counsel patients about the role of pharmacologic<br/>approaches to treatment of acid related disease</li> <li>Demonstrate adequate skills to perform diagnost<br/>endoscopy for diagnosis and management of acid<br/>complications</li> <li>Integrate nonpharmacologic management, appro<br/>endoscopic management and surgical management<br/>and H pylori infection</li> </ul> | studies and endoscopy in<br>complications<br>cal and non-pharmacological<br>ic and therapeutic<br>peptic disorders and their<br>priate use of medications, |
|--|--|--|
| Attitudes• Apply ethical principles in appropriate use of diagnostic and therapeutic<br>approachesAttitudes• Team with pharmacists, surgeons, and other disciplines including ear-nose-<br>throat and pulmonary medicine in management of acid peptic disorders• Demonstrate ethnic, gender, cultural and socio-economic sensitivity in<br>choice of management options for acid peptic disorders  |  |  |
| Chock ACCME comp   | etencies applicable to EPA   |  |
|  | t Care (PC)  |  |
|  | al Knowledge (MK)  |  |
|  | as-Based Practice (SBP)  |  |
|  | e-Based Learning & Improvement (PBLI)  |  |
|  | sionalism (PROF)   |  |
|  | ersonal & Communication Skills (ICS)   |  |
| inter pe   |  |  |
| What subcompetend  | cies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage  |
| Patient Care (PC):   |  |  |
| (PC3)  | with progressive responsibility and independence.  |  |
| Requests and prov  | vides consultative care. (PC5)   |  |
| Medical Knowledge  | (MK):  |  |
| Knowledge of diag  | gnostic testing and procedures. (MK2)  |  |
| •  |  |  |
| <ul> <li>consultants, nursi personnel). (SBP1</li> <li>Identifies forces the second se</li></ul> | within an interprofessional team (e.g., with peers, ng, ancillary professionals, and other support   |  |
|  | ning & Improvement (PBLI):   |  |

| •   |                             |
|---|-----------------------------|
| Professionalism (PROF):   |                             |
| • Has professional and respectful interactions with patients, caregivers      |                             |
| and members of the interprofessional team (e.g. peers, consultants,           |                             |
| nursing, ancillary professionals, and support personnel). (PROF1)             |                             |
| • Responds to each patient's unique characteristics and needs. (PROF3)        |                             |
| Interpersonal & Communication Skills (ICS):                                   |                             |
| • Communicates effectively in interprofessional teams (e.g., with peers,      |                             |
| consultants, nursing, ancillary professionals, and other support              |                             |
| personnel). (ICS2)  |                             |
| • Appropriate utilization and completion of health records. (ICS3)            |                             |
|   |                             |
| Stage of training at which supervision level 4 is expected to be              |                             |
| reached:  |                             |
|   |                             |
| Potential information sources/assessments to gauge progress                   |                             |
| Chart stimulated recall   |                             |
| Chart audits  |                             |
| Direct observations   |                             |
| Standardized patient  |                             |
| In-training examination   |                             |
| 360 Global Rating   |                             |
| Patient Survey  |                             |
| Simulation  |                             |
| Portfolios  |                             |
| Other   |                             |
|   |                             |
| Basis for formal entrustment decision by the Clinical Competency Com          | mittee:                     |
| Program director  |                             |
| Faculty   |                             |
| Other   |                             |
|   |                             |
| Implications of entrustment for the trainee: Entrustment would allow the      | e GI consultant to perform  |
| independent consults on patients with acid peptic disease and its complicat   | ions in both the inpatient  |
| and outpatient setting, and independently develop and implement clinically    | appropriate management      |
| approaches.   | -                           |
|   |                             |
| Entrustment indicates that the fellow is ready for unsupervised practice of t | this activity in accordance |

with program policy.

Name of Fellow:

#### 2. EPA Title: Manage common functional gastrointestinal disorders

**Detailed Description:** Functional gastrointestinal disorders are among the most common indications for gastroenterological consultation by practicing gastroenterologists. At the completion of fellowship training, the GI consultant should be familiar with the concepts of visceral sensation, brain-gut axis, triggering of functional symptoms, and use of pharmacologic and non-pharmacologic approaches for control and management of functional symptoms. The consultant needs knowledge of judicious and limited use of diagnostic studies in functional gastrointestinal disorders, understand the impact of affective, organic and psychological stressors, and develop a compassionate and detail oriented approach to management of functional gastrointestinal disorders.

| Knowledge | <ul> <li>Describe anatomic and physiological basis of brain and gut interactions, including visceral afferent signaling, sensitization and neurobiology of central pain modulation and peripheral pain signaling.</li> <li>Demonstrate the natural history, presentation, epidemiology and clinical course of common functional gastrointestinal diseases, including irritable bowel syndrome, functional dyspepsia, functional vomiting, noncardiac chest pain, functional heartburn, cyclic vomiting syndrome, narcotic bowel syndrome and chronic unexplained abdominal pain</li> <li>Recall the pharmacology, efficacy, routes of administration, and appropriate use of medications functional gastrointestinal disorders, including antidepressants, typical and atypical analgesic agents, psychotropic agents, laxatives, antidiarrheal agents, antiemetics</li> <li>Recall conditions that may mimic or confound the diagnosis of functional gastrointestinal disorders, including the concept of alarm symptoms that would warrant further investigation, and overlap functional syndromes interfacing with organic disorders (e.g. noncardiac chest pain and GERD, IBD and IBS)</li> <li>Illustrate the role of psychiatric and affective disorders in functional disease; describe appropriate use of diagnostic studies for evaluation of confounding organic diagnoses, triggers of functional syndromes</li> <li>Describe the utility of general measures and nonpharmacologic intervention for functional gastrointestinal disorders, including establishing a therapeutic patient-physician relationship, cognitive and behavioral therapy, dietary therapy, hypnosis, acupuncture and biofeedback</li> </ul> |
|-----------|--|
| Skills    | <ul> <li>Obtain a comprehensive history pertaining to functional gastrointestinal disorders</li> <li>Perform directed physical examination that assesses for confounding organic diagnoses and alarm symptoms warranting further investigation; perform a digital rectal examination as part of the assessment of every patient (other than those presenting with dysphagia), and particularly in patients with defecatory disorders</li> </ul>  |

|   | <ul> <li>Order limited, appropriate laboratory studies, radiologic studies, diagnostic motility studies and endoscopy for exclusion of organic disorders when warranted</li> <li>Integrate pharmacologic management, nonpharmacologic management, complementary and alternative medicine in effective management of functional gastrointestinal disorders</li> <li>Develop an understanding of the role of affective disorders, psychological extra and alternative medicine in effective disorders.</li> </ul>   |        |   |
|---|---|--------|---|
| Attitudes   | <ul> <li>state and abuse history in the presentation of functional gastrointestinal disorders</li> <li>Demonstrate a sensitive, patient and empathetic approach towards patients with chronic functional gastrointestinal symptoms including pain</li> <li>Incorporate a team approach utilizing health psychologists, dieticians, psychiatrists, and physical therapists in providing compassionate care that has sound neuropsychological basis</li> <li>Demonstrate gender, ethnic, cultural and socio-economic sensitivity in choice of management options</li> </ul> |        |   |
| Check ACGMF com   | petencies applicable to EPA   |        |   |
| Patie<br>Medi   | nt Care (PC)<br>cal Knowledge (MK)  |        |   |
| Pract   | ms-Based Practice (SBP)<br>ice-Based Learning & Improvement (PBLI)<br>essionalism (PROF)  |        |   |
|   | personal & Communication Skills (ICS)   |        |   |
| What subcompeter  | ncies are needed to achieve mastery?  |        | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |
| <ul> <li>Patient Care (PC):</li> <li>Manages patient<br/>(PC3)</li> </ul>   | s with progressive responsibility and independ  | lence. |   |
| Requests and pr   | ovides consultative care. (PC5)   |        |   |
|   | al knowledge (MK1)  |        |   |
| <ul> <li>Systems-Based Prate</li> <li>Works effectively<br/>consultants, nurse<br/>personnel). (SBF</li> <li>Identifies forces</li> </ul> | y within an interprofessional team (e.g., with pessing, ancillary professionals, and other support  |        |   |
| Monitors practic  | rning & Improvement (PBLI):<br>we with a goal for improvement. (PBLI1)<br>oves via feedback. (PBLI3)  |        |   |

| Professionalism (PROF):   |  |  |  |
|---|--|--|--|
| Has professional and respectful interactions with patients, caregivers  |  |  |  |
| and members of the interprofessional team (e.g. peers, consultants,   |  |  |  |
| nursing, ancillary professionals, and support personnel). (PROF1)   |  |  |  |
| Responds to each patient's unique characteristics and needs. (PROF3)  |  |  |  |
| Interpersonal & Communication Skills (ICS):   |  |  |  |
| • Communicates effectively in interprofessional teams (e.g., with peers,  |  |  |  |
| consultants, nursing, ancillary professionals, and other support  |  |  |  |
| personnel). (ICS2)  |  |  |  |
| Appropriate utilization and completion of health records. (ICS3)  |  |  |  |
|   |  |  |  |
| Stage of training at which supervision level 4 is expected to be  |  |  |  |
| reached:  |  |  |  |
|   |  |  |  |
| Potential information sources/assessments to gauge progress   |  |  |  |
| Chart stimulated recall   |  |  |  |
| Chart audits  |  |  |  |
| Direct observations   |  |  |  |
| Standardized patient  |  |  |  |
| In-training examination   |  |  |  |
| 360 Global Rating   |  |  |  |
| Patient Survey  |  |  |  |
| Simulation  |  |  |  |
| Portfolios  |  |  |  |
| Other   |  |  |  |
|   |  |  |  |
| Basis for formal entrustment decision by the Clinical Competency Committee:   |  |  |  |
| Program director  |  |  |  |
| Faculty   |  |  |  |
| Other   |  |  |  |
| In the second second for the trainers. Full structure that the Character black to second se |  |  |  |
| <b>Implications of entrustment for the trainee:</b> Entrustment would allow the GI consultant to recognize  |  |  |  |
| functional presentations distinct from and within organic disorders, direct appropriate diagnostic  |  |  |  |
| testing, and implement effective therapy. Once entrusted, the consultant can independently extract  |  |  |  |
| sensitive psychological and affective background history, and incorporate psychological elements into an effective multidisciplinary management plan.   |  |  |  |
| an encenve multiuscipiniary management plan.  |  |  |  |
| Entrustment indicates that the fellow is ready for unsupervised practice of this activity in accordance   |  |  |  |

with program policy.

#### 3. EPA Title: Manage common gastrointestinal motility disorders

| including dysphagia,<br>fellowship training th<br>gastrointestinal muse<br>The consultant needs<br>utilization of motility | <b>on:</b> Motility disorders interface with many common GI presenting symptoms, chest pain, nausea, vomiting, constipation and diarrhea. At the completion of he GI consultant should develop an understanding of the physiology of the cle function, its neural regulation, and common disorders arising from dysfunction. s knowledge of the indications, and limitations of diagnostic motility studies, and <i>v</i> studies in diagnosis and management of motility disorders. Additional training is for expertise in detailed interpretation of motility studies.   |
|--|---|
| Knowledge  | <ul> <li>Recognize anatomy and physiology of gastrointestinal contractile apparatus, gastrointestinal sensation, and its neurohormonal regulation including deglutition, gastric emptying, small bowel and colonic motility and transit, sphincter function and dysfunction (including sphincter of Oddi).</li> <li>Describe the natural history, epidemiology, pathophysiology, and complications of common motility disorders, including achalasia, aperistalsis, gastroparesis, intestinal pseudo-obstruction, colonic inertia, pelvic floor dyssynergia and fecal incontinence</li> <li>Develop understanding of molecular and genetic basis for certain motility disorders, including achalasia and Hirschsprung disease</li> <li>Recall the pharmacology, efficacy, routes of administration, and appropriate use of medications for motility disorders, including prokinetic agents, acid suppressive agents, laxatives, antidiarrheal agents</li> <li>Recall conditions that may mimic or confound the diagnosis of motility disorders (including organic obstructive syndromes, gastroesophageal reflux disease, celiac disease, inflammatory bowel disease, common anorectal disorders (including anal fissures, fistula and hemorrhoids)</li> <li>Describe the diagnostic motility studies for diagnosis and in directing therapy of motility disorders and their complications; understand clinical indications, cost effectiveness and complications</li> <li>Recognize situations where invasive intervention and surgical management is indicated in motility disorders, both for short term and long term management of these disorders</li> <li>Describe the utility of nonpharmacologic intervention for motility disorders, including cognitive and behavioral therapy, dietary therapy and biofeedback</li> </ul> |
| Skills   | <ul> <li>Obtain a comprehensive history pertaining to motility disorders</li> <li>Perform a physical examination that assesses for manifestations and particularly, complications of motility disorders; perform a digital rectal examination as part of the assessment of every patient (other than those presenting with dysphagia), and particularly in patients with defecatory disorders</li> <li>Order appropriate laboratory studies, radiologic studies, diagnostic motility studies and endoscopy in the evaluation of motility disorders and their</li> </ul>   |

| Attitudes       | <ul> <li>complications; apply results from these studies in the management of<br/>motility disorders</li> <li>Integrate nonpharmacologic management, appropriate use of medications,<br/>endoscopic and surgical management of common motility disorders</li> <li>Develop patience, compassion and ethical principles in managing chronic<br/>and disabling symptoms in motility disorders</li> <li>Team with pharmacists, surgeons, speech pathologists, health psychologists<br/>and motility nurses in management of GI motility disorders</li> <li>Demonstrate gender, ethnic, cultural and socio-economic sensitivity in</li> </ul> |   |
|-----------------|--|---|
|                 | choice of management options   |   |
| Chock ACCME c   | ompetencies applicable to EPA  |   |
|                 | atient Care (PC)   |   |
|                 | edical Knowledge (MK)  |   |
|                 | /stems-Based Practice (SBP)  |   |
|                 | ractice-Based Learning & Improvement (PBLI)  |   |
|                 | rofessionalism (PROF)  |   |
|                 | terpersonal & Communication Skills (ICS)   |   |
|                 |  |   |
| What subcomp    | etencies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |
| (PC3)           | C):<br>ents with progressive responsibility and independence.<br>I provides consultative care. (PC5)   |   |
| Medical Knowle  | edge (MK):   |   |
|                 | nical knowledge (MK1)  |   |
| Knowledge o     | f diagnostic testing and procedures. (MK2)   |   |
| Systems-Based   | Practice (SBP):  |   |
|                 | ively within an interprofessional team (e.g., with peers,<br>nursing, ancillary professionals, and other support<br>SBP1)  |   |
|                 | ces that impact the cost of health care, and advocates for scost-effective care. (SBP3)  |   |
| Practice-Based  | Learning & Improvement (PBLI):   |   |
|                 | ctice with a goal for improvement. (PBLI1)   |   |
| • Learns and in | nproves via feedback. (PBLI3)  |   |
| and members     | n (PROF):<br>onal and respectful interactions with patients, caregivers<br>s of the interprofessional team (e.g. peers, consultants,<br>llary professionals, and support personnel). (PROF1)<br>each patient's unique characteristics and needs. (PROF3)   |   |

| Interpersonal & Communication Skills (ICS):   |      |  |
|---|------|--|
| •   |      |  |
| Communicates effectively in interprofessional teams (e.g., with peers,                              |      |  |
| consultants, nursing, ancillary professionals, and other support                                    |      |  |
| personnel). (ICS2)  |      |  |
| Appropriate utilization and completion of health records. (ICS3)                                    |      |  |
|   |      |  |
| Stage of training at which supervision level 4 is expected to be                                    |      |  |
| reached:  |      |  |
|   |      |  |
| Potential information sources/assessments to gauge progress   |      |  |
| Chart stimulated recall   |      |  |
| Chart audits  |      |  |
| Direct observations   |      |  |
| Standardized patient  |      |  |
| In-training examination   |      |  |
| 360 Global Rating   |      |  |
| Patient Survey  |      |  |
| Simulation  |      |  |
| Portfolios  |      |  |
| Other   |      |  |
|   |      |  |
| Basis for formal entrustment decision by the Clinical Competency Committee:                         |      |  |
| Program director  |      |  |
| Faculty   |      |  |
| Other   |      |  |
|   |      |  |
| Implications of entrustment for the trainee: Entrustment would allow the GI consultant to relia     | ablv |  |
| recognize situations where common motility disorders are likely in both the inpatient and outpati   |      |  |
| setting, and independently recommend appropriate diagnostic testing. Once entrusted, the consultant |      |  |
| diagnose common motility disorders and recommend appropriate management; recognize motility         |      |  |
| disorders that require further expert opinion.  | -у   |  |
| uisor ders that require fultitier expert opinion.   |      |  |

Entrustment indicates that the fellow is ready for unsupervised practice of this activity in accordance with program policy.

#### 4. EPA Title: Manage liver diseases

**Detailed Description:** Gastroenterologists diagnose and manage the broad spectrum of acute and chronic liver problems encountered in a typical gastroenterology practice. This includes an understanding of liver disease in general, with an ability to recognize, diagnose and treat routinely seen acute and chronic liver diseases. Separate EPAs cover the management of cirrhosis and its complications, nutritional aspects of liver disease and endoscopic management of variceal bleeding.

| Knowledge | <ul> <li>Describe the anatomy, physiology, pharmacology, histology and molecular biology related to the liver</li> <li>Describe the pathophysiological mechanisms of liver injury</li> <li>Interpret abnormal liver chemistries</li> <li>List the indications, contraindications, limitations, complications and techniques of liver biopsy and interpret the results</li> <li>Interpret genetic markers and apply them in the management of liver disease</li> <li>List options for treatment of liver diseases encountered in a typical gastroenterology practice</li> <li>Recognize liver disorders associated with pregnancy</li> <li>Summarize the indications and limitations of liver imaging modalities, and be able to interpret the results of CT, MRI, MRCP, hepatic angiography and ultrasound (including Doppler evaluation of vasculature)</li> </ul>   |
|-----------|---|
| Skills    | <ul> <li>Obtain a relevant history and perform a focused physical examination in patients with acute and chronic liver disease and develop a comprehensive differential diagnosis</li> <li>Order appropriate labs and studies to assess patients with acute and chronic liver disease</li> <li>Counsel patients about lifestyle modifications relevant to liver disease (alcohol, drugs, diet)</li> <li>Diagnose and manage patients with liver diseases encountered in a typical gastroenterology practice including: acute infectious hepatitis, acute liver injury and failure, chronic infectious hepatitis, alcoholic liver disease, nonalcoholic fatty liver disease, Wilson's disease, primary biliary cirrhosis, primary sclerosing cholangitis, autoimmune hepatitis, hemochromatosis, alpha-1 antitrypsin deficiency, vascular liver disease to a hepatologist</li> <li>Identify patients at risk of complications of liver disease including progression to advanced stages</li> <li>Assess preoperative risk in patients with liver disease</li> <li>Provide efficient, cost-effective consultative care with timely feedback to referring providers</li> </ul> |

| Attitudes  | <ul> <li>Incorporate evolving management guidelines in the care of patients with liver disease</li> <li>Demonstrate cultural and socioeconomic sensitivity to devising individualized management plans</li> <li>Develop an awareness of the stigma related to liver disease, including the stigma associated with alcohol and drug-related causes.</li> </ul> |   |  |
|--|---|---|--|
| Check ACGME c                                      | ompetencies applicable to EPA   |   |  |
|  | atient Care (PC)  |   |  |
|  | ledical Knowledge (MK)  |   |  |
|  | ystems-Based Practice (SBP)   |   |  |
|  | ractice-Based Learning & Improvement (PBLI)   |   |  |
|  | rofessionalism (PROF)   |   |  |
| Ir   | nterpersonal & Communication Skills (ICS)   |   |  |
|  |   |   |  |
|  | etencies are needed to achieve mastery?   | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |  |
| Patient Care (P                                    | -   |   |  |
|  | synthesizes essential and accurate information to define  |   |  |
| -  | s clinical problem(s) (PC1)   |   |  |
| <ul> <li>Develops and<br/>patient (PC2)</li> </ul> | l achieves comprehensive management plan for each   |   |  |
| Medical Knowle                                     |   |   |  |
|  | nical knowledge (MK1)   |   |  |
|  | f diagnostic testing and procedures (MK2)   |   |  |
|  | Practice (SBP):   |   |  |
| •  |   |   |  |
| •  |   |   |  |
| Practice-Based                                     | Learning & Improvement (PBLI):  |   |  |
|  | ictice with a goal for improvement (PBLI1)  |   |  |
|  | nproves at the point of care (PBLI4)  |   |  |
| Professionalism                                    | n (PROF):   |   |  |
| and member<br>nursing, anci                        | onal and respectful interactions with patients, caregivers<br>s of the interprofessional team (e.g. peers, consultants,<br>llary professionals, and support personnel) (PROF1)<br>each patient's unique characteristics and needs (PROF3)   |   |  |
| 2  | & Communication Skills (ICS):   |   |  |
| •  | communication brins (160).  |   |  |
| •  |   |   |  |
|  |   |   |  |
| Stage of trainin                                   | g at which supervision level 4 is expected to be  |   |  |
| reached:   |   |   |  |

| Potential information sources/assessments to gauge progress                                 | 5                                     |  |
|---|---------------------------------------|--|
| Chart stimulated recall   |                                       |  |
| Chart audits  |                                       |  |
| Direct observations   |                                       |  |
| Standardized patient  |                                       |  |
| In-training examination   |                                       |  |
| 360 Global Rating   |                                       |  |
| Patient Survey  |                                       |  |
| Simulation  |                                       |  |
| Portfolios  |                                       |  |
| Other   |                                       |  |
|   |                                       |  |
| Basis for formal entrustment decision by the Clinical Compete                               | ency Committee:                       |  |
| Program director  |                                       |  |
| Faculty   |                                       |  |
| Other   |                                       |  |
|   |                                       |  |
| Implications of entrustment for the trainee: Entrustment allows the fellow to independently |                                       |  |
| perform consultation for patients with acute and chronic liver dise                         | eases in the inpatient and outpatient |  |
| setting.  | - •                                   |  |

### 5. EPA Title: Manage complications of cirrhosis

| encountered in a ty<br>the complications o<br>Gastroenterologists<br>for liver transplant | <b>on:</b> Gastroenterologists diagnose and manage the broad spectrum of liver problems pical gastroenterology practice. This includes an understanding and management of if cirrhosis, including portal hypertension and hepatic encephalopathy. If when to request consultative services and refer patients evaluation. Separate EPAs cover the management of nutritional aspects of the disease and endoscopic management of variceal bleeding.  |  |
|---|---|--|
| Knowledge   | <ul> <li>Recognize the complications of cirrhosis, including portal hypertension<br/>(ascites, spontaneous bacterial peritonitis, varices), hepatic encephalopathy<br/>and hepatorenal syndrome</li> <li>List the indications, contraindications, limitations and complications of<br/>diagnostic and therapeutic paracentesis and interpret the results of ascitic<br/>fluid analysis</li> <li>Describe appropriate screening and diagnostic strategies for hepatocellular<br/>carcinoma</li> <li>Recognize and apply prognostic models (e.g., MELD, CPT)</li> <li>Identify appropriate timing to request specialty consultation on patients</li> </ul>  |  |
| Skills  | <ul> <li>Identify appropriate timing to request specialty consultation on patients with cirrhosis</li> <li>Recognize patients in need of referral for liver transplantation</li> <li>Obtain a relevant history and perform a focused physical examination in patients with decompensated liver disease</li> <li>Order appropriate labs and studies to assess patients with decompensated liver disease</li> <li>Counsel patients about lifestyle modifications and dietary restrictions/recommendations relevant to decompensated liver disease</li> <li>Diagnose and manage patients with cirrhosis, including complications of portal hypertension (ascites, spontaneous bacterial peritonitis, varices), hepatic encephalopathy and hepatorenal syndrome</li> <li>Apply the results of ascitic fluid analysis</li> <li>Screen patients for hepatocellular carcinoma and refer for management</li> <li>Recognize when to refer patients for liver transplant evaluation</li> <li>Assess preoperative risk in patients with cirrhosis</li> <li>Communicate transitions of care effectively with other providers</li> </ul> |  |
| Attitudes   | <ul> <li>Work and communicate effectively within an interprofessional team in the management of patients with decompensated liver disease</li> <li>Provide compassionate care and end-of-life counseling to liver patients and their families</li> </ul>  |  |
| Patie   | ent Care (PC)   |  |

| Systems-Based Practice (SBP)  |   |
|---|---|
| Practice-Based Learning & Improvement (PBLI)  |   |
| Professionalism (PROF)  |   |
| Interpersonal & Communication Skills (ICS)  |   |
|   |   |
| What subcompetencies are needed to achieve mastery?   | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |
| Patient Care (PC):  |   |
| <ul> <li>Demonstrates skill in performing and interpreting invasive procedures. (PC4a)</li> </ul>   |   |
| <ul> <li>Demonstrates skill in performing and interpreting non-invasive<br/>procedures and/or testing (PC4b)</li> </ul>                                     |   |
| Requests and provides consultative care (PC5)   |   |
| Medical Knowledge (MK):   |   |
| Possesses Clinical knowledge (MK1)  |   |
| <ul> <li>Knowledge of diagnostic testing and procedures (MK2)</li> </ul>  |   |
| Systems-Based Practice (SBP):   |   |
| • Works effectively within an interprofessional team (e.g., with peers, consultants, nursing, ancillary professionals, and other support personnel) (SBP1). |   |
| • Transitions patients effectively within and across health delivery systems (SBP4)   |   |
| Practice-Based Learning & Improvement (PBLI):   |   |
| •   |   |
| Professionalism (PROF):   |   |
| •   |   |
| Interpersonal & Communication Skills (ICS):   |   |
| <ul> <li>Communicates effectively with patients and caregivers (ICS1)</li> </ul>  |   |
| • Communicates effectively in interprofessional teams (e.g., with peers, consultants, nursing, ancillary professionals, and other support                   |   |
| personnel) (ICS2).  |   |
|   |   |
| Stage of training at which supervision level 4 is expected to be reached:   |   |
|   |   |

| Potential information sources/assessments to gauge progress                   |                          |
|---|--------------------------|
| Chart stimulated recall   |                          |
| Chart audits  |                          |
| Direct observations   |                          |
| Standardized patient  |                          |
| In-training examination   |                          |
| 360 Global Rating   |                          |
| Patient Survey  |                          |
| Simulation  |                          |
| Portfolios  |                          |
| Other   |                          |
|   |                          |
| Basis for formal entrustment decision by the Clinical Competency Com          | nittee:                  |
| Program director  |                          |
| Faculty   |                          |
| Other   |                          |
|   |                          |
| Implications of entrustment for the trainee: Entrustment allows the fello     | w to independently       |
| perform consultation for patients with cirrhosis and its complications in the | inpatient and outpatient |
| setting.  |                          |

6. **EPA Title:** Perform upper and lower endoscopic evaluation of the luminal gastrointestinal tract for screening, diagnosis, and intervention

**Detailed Description:** Endoscopy is a significant aspect of gastroenterology practice and gastroenterologists should be able to determine which patients are appropriate to undergo an endoscopic procedure, be able to perform a quality examination safely, and integrate the clinical presentation with the endoscopic findings in order to plan further management. Gastroenterologists must also be able to communicate endoscopic and pathological findings to the patient, family, and the referring doctor in a timely fashion.

|           | • Summarize the appropriate indications for both upper and lower endoscopy.                     |
|-----------|---|
|           | List specific risks of endoscopic procedures.   |
|           | • Define the management of antiplatelet and anticoagulant therapy related to                    |
|           | endoscopy.  |
|           | • Summarize the proper use of antibiotics related to endoscopic procedures.                     |
|           | • Summarize the endoscopic screening/surveillance guidelines for average,                       |
|           | intermediate, and high-risk patients for colon cancer, colon polyps,                            |
|           | inflammatory bowel disease, Barrett's esophagus, and varices.                                   |
| Knowledge | • List the techniques utilized for removal of various lesions including flat and                |
| 8         | laterally spreading polyps.   |
|           | <ul> <li>Define potential quality metrics for endoscopic procedures including depth</li> </ul>  |
|           | of insertion and adequate identification of lesions in both the upper and                       |
|           | lower gastrointestinal tract.   |
|           | <ul> <li>Determine which lesions are best managed by submucosal injection and cap</li> </ul>    |
|           | or band-assisted resection.   |
|           | <ul> <li>Recognize system errors associated with endoscopy (universal protocol,</li> </ul>      |
|           | scope re-processing, specimen labeling, patient identification)                                 |
|           | <ul> <li>Obtain a thorough informed consent including a discussion of all possible</li> </ul>   |
|           | outcomes  |
|           | Participate in a well-informed discussion about the preparation and                             |
|           | procedure day expectations.   |
|           | • Administer sedation and monitor the patient during endoscopy safely.                          |
|           | Communicate effectively with assistants during procedure.                                       |
|           | • Demonstrate proper use of resuscitation equipment.  |
|           | <ul> <li>Perform and document the successful intubation to the second portion of the</li> </ul> |
| Skills    | duodenum using proper technique.  |
|           | <ul> <li>Perform and document successful intubation of the cecum and terminal</li> </ul>        |
|           | ileum using proper technique.   |
|           | <ul> <li>Conduct a thorough examination of the upper and lower gastrointestinal</li> </ul>      |
|           | tract and correctly identify landmarks.   |
|           | <ul> <li>Recognize both the spectrum of normal endoscopic findings as well as</li> </ul>        |
|           | abnormal findings and determine the clinical relevance of these findings.                       |
|           | <ul> <li>Determine the adequacy of bowel preparation for a colonoscopic evaluation.</li> </ul>  |
| L         |   |

|             | <ul> <li>Demonstrate adequate detection of polyps and adenomas on colonoscopy.</li> <li>Determine the best management and disposition of each patient and discuss the findings with the patient, their family and other physicians in a comprehensible fashion.</li> <li>Recognize and manage any complications expeditiously.</li> <li>Perform endoscopic mucosal biopsy and polypectomy successfully, including pedunculated and sessile polyps, and submucosal injection when appropriate</li> </ul>  |  |  |
|-------------|--|--|--|
|             |  |  |  |
|             |  |  |  |
|             | Ensure adequate post polypectomy hemostasis.   |  |  |
|             | <ul> <li>Perform retroflexion of the gastric fundus/cardia and rectum with adequate visualization.</li> </ul>  |  |  |
|             | <ul> <li>Perform effective endoscopic therapies (such as foreign body removal, prophylactic variceal band ligation, dilation, injection therapy, feeding tube placement, and colonic decompression) safely in the appropriate setting.</li> <li>Complete timely and thorough documentation of all endoscopic procedures.</li> <li>Integrate endoscopic findings with clinical presentation to formulate a</li> </ul>   |  |  |
|             | diagnosis and plan of care.  |  |  |
|             | • Explain how patients and other providers will get pathology results and recommendations within the patient's medical system.   |  |  |
| Attitudes   | <ul> <li>Acquire all of the relevant medical and social history prior to the procedure.</li> <li>Consider alternatives to the procedure and inform the patient and family.</li> <li>Recognize the cultural and religious differences that patients may have as it pertains to endoscopy and the specific interventions associated with the procedure.</li> <li>Recognize when a procedure or intervention should be aborted for the safety of the patient.</li> <li>Respect gender issues that may exist with regard to the comfort/discomfort of the patient with the endoscopist.</li> <li>Recognize the social and ethical issues in aging, abused and other vulnerable populations.</li> <li>Recognize ones own training or skill limitations in procedure planning and acknowledge that certain procedures (luminal stenting, ERCP, EUS) may require special additional training.</li> <li>Review quality performance metrics and incorporate necessary changes into practice.</li> </ul>   |  |  |
| Check ACCME | ownotonging onnlights to EDA   |  |  |
|             | ompetencies applicable to EPA  |  |  |
|             | atient Care (PC)   |  |  |
|             | Medical Knowledge (MK)     Image: Constraint of the second s |  |  |
| -           | ractice-Based Learning & Improvement (PBLI)  |  |  |
|             | rofessionalism (PROF)  |  |  |
|             |  |  |  |

| Interpersonal & Communication Skills (ICS)   |   |  |  |
|--|---|--|--|
|  |   |  |  |
| What subcompetencies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |  |  |
| Patient Care (PC):   |   |  |  |
| • Gathers and synthesizes essential and accurate information to define each patient's clinical problem(s). (PC1)   |   |  |  |
| <ul> <li>Demonstrates skill in performing and interpreting invasive procedures. (PC4a)</li> <li>Demonstrates skill in performing and interpreting non-invasive procedures and (or testing (PC4b))</li> </ul>   |   |  |  |
| procedures and/or testing (PC4b)   |   |  |  |
| <ul> <li>Medical Knowledge (MK):</li> <li>Possesses Clinical knowledge. (MK1)</li> <li>Knowledge of diagnostic testing and procedures. (MK2)</li> </ul>  |   |  |  |
| <ul> <li>Systems-Based Practice (SBP):</li> <li>Recognizes system error and advocates for system improvement.<br/>(SBP2)</li> </ul>  |   |  |  |
| Practice-Based Learning & Improvement (PBLI):  |   |  |  |
| Monitors practice with a goal for improvement. (PBLI1)   |   |  |  |
| • Learns and improves via performance audit. (PBLI2)   |   |  |  |
| Professionalism (PROF):  |   |  |  |
| •  |   |  |  |
| Interpersonal & Communication Skills (ICS):  |   |  |  |
| • Appropriate utilization and completion of health records. (ICS3)   |   |  |  |
|  |   |  |  |
| Stage of training at which supervision level 4 is expected to be   |   |  |  |
| reached:   |   |  |  |
|  |   |  |  |
| Potential information sources/assessments to gauge progress         Chart stimulated recall       Image: Chart audits         Chart audits       Image: Chart audits         Direct observations       Image: Chart audits         Standardized patient       Image: Chart audits         In-training examination       Image: Chart audits         360 Global Rating       Image: Chart audits         Patient Survey       Image: Chart audits         Simulation       Image: Chart audits         Portfolios       Image: Chart audits         Other       Image: Chart audits |   |  |  |
| Basis for formal entrustment decision by the Clinical Competency Com Program director Faculty  | mittee:   |  |  |

Other

Implications of entrustment for the trainee: Entrustment indicates that a gastroenterologist has acquired the necessary skills to independently perform both upper and lower endoscopy in the inpatient as well as outpatient setting. The trainee will be entrusted to perform endoscopy safely and to ensure that the quality metrics are met for every procedure as defined by our professional societies. Actual independent practice is dependent on institutional and governmental policies.

7. **EPA Title:** Perform endoscopic procedures for the evaluation and management of gastrointestinal bleeding

**Detailed Description:** Gastroenterologists play a critical role in the evaluation and management of patients with gastrointestinal bleeding. Care of the patient with gastrointestinal bleeding includes initial assessment, hemodynamic resuscitation, and stabilization. Gastroenterologists should be able to determine when and which patients are appropriate to undergo endoscopic procedures that are diagnostic and potentially therapeutic. Consultants should be able to perform a quality endoscopic examination in a safe and efficient manner and should be able to perform effective endoscopic hemostasis. GI staff must also be able to communicate endoscopic findings, pathological findings, and management plans to the patient, family, and the involved health care providers in a timely fashion.

| Knowledge | <ul> <li>Demonstrate understanding of the principles for assessing hemodynamic status, determining the need for hemodynamic resuscitation including blood transfusion, and indications for advanced airway protection and more intensive care within the hospital</li> <li>List the indications for proton pump inhibitors, somatostatin analogues, and other medical management for acute gastrointestinal bleeding</li> <li>Summarize the management of antiplatelet and anticoagulant therapy in the setting of gastrointestinal bleeding</li> <li>Summarize the pathophysiology and risk of variceal bleeding in liver disease with portal hypertension.</li> <li>Summarize the indication and treatment options for antibiotic prophylaxis</li> <li>Summarize the appropriate indications for esophagogastroduodenoscopy, colonoscopy, small bowel enteroscopy and capsule endoscopy in the evaluation of gastrointestinal bleeding</li> <li>Describe specific risks of endoscopic procedures</li> <li>Recognize mucosal lesions, stigmata of bleeding and other anatomical findings and know the clinical relevance of these findings</li> <li>Summarize the appropriate endoscopic and medical management required for the specific endoscopic findings</li> <li>Summarize the appropriate endoscopic and medical management required for the specific endoscopic findings</li> <li>Summarize the available endoscopic procedures</li> <li>Recognize the appropriate endoscopic and medical management required for the specific endoscopic findings</li> <li>Summarize the appropriate endoscopic and medical management required for the specific endoscopic findings</li> <li>Summarize the available endoscopic procedures</li> <li>Recognize complications of endoscopic procedures</li> <li>Recognize complications of endoscopic procedures</li> <li>List the necessary post-procedural monitoring and care of the patient</li> </ul> |
|-----------|---|
| Skills    | <ul> <li>Obtain a detailed history and physical examination</li> <li>Determine hemodynamic status</li> <li>Assess and guide hemodynamic resuscitation of the patient using current guidelines</li> <li>Recommend necessary medical management including proton pump</li> </ul>  |

| Г         |  |
|-----------|--|
|           | inhibitors, somatostatin analogues, prophylactic antibiotics, and transfusion  |
|           | of indicated blood products  |
|           | • Determine whether upper or lower endoscopy (or both) is required in the setting of an active GI bleed.   |
|           |  |
|           |  |
|           | • Differentiate patient presentations that are at high risk for a variceal source of hemorrhage.   |
|           | <ul> <li>Recognize indication for anesthesia assistance and appropriate airway</li> </ul>  |
|           | protection for the performance of endoscopy  |
|           | <ul> <li>Demonstrate the ability to obtain a thorough informed consent including a</li> </ul>  |
|           | discussion of all possible outcomes  |
|           | • Engage in a well informed discussion about the preparation and procedure   |
|           | day expectations   |
|           | • Assemble the necessary endoscopic equipment and devices needed during  |
|           | specific procedures  |
|           | Administer sedation safely and effectively and monitor the patient during  |
|           | endoscopy  |
|           | Perform appropriate upper and lower endoscopic procedures for  |
|           | gastrointestinal bleeding and accurately identify endoscopic findings and  |
|           | stigmata of bleeding   |
|           | • Perform the endoscopic hemostasis methods indicated for the specific ordescenic findings and recognize when hemostasis has been achieved or if     |
|           | endoscopic findings and recognize when hemostasis has been achieved or if further measures are necessary.  |
|           | <ul> <li>Demonstrate the ability to interpret capsule endoscopy findings in the</li> </ul>   |
|           | evaluation of gastrointestinal bleeding  |
|           | Communicate effectively with assistants during endoscopic procedures   |
|           | • Integrate endoscopic findings with clinical presentation to formulate a  |
|           | diagnosis and plan of care   |
|           | • Determine the best management and disposition of each patient and discuss  |
|           | the findings with the patient, their family and other physicians in a  |
|           | comprehensible fashion   |
|           | Manage any complications expeditiously   |
|           | Complete timely and thorough documentation of all endoscopic procedures  |
|           | • Plan medical care while respecting the patient's and family's values.  |
|           | • Acquire all of the relevant medical and social history prior to performing   |
|           | endoscopic procedures  |
|           | Consider alternatives to endoscopic procedures and inform the patient and     family   |
|           | family<br>Value the cultural and religious differences that nationts may have as it  |
| Attitudes | • Value the cultural and religious differences that patients may have as it pertains to endoscopy and the specific interventions associated with the |
|           | procedure  |
|           | <ul> <li>Respect gender issues that may exist with regard to the comfort/discomfort</li> </ul>   |
|           | of the patient with the endoscopist  |
|           | <ul> <li>Recognize when a procedure or intervention should be aborted for the safety</li> </ul>  |
|           | of the patient   |
| L         |  |

| <ul> <li>Work effectively with surgeons, intensivists, and multidisciplinary team.</li> </ul> |   |
|---|---|
| Recognize and advise the patient, family, and med   |   |
| intervention is futile, such as those with terminal   | conditions  |
|   |   |
| Check ACGME competencies applicable to EPA  |   |
| Patient Care (PC)   |   |
| Medical Knowledge (MK)  |   |
| Systems-Based Practice (SBP)  |   |
| Practice-Based Learning & Improvement (PBLI)  |   |
| Professionalism (PROF)  |   |
| Interpersonal & Communication Skills (ICS)  |   |
|   |   |
| What subcompetencies are needed to achieve mastery?   | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |
| Patient Care (PC):  |   |
| • Gathers and synthesizes essential and accurate information to define                        |   |
| each patient's clinical problem(s). (PC1)   |   |
| Demonstrates skill in performing and interpreting invasive                                    |   |
| procedures.(PC4a)   |   |
| Demonstrates skill in performing and interpreting non-invasive                                |   |
| procedures and/or testing. (PC4b)   |   |
| Medical Knowledge (MK):   |   |
| Possesses Clinical knowledge. (MK1)   |   |
| • Knowledge of diagnostic testing and procedures. (MK2)                                       |   |
| Systems-Based Practice (SBP):   |   |
| •   |   |
| Practice-Based Learning & Improvement (PBLI):   |   |
| <ul> <li>Monitors practice with a goal for improvement. (PBLI1)</li> </ul>                    |   |
| Professionalism (PROF):   |   |
| •   |   |
| Interpersonal & Communication Skills (ICS):   |   |
| Communicates effectively with patients and caregivers. (ICS1)                                 |   |
| • Appropriate utilization and completion of health records. (ICS3)                            |   |
|   |   |
| Stage of training at which supervision level 4 is expected to be reached:                     |   |
|   |   |

| Potential information sources/assessments to gauge progress  |                                       |
|--|---------------------------------------|
| Chart stimulated recall  |                                       |
| Chart audits   |                                       |
| Direct observations  |                                       |
| Standardized patient   |                                       |
| In-training examination  |                                       |
| 360 Global Rating  |                                       |
| Patient Survey   |                                       |
| Simulation   |                                       |
| Portfolios   |                                       |
| Other  | _                                     |
|  |                                       |
| Basis for formal entrustment decision by the Clinical Competer   | ncy Committee:                        |
| Program director   |                                       |
| Faculty  |                                       |
| Other  |                                       |
|  |                                       |
| <b>Implications of entrustment for the trainee:</b> Entrustment indica<br>acquired the necessary skills to independently perform evaluation<br>gastrointestinal bleeding. The trainee will be entrusted to perform | of, and consultation on patients with |

the evaluation and management of gastrointestinal bleeding. Actual independent practice is dependent on institutional and governmental policies.

#### 8. EPA Title: Manage biliary disorders

**Detailed Description:** The diagnosis and treatment of biliary disorders constitute a significant portion of the practice of gastroenterology. At the completion of training, a GI consultant should be able to obtain diagnostic information from patient history, physical exam and studies to evaluate biliary conditions, including those related to lithiasis, inflammatory or neoplastic etiologies. The trainee who is aiming at becoming proficient in therapeutic biliary endoscopy should undergo additional training. Due to the complexity of this field of endoscopy and need for expertise, gastroenterologists should only perform procedures they have demonstrated proficiency in performing during supervised training, and should identify patients who might benefit from referral to centers of expertise. The gastroenterologist who is aiming at becoming proficient in any of the fields of advanced endoscopy such as EUS, therapeutic biliary endoscopy, etc. will need additional focused training.

| Knowledge | <ul> <li>Demonstrate an understanding of basic anatomy of the biliary tree and congenital structural anomalies</li> <li>Describe the basic physiology of the biliary system including hormonal and neural regulation of bile flow and gallbladder function, motility of the biliary system, bile composition and secretion and its derangement in cholestatic disorders</li> <li>Recognize cholelithiasis related disease including epidemiology, etiology, clinical manifestations, complications, and treatment modalities</li> <li>List the various infectious conditions affecting the biliary system and differentiate those from non-infectious inflammatory conditions.</li> <li>Demonstrate understanding of the current principles for the evaluation and management of common clinical syndromes including cholestasis, biliary-type pain, motility disorders, and incidental findings on radiographic testing</li> <li>Summarize the indications for obtaining radiographic and endoscopic evaluation of the biliary tree and the utility of each modality for lesion recognition</li> <li>List principles, utility, and complications of biliary interventional procedures</li> <li>Interpret laboratory and imaging studies related to biliary disease</li> <li>Recognize post-surgical biliary complications and understand appropriate and timely endoscopic intervention</li> </ul> |
|-----------|---|
| Skills    | <ul> <li>Obtain a detailed history of biliary disorders</li> <li>Perform a physical exam that identifies signs of biliary obstruction<br/>(cholestasis), inflammation and related systemic manifestations</li> <li>Order and interpret appropriate labs and imaging studies to assess the<br/>biliary tree and potential obstructive pathology (transabdominal US, CT,<br/>MRI/MRCP and scintigraphy).</li> <li>Identify endoscopic techniques used in the diagnosis and treatment of biliary<br/>tract diseases, including their potential risks, limitations, and costs; and the<br/>role of alternative diagnostic and therapeutic modalities</li> <li>Manage acute cholangitis with antibiotics and understand timing of</li> </ul>   |

| Attitudes   | <ul> <li>interventional procedures</li> <li>Recognize the indications and contraindications advantages and disadvantages, complications, alt therapeutic options, and interpretation of finding</li> <li>Evaluate the clinical efficacy of advanced endoscopic interventions, including drainage pro</li> <li>Identify and manage systemic manifestation of bi jaundice and pruritus</li> <li>Apply ethical principles in discussing and applyir interventions including clear presentation of risk to the various diagnostic and therapeutic options</li> <li>Team with diagnostic and interventional radiolog oncologists and surgeons in the care of the patier</li> <li>Consider alternative palliative approaches to treaterminal biliary diseases</li> <li>Develop respect for personal choices for treatmentions</li> </ul> | cernative diagnostic and<br>gs.<br>opic techniques and non-<br>cedures.<br>liary obstruction such as<br>ng biliary evaluations and<br>ts, benefits and alternatives<br>gists, pathologists,<br>nt with biliary disorders<br>atment of advanced and |
|---|--|--|
| <b>Check ACGME comp</b>                                     | etencies applicable to EPA   |  |
|   | t Care (PC)  |  |
|   | al Knowledge (MK)  |  |
|   | ns-Based Practice (SBP)  |  |
|   | ce-Based Learning & Improvement (PBLI)   |  |
|   | sionalism (PROF)   |  |
| Interp  | ersonal & Communication Skills (ICS)   |  |
| What subcompetend   | cies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage  |
| Patient Care (PC):  |  |  |
| -   | esizes essential and accurate information to define  |  |
|   | ical problem(s). (PC1)   |  |
| patient. (PC2)  | eves comprehensive management plan for each  |  |
|   | l in performing and interpreting invasive  |  |
| procedures.(PC4a  | ·  |  |
| <ul> <li>Demonstrates skill<br/>procedures and/o</li> </ul> | l in performing and interpreting non-invasive  |  |
| Medical Knowledge   |  |  |
|   | knowledge. (MK1)   |  |
|   | gnostic testing and procedures. (MK2)  |  |
| Systems-Based Prac  |  |  |
| Works effectively   | within an interprofessional team (e.g., with peers, ng, ancillary professionals, and other support   |  |

| Identifies forces that impact the cost of health care, and advocates for and practices cost-effective care. (SBP3) |
|--|
| Practice-Based Learning & Improvement (PBLI):  |
| <ul> <li>Monitors practice with a goal for improvement. (PBLI1)</li> </ul>   |
| •  |
| Professionalism (PROF):  |
| •  |
| •  |
| Interpersonal & Communication Skills (ICS):  |
| Communicates effectively with patients and caregivers. (ICS1)  |
| Communicates effectively in interprofessional teams (e.g., with peers,   |
| consultants, nursing, ancillary professionals, and other support   |
| personnel). (ICS2)   |
| Steps of training starkish supervision level 4 is supertail to be  |
| Stage of training at which supervision level 4 is expected to be reached:  |
|  |
| Potential information sources/assessments to gauge progress  |
| Chart stimulated recall  |
| Chart audits   |
| Direct observations  |
| Standardized patient   |
| In-training examination  |
| 360 Global Rating  |
| Patient Survey   |
| Simulation   |
| Portfolios   |
| Other  |
|  |
| Basis for formal entrustment decision by the Clinical Competency Committee:  |
| Program director   |
| Faculty  |
| Other  |
|  |
| Implications of entrustment for the trainee: Entrustment indicates that the fellow is ready for                    |
| unsupervised practice of this activity in accordance with program policy. This includes the ability to             |
| recognize when higher-level consultation is required. It is recognized that achieving proficiency in               |
| advanced endoscopy of the biliary tree requires time and continued guidance, which usually extends                 |
| beyond the end of the 3 <sup>rd</sup> year of training.  |

**Knowledge** 

#### 9. EPA Title: Manage pancreatic diseases

Detailed Description: By the end of gastroenterology fellowship, trainees should have a thorough<br/>cognitive understanding of the spectrum of pancreatic disease. Gastroenterologists should be able to<br/>obtain pertinent information through patient history, physical examination, laboratory, and imaging to<br/>evaluate the etiology, severity, complications, and basic management of pancreatic disease. The GI<br/>consultant should also recognize the indications for invasive testing of the pancreas including EUS and<br/>ERCP. The trainee who aspires to be an expert in pancreatic endoscopy usually requires additional<br/>dedicated advanced endoscopic training with a focus on ERCP, EUS, and endoscopic management of<br/>pancreatic diseases.• Describe the normal anatomy of the pancreas and congenital variants<br/>• Describe the physiology of pancreatic exocrine secretion of digestive<br/>enzymes, including the types of enzymes, their mechanisms of activation,<br/>regulation, and roles in digestion<br/>• Summarize the epidemiology, etiology, pathophysiology, natural history,

| summarize the epidemiology, enough, puthophysiology, natural motory,  |
|---|
| prevention, and management of acute and chronic pancreatitis and its  |
| complications   |
| Recognize the enidemiology etiology natural history and management of |

- Recognize the epidemiology, etiology, natural history, and management of pancreatic cancer and related complications
- Describe the epidemiology, pathology, natural history, and management of pancreatic cystic lesions
- Summarize the basics of the molecular genetics of pancreatic disease with particular reference to hereditary pancreatitis and cystic fibrosis, their diagnosis and management
- List the indications for and the interpretation of test results in the diagnosis and management of pancreatic diseases including serum enzymes, tumor markers, fecal studies, and cytological analysis of pancreatic fine needle aspirates.
  - Summarize the principles, utility, indications for, and basic interpretation of all radiographic studies of the pancreas.
  - Summarize the basic principles, utility, and complications of pancreatic surgery
  - Recognize principles of nutritional support for patients with both acute and chronic pancreatitis
- Describe endoscopic, radiologic, and surgical therapeutic interventions and their risks and benefits for pancreatic diseases
- List indications, contraindications, alternatives, and complications, of ERCP and EUS in the diagnosis and management of pancreatic disease

|        | ٠ | Obtain a thorough history of pancreatic disorders and presentation of     |
|--------|---|---|
| Skills |   | common pancreatic disorders such as acute and chronic pancreatitis        |
| JKIIIS | • | Perform a physical exam that would identify signs of severe pancreatitis, |
|        |   | pancreatic insufficiency and related systemic manifestations              |

| Check ACGME compet<br>Patient C<br>Medical<br>Systems<br>Practice<br>Professio | <ul> <li>Respect personal choices for treatment and end of<br/>Consider psychosocial impact of debilitating cond<br/>pancreatitis</li> </ul> |                                       |
|--|--|---------------------------------------|
| Patient C<br>Medical<br>Systems<br>Practice<br>Professio                       | pancreatitis   | litions like chronic                  |
| Patient C<br>Medical<br>Systems<br>Practice<br>Professio                       |  |                                       |
| Patient C<br>Medical<br>Systems<br>Practice<br>Professio                       | angias applicable to EDA   |                                       |
| Medical<br>Systems<br>Practice-<br>Professio                                   |  |                                       |
| Systems-<br>Practice-<br>Professio   |  |                                       |
| Practice-<br>Professio   | Knowledge (MK)   |                                       |
| Professio  | -Based Practice (SBP)  |                                       |
|  | Based Learning & Improvement (PBLI)  |                                       |
| Ť . i  | onalism (PROF)   |                                       |
| Interper   | sonal & Communication Skills (ICS)   |                                       |
| What subcompotonsis  | es are needed to achieve mastery?  | Approximate Time                      |
| what subcompetencie  | es ai e neeueu to achieve mastery?   | Frame Trainee Should<br>Achieve Stage |
| Patient Care (PC):   |  |                                       |
|  | ith progressive responsibility and independence.   |                                       |
| Requests and provid  | des consultative care. (PC5)   |                                       |
| Medical Knowledge (M   | MK):   |                                       |
| <ul> <li>Possesses Clinical kit</li> </ul>                                     | -  |                                       |
|  | ostic testing and procedures. (MK2)  |                                       |
| Systems-Based Practic  |  |                                       |
| Works effectively w  | ithin an interprofessional team (e.g., with peers,<br>g, ancillary professionals, and other support  |                                       |

| Practice-Based Learning & Improvement (PBLI):  |
|--|
| •  |
| •  |
| Professionalism (PROF):  |
| •  |
| •  |
| Interpersonal & Communication Skills (ICS):  |
| Communicates effectively with patients and caregivers. (ICS1)  |
| Communicates effectively in interprofessional teams (e.g., with peers,                                 |
| consultants, nursing, ancillary professionals, and other support                                       |
| personnel). (ICS2)   |
|  |
| Stage of training at which supervision level 4 is expected to be                                       |
| reached:   |
|  |
| Potential information sources/assessments to gauge progress  |
| Chart stimulated recall  |
| Chart audits   |
| Direct observations  |
| Standardized patient   |
| In-training examination  |
| 360 Global Rating  |
| Patient Survey   |
| Simulation   |
| Portfolios   |
|  |
| Other  |
| Basis for formal entrustment decision by the Clinical Competency Committee:                            |
| Program director   |
| Faculty  |
| Other  |
|  |
| Implications of entrustment for the trainee: Entrustment indicates that the fellow is ready for        |
|  |
| unsupervised practice of this activity in accordance with program policy. This includes the ability to |
| recognize when higher-level consultation is required. It is recognized that achieving proficiency in   |
| advanced pancreatic endoscopy requires time and continued guidance, which usually extends beyond       |
| the end of the 3 <sup>rd</sup> year of training.   |

## 10. **EPA Title:** Manage common GI infections in non-immunosuppressed and immunocompromised populations

**Detailed Description:** Gastroenterologists must understand the pathogenic entities that cause infections of the upper and lower GI tract including infectious diarrhea. Particular skill and attention are required to recognize that populations of patients, such as those who are immunocompromised or pharmacologically immunosuppressed, may have different susceptibilities to enteric pathogens.

| Knowledge | <ul> <li>Describe the mechanism of action of infectious agents that cause<br/>inflammatory diarrhea</li> <li>Identify the molecular mechanism of organisms that cause secretory<br/>diarrhea</li> <li>Describe the constituents of the mucosal defense system (including the<br/>mucosal immune system and epithelial barrier</li> <li>Identify the components of the normal microbiome</li> <li>Recognize risk factors for and clinical presentation of bacteria, parasites,<br/>viruses and other gastrointestinal pathogens including those related to<br/>chemotherapy and other immunocompromised states not directly related to<br/>the bowel (e.g. Graft vs Host Disease).</li> <li>Describe the indications and contraindications for antimicrobial therapy and<br/>risk of antibiotic associated diarrhea and esophagitis</li> <li>Recognize HIV enteropathy and AIDS-related malignancies</li> <li>Differentiate between infectious diarrhea and functional diarrhea</li> <li>Identify the viral and fungal organisms that can cause esophagitis.</li> </ul> |
|-----------|--|
| Skills    | <ul> <li>Apply therapies for GI infections which may differ based upon region of the country or travel history</li> <li>Differentiate between infectious vs. non-infectious diarrhea</li> <li>Order laboratory, stool and pathologic studies necessary to diagnose infections of the luminal GI Tract in a cost effective manner</li> <li>Interpret results of mucosal biopsies</li> <li>Select appropriate antimicrobial therapy and determine rational treatment plan for enteric infections</li> <li>Formulate preventative strategies related to upcoming travel</li> </ul>  |
| Attitudes | <ul> <li>Apply broad based differentials to immunocompetent and immunocompromised patients.</li> <li>Demonstrate high standards of ethical behavior when approaching patients with infectious diseases including but not limited to HIV.</li> <li>Determine rational treatment plans in a cost-effective fashion with sensitivity to the cultural and socioeconomic values of the patient.</li> </ul>  |
|           | tancias applicable to EDA  |
|           | ent Care (PC)  |
|           | ent Care (PC) 🛛 🖄  |
| Ivieu     |  |

| Systems-Based Practice (SBP)   |   |
|--|---|
| Practice-Based Learning & Improvement (PBLI)   |   |
| Professionalism (PROF)   |   |
| Interpersonal & Communication Skills (ICS)   |   |
|  |   |
| What subcompetencies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |
| Patient Care (PC):   |   |
| <ul> <li>Manages patients with progressive responsibility and independence.<br/>(PC3)</li> </ul>   |   |
| Requests and provides consultative care. (PC5)   |   |
| Medical Knowledge (MK):  |   |
| Possesses Clinical knowledge (MK1)   |   |
| <ul> <li>Knowledge of diagnostic testing and procedures. (MK2)</li> </ul>  |   |
| Systems-Based Practice (SBP):  |   |
| <ul> <li>Identifies forces that impact the cost of health care, and advocates for<br/>and practices cost-effective care. (SBP3)</li> </ul> |   |
|  |   |
| Practice-Based Learning & Improvement (PBLI):  |   |
| •  |   |
| •  |   |
| <ul> <li>Professionalism (PROF):</li> <li>Exhibits integrity and ethical behavior in professional conduct.<br/>(PROF4)</li> </ul>          |   |
| Interpersonal & Communication Skills (ICS):  |   |
|  |   |
| •  |   |
|  |   |
| Stage of training at which supervision level 4 is expected to be reached:  |   |
| Potential information sources/assessments to gauge progress  |   |
| Chart stimulated recall<br>Chart audits<br>Direct observations<br>Standardized patient<br>In-training examination<br>360 Global Rating     |   |
| Patient Survey   |   |
| Simulation   |   |
| Portfolios<br>Other  |   |

| Basis for formal entrustment decision by the Clinical Competency Committee: |  |  |
|---|--|--|
| Program director  |  |  |
| Faculty   |  |  |
| Other   |  |  |
|   |  |  |

**Implications of entrustment for the trainee:** Entrustment affirms the fellow's ability to diagnose and manage patients with infections of the gastrointestinal tract in both the inpatient and outpatient environments. Entrustment indicates that the fellow is ready for unsupervised practice of this activity in accordance with program policy.

The gastroenterology and hepatology professional societies recognize the incongruence between the theoretical implications of entrustment and the medico-legal and regulatory limitations of practicing without supervision within a training program. Continued learning even after entrustment is achieved is recognized as having value. Therefore, the implications of entrustment can vary per individual program, and may include additional teaching and leadership roles and responsibilities, but importantly can individualize further training by focusing on EPAs not yet achieved.

# 11. **EPA Title:** Identify and manage patients with noninfectious GI luminal disease

**Detailed Description:** Gastroenterologists diagnose and manage patients with inflammatory bowel disease and other noninfectious luminal disease. To effectively manage patients with these conditions, the gastroenterologist requires a close relationship with a health care team that includes nutrition, colorectal surgery, radiology, pathology, etc. The gastroenteroligist should be able to formulate an assessment and plan that leads to the successful diagnosis of IBD, microscopic colitis, celiac disease, etc. and, once the diagnosis is made, begin an evidence-based treatment approach, including monitoring of therapy.

| Knowledge | <ul> <li>Describe and recognize the extraintestinal manifestations of GI disorders including ophthalmologic, musculoskeletal, dermatologic, hepatic, etc. and how to recognize them</li> <li>List the classes of immunomodulatory agents used in the treatment of noninfectious GI luminal disease, including evaluation of patients prior to intitaing treatment (testing) amonitoring of these agents , and recognize the short- and long-term drug- or class-specific complications of the various agents used in the treatment of IBD and microscopic colitis</li> <li>Summarize the guidelines for immunizations in patients receiving immunomodulator therapy</li> <li>Summarize the guidelines for colorectal cancer surveillance in patients with chronic colitis</li> <li>Recognize when referral to colorectal surgery is necessary for management of a patient with IBD, inlcuding anorectal disease, complex luminal disease, and dysplasia</li> <li>Recognize when patients meet criteria for inpatient management of IBD, including ability to list indicators of severe disease, and describe how inpatient treatment differs from outpatient management</li> <li>Recognize infections relevant to the IBD population and the role this infection plays in the management of Such patients</li> <li>Outline guidelines for treatment of IBD during pregnancy</li> <li>List criteria for diagnosis of celiac disease, autoimmune enteropathy, etc.</li> </ul> |
|-----------|---|
| Skills    | <ul> <li>Perform a careful history and physical examination and be able to order appropriate diagnostic tests in a logical and cost-conscious sequence to diagnosis inflammatory GI conditions or to assess disease activity of known inflammatory conditions</li> <li>Manage immunosuppressive medications including biologic agent and monitor and adjust medication dosages based on laboratory testing and patient response to therapy</li> <li>Order diagnostic testing (including endoscopy) appropriately in the management of patients with any of the above conditions</li> <li>Work effectively with the Primary Care team to manage immunizations and</li> </ul>   |

|  | <ul> <li>other health maintenance requirements in vitamin deficiencies, smoking cessation, ca</li> <li>Manage an inpatient with IBD including an initiation of therapy, and communication vinpatient health care team</li> <li>Incorporate appropriate colorectal cancer long-term management of patients with cl</li> <li>Communicate the risk, benefits and altern patients and members of the health care to be appropriate colorectal cancer long-term management of patients with cl</li> </ul> | ancer screening, etc.<br>opropriate diagnostic testing,<br>with other members of the<br>surveillance strategies into the<br>pronic colitis<br>atives of treatment options to  |
|--|--|---|
| Attitudes  | <ul> <li>Work with a multidisciplinary team to del patients with chronic GI conditions; this con nutrition, rheumatology, colorectal surger among others</li> <li>Recognize and understand the psychologi chronic illness and know when to interver further care</li> <li>Anticipate the needs of patients including with ostomy, celiac disease, ileal pouch, et</li> </ul>   | iver comprehensive care for<br>buld include pathology, radiology,<br>by, and the primary care physician,<br>cal consequences of dealing with a<br>ne or refer to a specialist for<br>support groups (e.g., for patients |
| Pati<br>Med<br>Syst<br>Prac<br>Prof  | npetencies applicable to EPAent Care (PC)[ical Knowledge (MK)[ems-Based Practice (SBP)[etice-Based Learning & Improvement (PBLI)[essionalism (PROF)[rpersonal & Communication Skills (ICS)[  |   |
| What subcompete  | encies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage   |
| each patient's c<br>Manages patien<br>(PC3)  | nthesizes essential and accurate information to de<br>linical problem(s). (PC1)<br>ts with progressive responsibility and independe  | fine  |
|  | <b>ge (MK):</b><br>cal knowledge. (MK1)<br>iagnostic testing and procedures. (MK2)   |   |
| Systems-Based Practice (SBP):• Works effectively within an interprofessional team (e.g., with peers, consultants, nursing, ancillary professionals, and other support personnel). (SPB1)• Transitions patients effectively within and across health delivery |  |   |

| Practice-Based Learning & Improvement (PBLI):   |
|---|
| •   |
| •   |
| Professionalism (PROF):   |
| •   |
| •   |
| Interpersonal & Communication Skills (ICS):   |
| Communicates effectively with patients and caregivers. (ICS1)   |
| Communicates effectively in interprofessional teams (e.g., with peers,                                |
| consultants, nursing, ancillary professionals, and other support                                      |
| personnel). (ICS2)  |
|   |
| Stage of training at which supervision level 4 is expected to be                                      |
| reached:  |
|   |
| Potential information sources/assessments to gauge progress   |
| Chart stimulated recall   |
| Chart audits  |
| Direct observations   |
| Standardized patient  |
| In-training examination   |
| 360 Global Rating   |
| Patient Survey  |
| Simulation  |
| Portfolios  |
| Other   |
|   |
| Basis for formal entrustment decision by the Clinical Competency Committee:                           |
| Program director  |
| Faculty   |
| Other   |
|   |
| Implications of entrustment for the trainee: Entrustment indicates that the fellow is ready for       |
| unsupervised practice of this activity in accordance with program policy.                             |
|   |
| The gastroenterology and hepatology professional societies recognize the incongruence between the     |
| theoretical implications of entrustment and the medico-legal and regulatory limitations of practicing |
| without supervision within a training program. Continued learning even after entrustment is achieved  |
| is recognized as having value. Therefore, the implications of entrustment can vary per individual     |

program, and may include additional teaching and leadership roles and responsibilities, but importantly can individualize further training by focusing on EPAs not yet achieved.

# 12. **EPA Title:** Manage common GI and liver malignancies, and associated extraintestinal cancers

**Detailed Description:** Gastroenterologists screen, diagnose, and manage patients with GI and liver malignancies. In addition, they also manage patients with complications from the treatment of malignancies involving other systems related to side effects from chemotherapy, radiation therapy, and bone marrow transplantation. At the completion of fellowship training a gastroenterologist should be able to diagnose malignancies of the GI tract and hepatobiliary system. They should be able to discuss and offer appropriate screening tests for GI and liver malignancies, treat complications associated with these malignancies, and those related to the treatment of malignancies. The gastroenterologist should be able to work within a team of providers and extenders to provide care to the patient with GI or liver malignancy. The fellow should also be exposed to all appropriate endoscopic tools while providing this care.

| Knowledge | <ul> <li>Identify cancer epidemiology, primary prevention, and screening for GI and liver malignancies.</li> <li>Cite the recommended guidelines for screening for gastrointestinal and liver neoplasia and the literature supporting these recommendations.</li> <li>Identify the appropriate surveillance and surveillance intervals for patients at high risk for developing cancer and those in whom premalignant epithelium has already been detected.</li> <li>Describe clinical genetics related to GI and liver malignancies and the approaches to the genetic diagnosis of FAP, HNPCC, and other rarer polyposis syndromes.</li> <li>Define the initial management of patients with newly diagnosed gastrointestinal or liver cancer.</li> <li>Recall the prognoses associated with different types of gastrointestinal and liver cancer.</li> <li>Describe the principles of neoplastic growth as they relate to therapy, including endoscopic treatment as well as traditional surgical approaches.</li> <li>Cite the principles and importance of genetic counseling as it pertains to genetic testing and the management of the inherited gastrointestinal and liver diseases.</li> <li>Identify patients at high risk for luminal obstruction secondary to malignancy.</li> </ul> |
|-----------|---|
| Skills    | <ul> <li>Perform a careful history and physical examination identifying features related to GI and liver malignancies.</li> <li>Order appropriate tests in a cost-conscious sequence for the diagnosis, screening, surveillance, and staging of GI/liver malignancies.</li> <li>Perform basic endoscopy to diagnose and treat GI neoplasia including colonoscopic polypectomy of pedunculated and sessile polyps and ablative therapies for sessile lesions.</li> <li>Demonstrate the capabilities and limitations of endoscopic therapy for early</li> </ul>   |

| Attitudes  | <ul> <li>gastrointestinal cancers.</li> <li>Determine the best management of luminal disters surgical, and endoscopic interventions.</li> <li>Counsel patients who have gastrointestinal and/or to manage patients who inquire about the manage histories of gastrointestinal or liver cancer.</li> <li>Maintain professional and ethical interactions wire and patients.</li> <li>Work with a multidisciplinary team to provide cate and/or liver malignancies including primary care surgeons, pathologists, and radiologists.</li> <li>Recognize and understand the psychological consepatient with GI and/or liver malignancy</li> <li>Be able to discuss with the patient and family about the patient with gastroines with gas</li></ul> | or liver neoplasia and how<br>ement of positive family<br>th all healthcare providers<br>re to patients with GI<br>e physicians, oncologists,<br>sequences to the family and |
|--|--|--|
|  |  |  |
| -  | encies applicable to EPA   |  |
| Patient Care (PC)  |  |  |
| Medical Knowledge (MK)     Image: Constraint of the second s |  |  |
|  | ice-Based Learning & Improvement (PBLI)  |  |
|  | essionalism (PROF)   |  |
|  | personal & Communication Skills (ICS)  |  |
| Inter  |  |  |
| What subcompeter   | ncies are needed to achieve mastery?   | Approximate Time<br>Frame Trainee Should<br>Achieve Stage  |
| Patient Care (PC):   |  |  |
| Gathers and synthesizes essential and accurate information related to  |  |  |
|  | ent's clinical problem. (PC1)  |  |
| <ul> <li>Manages patient<br/>(PC3)</li> </ul>  | s with progressive responsibility and independence   |  |
|  | till in performing and interpreting invasive   |  |
| procedures.(PC4  |  |  |
| Demonstrates skill in performing and interpreting non-invasive   |  |  |
| procedures and/or testing. (PC4b)  |  |  |
| · · ·  | ovides consultative care (PC5)   |  |
| Medical Knowledg   |  |  |
|  | al Knowledge (MK1)   |  |
|  | agnostic testing and procedures (MK2)  |  |
| Systems-Based Pra  | • •  |  |
|  | y within an interprofessional team (e.g., with peers,<br>sing, ancillary professionals, and other support<br>21)   |  |

| •  |                         |  |  |  |
|--|-------------------------|--|--|--|
| Practice-Based Learning & Improvement (PBLI):  |                         |  |  |  |
| •  |                         |  |  |  |
| •  |                         |  |  |  |
| Professionalism (PROF):  |                         |  |  |  |
| •  |                         |  |  |  |
| •  |                         |  |  |  |
| Interpersonal & Communication Skills (ICS):  |                         |  |  |  |
| <ul> <li>Communicates effectively with patients and caregivers (ICS1)</li> </ul>   |                         |  |  |  |
| <ul> <li>Communicates effectively with patients and caregivers (rest)</li> <li>Communicates effectively in interprofessional teams (e.g., with peers,</li> </ul> |                         |  |  |  |
| consultants, nursing, ancillary professionals, and other support   |                         |  |  |  |
| personnel). (ICS2)   |                         |  |  |  |
|  |                         |  |  |  |
| Chara of two ining of which gun omigical level 4 is some studies he  |                         |  |  |  |
| Stage of training at which supervision level 4 is expected to be   |                         |  |  |  |
| reached:   | l                       |  |  |  |
| Detential information courses (according to the gauge program  |                         |  |  |  |
| Potential information sources/assessments to gauge progress  |                         |  |  |  |
| Chart stimulated recall  |                         |  |  |  |
| Chart audits   |                         |  |  |  |
| Direct observations  |                         |  |  |  |
| Standardized patient   |                         |  |  |  |
| In-training examination  |                         |  |  |  |
| 360 Global Rating  |                         |  |  |  |
| Patient Survey   |                         |  |  |  |
| Simulation   |                         |  |  |  |
| Portfolios   |                         |  |  |  |
| Other  |                         |  |  |  |
|  |                         |  |  |  |
| Basis for formal entrustment decision by the Clinical Competency Com   | mittee:                 |  |  |  |
| Program director   |                         |  |  |  |
|  |                         |  |  |  |
| Faculty  |                         |  |  |  |
| Other  |                         |  |  |  |
| Implications of entrustment for the trainee: Entrustment indicates that  | the fellow is ready for |  |  |  |
| <b>Implications of entrustment for the trainee:</b> Entrustment indicates that the fellow is ready for   |                         |  |  |  |
| unsupervised practice of this activity in accordance with program policy.  |                         |  |  |  |
| The gestroenterology and henotology professional societies recognize the incommunes between the  |                         |  |  |  |
| The gastroenterology and hepatology professional societies recognize the incongruence between the  |                         |  |  |  |
| theoretical implications of entrustment and the medico-legal and regulatory limitations of practicing  |                         |  |  |  |
| without supervision within a training program. Continued learning even after entrustment is achieved   |                         |  |  |  |
| is recognized as having value. Therefore, the implications of entrustment can vary per individual  |                         |  |  |  |

program, and may include additional teaching and leadership roles and responsibilities, but importantly can individualize further training by focusing on EPAs not yet achieved.

# 13. **EPA Title:** Assess nutritional status and develop and implement nutritional therapies in health and disease

Detailed Description: Gastroenterologists diagnose and manage diseases where pathogenesis and therapies involve an understanding of nutritional principles and therapies. A GI consultant should be able to obtain information from patient history, physical exam and studies to evaluate nutritional status, diagnose diseases of nutritional excess and deficiency, and identify nutritional complications from other chronic GI and liver disease. The gastroenterologist should be able to select appropriate parenteral and enteral options for nutrition therapy and understand how food and diet impact the presentation and management of GI symptoms. Recognize physiology of nutrition in health including absorption, digestion • and metabolism State the metabolic response to starvation, illness/trauma and obesity • Discuss chronic GI and liver diseases that can lead to malnutrition including • IBD, celiac disease, and altered GI anatomy **Knowledge** • Summarize indications and complications of enteral and parenteral support • List options for obesity treatment including medical and surgical options Assess nutritional status, including specific nutrient deficiencies and • excesses, protein-energy malnutrition and obesity • Describe nutritional issues specific to the patient with cirrhosis Determine nutrient requirements during stress states • • Obtain a diet history and use validated nutrition assessment tools Perform a physical exam that assesses nutritional status of the patient • Order appropriate labs and studies to assess nutrtional status • • Counsel patients about how to make lifestyle and dietary changes to impact nutritional status Skills Provide nutritional guidance for many medical conditions • Identify and treat nutritional deficiencies, overfeeding and obesity • Implement and manage nutritional therapy, including modified diets, enteral • tube feeding, and create parenteral nutrition orders Evaluate the clinical efficacy of and complications of nutrition support • Perform endoscopic placement of feeding tubes • Apply ethical principles in discussing and applying nutritional therapy. • including at the end of life Demonstrate cultural, gender and socio-economic sensitivity to creating • nutrition therapy plans, including diet counseling, and complementary and alternative approaches to nutrtion Attitudes Collaborate effectively with pharmacists, dieticians and surgeons in the care • of the patient with nutritional problems Develop an awareness of stigma associated with obesity in the delivery of • health care Consider complementary and alternative approaches to nutrition •

| Consider psychosocial impact on eating disorders   | 3   |
|--|---|
|  | -   |
| Check ACGME competencies applicable to EPA   |   |
| Patient Care (PC)  |   |
| Medical Knowledge (MK)   |   |
| Systems-Based Practice (SBP)   |   |
| Practice-Based Learning & Improvement (PBLI)   |   |
| Professionalism (PROF)   |   |
| Interpersonal & Communication Skills (ICS)   |   |
|  |   |
| What subcompetencies are needed to achieve mastery?  | Approximate Time<br>Frame Trainee Should<br>Achieve Stage |
| Patient Care (PC):   |   |
| •  |   |
| •  |   |
| Medical Knowledge (MK):  |   |
| Possesses Clinical knowledge. (MK1)  |   |
| • Knowledge of diagnostic testing and procedures. (MK2)  |   |
| Systems-Based Practice (SBP):  |   |
| • Works effectively within an interprofessional team (e.g., with peers,                                |   |
| consultants, nursing, ancillary professionals, and other support                                       |   |
| personnel). (SBP 1)  |   |
| <ul> <li>Transitions patients effectively within and across health delivery systems. (SBP4)</li> </ul> |   |
| Practice-Based Learning & Improvement (PBLI):  |   |
| •  |   |
| •  |   |
| Professionalism (P):   |   |
| <ul> <li>Accepts responsibility and follows through on tasks. (PROF2)</li> </ul>                       |   |
| <ul> <li>Responds to each patient's unique characteristics and needs. (PROF3)</li> </ul>               |   |
| Interpersonal & Communication Skills (ICS):  |   |
| Communicates effectively with patients and caregivers. (ICS1)  |   |
| • Communicates effectively in interprofessional teams (e.g., with peers,                               |   |
| consultants, nursing, ancillary professionals, and other support                                       |   |
| personnel). (ICS2)   |   |
|  |   |
| Stage of training at which supervision level 4 is expected to be                                       |   |
| reached:   |   |
|  |   |

| Potential information sources/assessments to gauge progress  |                              |  |  |  |
|--|------------------------------|--|--|--|
| Chart stimulated recall  |                              |  |  |  |
| Chart audits   |                              |  |  |  |
| Direct observations  |                              |  |  |  |
| Standardized patient   |                              |  |  |  |
| In-training examination  |                              |  |  |  |
| 360 Global Rating  |                              |  |  |  |
| Patient Survey   |                              |  |  |  |
| Simulation   |                              |  |  |  |
| Portfolios   |                              |  |  |  |
| Other  |                              |  |  |  |
|  |                              |  |  |  |
| Basis for formal entrustment decision by the Clinical Competency Committee:                            |                              |  |  |  |
| Program director   |                              |  |  |  |
| Faculty  |                              |  |  |  |
|  | Nutrition support service if |  |  |  |
| available  |                              |  |  |  |
|  |                              |  |  |  |
| Implications of entrustment for the trainee: Entrustment would allow the fellow to perform             |                              |  |  |  |
| consultation in the inpatient and outpatient setting with distance supervision, or independently       |                              |  |  |  |
| (according to program policy), particularly with encounters related to counseling. Once entrusted, the |                              |  |  |  |
| trainee can become an observer and teacher of junior trainees. Entrustment of a nutrition-related      |                              |  |  |  |
| procedure, such as a PEG or endoscopic NJ tube placement, would allow the trainee to teach the         |                              |  |  |  |
| procedure in a supervised setting.   |                              |  |  |  |