Body System: Gastrointestinal		
Session Topic: Inflammatory Bowel Disease		
Educational Format		**Faculty Expertise Required**
REQUIRED	Interactive Lecture	Expertise in the field of study. Experience teaching in the field of study is desired. Preferred experience with audience response systems (ARS). Utilizing polling questions and engaging the learners in Q&A during the final 15 minutes of the session are required.
OPTIONAL	Problem-Based Learning (PBL)	Expertise teaching highly interactive, small group learning environments. Case-based, with experience developing and teaching case scenarios for simulation labs preferred. Other workshop-oriented designs may be accommodated. A typical PBL room is set for 50-100 participants, with 7-8 each per round table. Please describe your interest and plan for teaching a PBL on your proposal form.

Professional Practice Gap	**Learning Objective(s) that will close the gap and meet the need**	**Outcome Being Measured**
• Physicians have gaps in the medical knowledge necessary to provide optimal management of patient with an inflammatory bowel disease (IBD), including the appropriate use of diagnostic imaging for diagnosis. • Physicians have gaps with regard to the integration of new guidelines into practice; counseling patients on lifestyle modifications for better management of symptoms; appropriate and effective initial evaluation; implementing appropriate screening for colon cancer; and appropriate follow-up and coordination of referral as necessary. • Patients with IBD often experience poor quality of life because coexisting disorders frequently go	1. Use evidence-based diagnostic criteria to diagnose patients suspected of Inflammatory Bowel Diseases (IBD). 2. Develop a multidisciplinary approach and coordinate care with a gastroenterologist and a surgeon for patients IBD, as indicated by severity or response to other therapies. 3. Develop patient-centered treatment strategies for patients with inflammatory bowel disease, emphasizing adherence to lifestyle modifications and prescribed pharmacologic therapies. 4. Counsel patients with inflammatory bowel disease regarding their risk of cancer and cancer screening requirements.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

untreated. • Physicians are often nonadherent to IBD guidelines, especially concerning the screening for colorectal cancer, and surveillance. • IBD patients are frequently nonadherent to prescribed lifestyle medications.		

ACGME Core Competencies Addressed (select all that apply)

X	Medical Knowledge		Patient Care
X	Interpersonal and Communication Skills		Practice-Based Learning and Improvement
	Professionalism		Systems-Based Practice

Faculty Instructional Goals

Faculty play a vital role in assisting the AAFP to achieve its mission by providing high-quality, innovative education for physicians, residents and medical students that will encompass the art, science, evidence and socio-economics of family medicine and to support the pursuit of lifelong learning. By achieving the instructional goals provided, faculty will facilitate the application of new knowledge and skills gained by learners to practice, so that they may optimize care provided to their patients.

- Provide up to 3 evidence-based recommended practice changes that can be immediately implemented, at the conclusion of the session; including SORT taxonomy & reference citations
- Facilitate learner engagement during the session
- Address related practice barriers to foster optimal patient management
- Provide recommended journal resources and tools, during the session, from the American Family Physician (AFP), Family Practice Management (FPM), and Familydoctor.org patient resources; those listed in the References section below are a good place to start
    - Visit http://www.aafp.org/journals for additional resources
    - Visit http://familydoctor.org for patient education and resources
- Provide recommendations for adhering to evidence-based diagnostic criteria to diagnose patients suspected of Inflammatory Bowel Diseases (IBD).
- Provide an overview of current clinical guidelines and treatments, emphasizing recommended approaches to incorporating key concepts into practice that have the largest impact to patient care.
- Provide strategies and recommendations for developing a multidisciplinary approach and coordinate care with a gastroenterologist and a surgeon for patients IBD (CD/UC), as indicated by severity or response to other therapies, emphasizing strategies for maximizing coordination of care, follow-up, and surveillance.
- Provide strategies and resources for developing patient-centered treatment strategies for patients with inflammatory bowel disease, emphasizing adherence to lifestyle modifications and prescribed pharmacologic therapies.
- Provide strategies and resources for counseling patients with inflammatory bowel disease regarding their risk of cancer and cancer screening requirements.
- Provide recommendations regarding guidelines for Medicare reimbursement.

- Provide recommendations to maximize office efficiency and guideline adherence to the diagnosis and management of IBD.
- Provide an overview of newly available treatments, including efficacy, safety, contraindications, and cost/benefit relative to existing treatments.
- Provide instructions regarding the incorporation and use of the PCMH/ACO/Primary Care Core Measure Set into practice.

Needs Assessment

As inflammatory bowel disease (IBD) is primarily comprised of ulcerative colitis (UC) and Crohn's disease (CD), the scope of this topic will encompass the management of both disorders. Precise incidence and prevalence of Crohn's disease and ulcerative colitis have been limited by (1) a lack of gold standard criteria for diagnosis; (2) inconsistent case ascertainment; and (3) disease misclassification. The data that does exist suggest that the worldwide incidence rate of ulcerative colitis varies greatly between 0.5–24.5/100,000 persons, while that of Crohn's disease varies between 0.1–16/100,000 persons worldwide, with the prevalence rate of IBD reaching up to 396/100,000 persons. It is estimated that as many as 1.4 million persons in the United States suffer from these diseases.[1] IBD is one of the five most prevalent gastrointestinal disease burdens in the United States, with an overall health care cost of more than $1.7 billion. This chronic condition is without a medical cure and commonly requires a lifetime of care. Each year in the United States, IBD accounts for more than 700,000 physician visits, 100,000 hospitalizations, and disability in 119,000 patients. Over the long term, up to 75% of patients with Crohn's disease and 25% of those with ulcerative colitis will require surgery.[1]

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment survey indicate that family physicians have statistically significant and meaningful gaps in the medical skill necessary to provide optimal management of patient with an inflammatory bowel disease, including the appropriate use of diagnostic imaging for diagnosis.[2] More specifically, CME outcomes data from 2012, 2013, and 2015 AAFP FMX (formerly Assembly): *Inflammatory Bowel Disease* sessions suggest that physicians have knowledge and practice gaps with regard to the integration of new guidelines into practice; counseling patients on lifestyle modifications for better management of symptoms; appropriate and effective initial evaluation; implementing appropriate screening for colon cancer; and appropriate follow-up and coordination of referral as necessary.[3-5]

Patients with IBD often describe their quality of life as fair to poor, despite excellent medical and surgical management; in part, because coexisting problems have an impact on the prognosis and quality of life for patients with inflammatory bowel disease; therefore, when those coexisting disorders are not treated, patients do poorly regardless of the medical care they receive for inflammatory bowel disease.[6] In 25-40% of patients, the classic signs and symptoms of IBD may be accompanied by symptoms in the eyes, joints, skin, bones, kidneys, and liver; and because the gut has only a limited number of ways to show distress, many of the above symptoms of IBD are non-specific and could also be related to other gastrointestinal conditions.[7] These include: infectious gastroenteritis, traveler's diarrhea, celiac sprue, gallbladder disease, pancreatitis, stomach ulcers, irritable bowel syndrome (IBD), and colorectal cancer. Patients with IBD, especially those with UC, are at increased risk for colon cancer; therefore, physicians should receive education on the must up to date guidelines for managing IBD and colorectal cancer.[8-12]

This is of particular importance because currently the US Preventive Services Task Force (USPSTF) does not recommend stool DNA testing as a method to screen for colorectal cancer; however, in light of the recent FDA approval of a stool-based colorectal screening test, the USPSTF is currently reviewing its colorectal cancer screening recommendations.[13] Ruling out other possible diseases is part of the diagnostic process, starting with patient history and physical examination. Approximately 25%-50% of patients with IBD have experience exacerbations and remissions annually; therefore, it is important that both primary care physicians and specialists (gastroenterologists, colorectal surgeons) need to be aware of the questions and concerns of IBD patients and to be capable of dispensing the information in a clear and concise manner.[14] Patients with IBD who are of advanced age, or male gender, or diabetes, or obesity, or have multiple comorbidities, use tricyclic antidepressant or opiate, have inpatient status, have low mobility, and lower education level, may be at risk for low rates of colorectal cancer surveillance.[15] Additionally, IBD patient-adherence to prescribed medical therapy is suboptimal, but can be improved by good physician-patient communication.[16] Further, a nationwide study indicates that physicians are frequently non-adherent to IBD treatment guidelines.[17,18]

Physicians may improve their care of patients with IBD/UC/CD by engaging in continuing medical education that provides practical integration of current evidence-based guidelines and recommendations into their standards of care, including, but not limited to the following:[9,19-22]

- Ultrasonography, computed axial tomography, scintigraphy, and magnetic resonance imaging are helpful for excluding extramural complications in persons with Crohn's disease.
- Colonoscopy with ileoscopy and biopsy is a valuable initial test in the diagnosis of ileocolonic Crohn's disease.
- Esophagogastroduodenoscopy is recommended in patients with Crohn's disease who have upper gastrointestinal symptoms.
- There is no difference between elemental and non-elemental diets in inducing remission in patients with Crohn's disease.
- Budesonide (Entocort EC) is effective in inducing, but not maintaining, remission in patients with Crohn's disease.
- Corticosteroids are more effective than placebo and 5-aminosalicylic acid products in inducing remission in patients with Crohn's disease.
- Azathioprine (Imuran) and 6-mercaptopurine are effective in inducing remission in patients with active Crohn's disease.
- Methotrexate is effective in inducing and maintaining remission in patients with Crohn's disease.
- 5-Aminosalicylic acid is highly effective for inducing remission and preventing relapse in patients with ulcerative colitis.
- Oral corticosteroids are effective for inducing remission in patients with ulcerative colitis.
- Infliximab (Remicade) is effective for inducing remission in patients with corticosteroid-refractory ulcerative colitis.
- Azathioprine (Imuran) is effective for preventing relapse in patients with ulcerative colitis.

- The probiotics Lactobacillus GG and Escherichia coli Nissle 1917 (Mutaflor) are as effective as 5-aminosalicylic acid in maintaining remission in patients with ulcerative colitis.
- Colonoscopy should be initiated eight to 10 years after ulcerative colitis is diagnosed, with regular-interval biopsies every one to two years.
- Patients with ulcerative colitis have an increased risk of colon cancer and should have periodic colonoscopy beginning eight to 10 years after diagnosis.
- Fecal calprotectin, a marker for neutrophil activity, is useful for distinguishing inflammatory bowel disease from irritable bowel syndrome and for monitoring inflammatory bowel disease activity.
- Screening colonoscopy should be performed when the disease is in remission.
- Initial surveillance colonoscopy should be performed in each patient beginning 8–10 years after symptom onset, partly to reassess disease extent.
- Regular surveillance should begin on an annual or biannual basis beginning 8–10 years of disease for patients with left-sided or extensive colitis after symptom onset.43,44 There should be a decrease in the screening interval with increasing disease duration (from every other year to yearly). Patients with proctosigmoiditis, who have little or no increased risk of colorectal cancer compared with the general population, should be managed according to standard colorectal cancer prevention measures.
- Patients with PSC represent a subgroup of IBD patients at higher risk for IBD-CRC, thus surveillance should be performed annually from the time of PSC diagnosis.
- Two to four random biopsy specimens should be taken every 10 cm from the entire colon, with additional samples of suspicious areas. Particularly in ulcerative colitis, consideration should be given to taking 4-quadrant biopsies every 5 cm in the lower sigmoid and rectum, because the frequency of colorectal cancer is higher in this region.

These recommendations are provided only as assistance for physicians making clinical decisions regarding the care of their patients. As such, they cannot substitute for the individual judgment brought to each clinical situation by the patient's family physician. As with all clinical reference resources, they reflect the best understanding of the science of medicine at the time of publication, but they should be used with the clear understanding that continued research may result in new knowledge and recommendations. These recommendations are only one element in the complex process of improving the health of America. To be effective, the recommendations must be implemented. As such, physicians require continuing medical education to assist them with making decisions about specific clinical considerations.

Physicians should also be kept up to date on new treatment therapies, changes to therapies, or warnings associated with existing therapies. Provide recommendations regarding new FDA approved medications for the treatment of IBD; including safety, efficacy, tolerance, and cost considerations relative to currently available options. Recent examples include, but are not limited to:[23]

- Entyvio (vedolizumab); Millenium Pharmaceuticals; For the treatment of adults with ulcerative colitis and Crohn's disease, Approved May of 2014
- Tysabri (natalizumab); Biogen IDEC; For the maintenance treatment of moderate to severe Crohn’s disease, Approved January 2008

- Cimzia (certolizumab pegol); UCB; For the treatment of Crohn's disease, Approved April 2008
- Entocort EC (budesonide); AstraZeneca; Capsules for the treatment of mild-to-moderate, active Crohn's disease, Approved October 2001

The American Academy of Family Physicians Academy has participated in the Core Measures Collaborative (the Collaborative) convened by America's Health Insurance Plans (AHIP) since August 2014. The Collaborative is a multi-stakeholder effort working to define core measure sets of various specialties promoting alignment and harmonization of measure use and collection across both public and private payers.

Participants in the Collaborative included Centers for Medicare and Medicaid Services (CMS), the National Quality Forum (NQF), private payers, provider organizations, employers, and patient and consumer groups. This effort exists to decrease physician burden by reducing variability in measure selection, specifications and implementation– making quality measurement more useful and meaningful for consumers, employers, as well as public and private clinicians.

With significant AAFP input, a PCMH/ACO/Primary Care Core Measure Set has been developed for primary care. The goal of this set is to decrease burden and allow for more congruence between payer reporting programs.[24]

Resources: Evidence-Based Practice Recommendations/Guidelines/Performance Measures

- Ulcerative colitis[20]
- ACG Ulcerative colitis practice guidelines in adults[25]
- ACG Management of Crohn's disease in adults[26]
- AGA IBD Clinical Guidelines[27]
- Diagnosis and management of Crohn's disease[21]
- AGA medical position statement on the diagnosis and management of colorectal neoplasia in inflammatory bowel disease[28]
- ACR Appropriateness Criteria: Crohn disease[29]
- ASGE guideline: endoscopy in the diagnosis and treatment of inflammatory bowel disease[30]
- NICE clinical guideline (CG152): the management of Crohn's disease in adults, children and young people[31]
- NICE Colonoscopic surveillance for prevention of colorectal cancer in people with ulcerative colitis, Crohn's disease or adenomas[32]
- Imaging techniques for assessment of inflammatory bowel disease: joint ECCO and ESGAR evidence-based consensus guidelines[33]
- Adding health education specialists to your practice[34]
- Envisioning new roles for medical assistants: strategies from patient-centered medical homes[35]
- The benefits of using care coordinators in primary care: a case study[36]
- Engaging Patients in Collaborative Care Plans[37]

- The Use of Symptom Diaries in Outpatient Care[38]
- Health Coaching: Teaching Patients to Fish[39]
- Medication adherence: we didn't ask and they didn't tell[40]
- Encouraging patients to change unhealthy behaviors with motivational interviewing[41]
- Integrating a behavioral health specialist into your practice[42]
- Simple tools to increase patient satisfaction with the referral process[43]
- FamilyDoctor.org. Inflammatory Bowel Disease | Overview (patient education)[44]

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