Body System: Gastrointestinal		
Session Topic: Irritable Bowel Syndrome (IBS)		
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**
• Knowledge gaps related to applying evidence-based diagnostic criteria for the evaluation of IBS in patients who present with recurrent and episodic abdominal pain. • Knowledge gaps related to the identification of red flags indicating a need to investigate for other diseases, and subsequent referral and follow-up with a gastroenterologist. • Knowledge gaps related to the use of evidence-based treatment strategies that foster patient adherence. • Knowledge and practice gaps with regard to coaching patients in the use of food diaries; diagnosing IBS (e.g. Rome criteria, Bristol scale); understanding the safety and efficacy of current and new medications; and counseling patients about diet and lifestyle modification.	1. Apply evidence-based diagnostic criteria to evaluate patients presenting with recurrent or episodic abdominal pain for IBS. 2. Establish referral and follow-up protocol with a gastroenterologist for patients exhibiting red flags for other which endoscopic evaluation should be considered. 3. Develop treatment plans that involve positive patient-physician communication, shared decision making, and follow-up strategies that result in symptom relief and improved quality of life.	Learners will submit written commitment to change statements on the session evaluation, indicating how they plan to implement presented practice recommendations.

• 2016 Rome Foundation release Rome IV criteria		

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 tools, resources, and strategies to foster the implementation of evidence-based IBS diagnosis and management guidelines into practice
- Provide case-based examples to illustrate the identification of red flags indicating the need for further evaluation of other diseases and possible referral
- Provide specific strategies and resources for developing collaborative treatment plans that involve positive patient-physician communication, shared decision making, and follow-up strategies that result in symptom relief and improved quality of life
- Provide recommendations regarding guidelines for Medicare reimbursement.
- Provide recommendations to maximize office efficiency and guideline adherence to the diagnosis and management of IBS
- Provide an overview of newly available treatments, including efficacy, safety, contraindications, and cost/benefit relative to existing treatments.

Needs Assessment:

With between 2.4 and 3.5 million annual physician visits, irritable bowel syndrome (IBS) is the most common functional gastrointestinal (GI) disorder in the U.S.[1] IBS treatment in the U.S. has an estimated cost between $1.7 billion and $10 billion (excluding prescription and OTC drug costs), and nearly $20 billion in indirect cost.[2] The 15 million office visits for abdominal pain in 2010 do not account for the 76% of IBS sufferers who are undiagnosed.[3]

Data from a recent American Academy of Family Physicians (AAFP) CME Needs Assessment Survey indicate that family physicians have gaps in the knowledge and medical skill to manage patients with IBS; counsel patients regarding diets, and nutrition; and order appropriate diagnostic testing in the diagnosis of IBS.[4] Additionally, CME outcomes data from 2014 and 2015 AAFP FMX (formerly Assembly): *Irritable Bowel Syndrome (IBS): Evidence-Based Approach* sessions suggest that family physicians have knowledge and practice gaps with regard to coaching patients in the use of food diaries; diagnosing IBS (e.g. Rome III, Bristol scale); differentiating from chronic constipation; understanding the safety and efficacy of current and new medications; and counseling patients about diet and lifestyle modification.[5,6]

Physicians tend to have no or limited knowledge of appropriate diagnostic criteria for IBS; therefore approaching IBS as a diagnosis of exclusion, and perform more unnecessary tests as a result.[7-10] Diagnosing patients who present with abdominal pain can be challenging to properly evaluate without overusing diagnostic tests and consultation.[11] ROME III is often cited as the preferred diagnostic tool, however, it is more commonly used in research and less often in clinical practice; therefore, family physicians should consider the diagnosis and management of IBS as outlined by Thad Wilkins, MD; Christina Peptone, MD; Biju Alex, MD; and Robert R. Schade, MD in the September 1, 2012 issue of American Family Physician. Evidence-bases clinical recommendations from that article are summarized as follows:[12]

- The absence of abdominal pain can be used to rule out IBS.
- Routine blood and stool studies are not recommended in the diagnosis of IBS.
- Routine testing for celiac disease should be considered in patients with diarrhea-predominant or mixed presentation IBS.
- The presence of alarm features in patients with IBS symptoms should prompt additional testing with colonoscopy and biopsy to evaluate for other conditions.
- Exercise, probiotics, antibiotics, antispasmodics, antidepressants, psychological treatments, and peppermint oil may improve IBS symptoms.

The Rome Foundation has since released (2016) Rome IV diagnostic criteria. Physicians need continuing medical education to learn how the updated criteria will impact care delivered to their patients.

The American Gastroenterological Association Institute Guideline on the Pharmacological Management of Irritable Bowel Syndrome provides the following guidelines for the pharmacological management of IBS:[13]

- The AGA recommends using linaclotide (over no drug treatment) in patients with IBS-C. (Strong recommendation; High-quality evidence)
- The AGA suggests using lubiprostone (over no drug treatment) in patients with IBS-C. (Conditional recommendation; Moderate-quality evidence)
- The AGA suggests using laxatives (over no drug treatment) in patients with IBS-C. (Conditional recommendation; Low-quality evidence)
- The AGA suggests using rifaximin (over no drug treatment) in patients with IBS–D. (Conditional recommendation; Moderate-quality evidence)
- The AGA suggests using alosetron (over no drug treatment) in patients with IBS-D to improve global symptoms. (Conditional recommendation; Moderate evidence)

- The AGA suggests using loperamide (over no drug treatment) in patients with IBS-D. (Conditional recommendation; Very low-quality evidence)
- The AGA suggests using tricyclic antidepressants (over no drug treatment) in patients with IBS. (Conditional recommendation; Low-quality evidence)
- The AGA suggests against using selective serotonin reuptake inhibitors for patients with IBS. (Conditional recommendation; Low-quality evidence)
- The AGA suggests using antispasmodics (over no drug treatment) in patients with IBS. (Conditional recommendation; Low-quality evidence)

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.[14] Provide recommendations regarding new FDA approved medications for the treatment of IBS; including safety, efficacy, tolerance, and cost considerations relative to currently available options. Since the publication of the AGA Pharmacological Management guidelines, the FDA has approved newer agents, including:[15]

- Viberzi (eluxadoline); Actavis; For the treatment of irritable bowel syndrome with diarrhea, Approved May 2015
- Xifaxan (rifaximin); Salix Pharmaceuticals; For the treatment of irritable bowel syndrome with diarrhea , Approved May 2015

Additionally, IBS is a complicated condition which requires physicians to identify and treat associated psychosocial factors (e.g. depression) for optimal patient management.[12,16] The goals of IBS treatment are symptom relief and improved quality of life and include therapies to improve symptoms, improve stool frequency, and treat associated psychological factors.[12] Effective treatment can be achieved with positive patient-physician communication, shared decision making, and effective follow-up strategies that should result in fewer return office visits for IBS.[17-19] Family physicians should develop evidence-based treatment strategies that may include exercise, OTC laxatives, antidiarrheals, probiotics, antibiotics, antispasmodics, selective C-2 chloride channel activators, antidepressants, CAM therapies, 5-HT_3 antagonists, or 5-HT_4 antagonists depending on diagnosis and IBS severity score.[12] Family physicians should utilized evidence-based recommendations for the diagnosis and management of IBS, such as those release by the American College of Gastroenterology.[20]

A recent review of the literature suggests a need to provide continuing medical education to physicians with regard to the following:

- As patients tend to "migrate" over time from one diagnosis to the other, which, coupled with limited knowledge of diagnostic criteria, likely enhances the challenge of making an accurate diagnosis in primary care and specialty practices[21-23]
- Antidepressants and psychological therapies are effective in treating the symptoms of IBS.[24]

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

- Irritable bowel syndrome: diagnostic approaches in clinical practice[7]
- AGA IBS Clinical Guidelines[13]
- Diagnosing the patient with abdominal pain and altered bowel habits: is it irritable bowel syndrome[11]
- Diagnosis and management of IBS in adults[12]
- Thinking on paper: documenting decision making[19]
- ACG Releases Recommendations on the Management of Irritable Bowel Syndrome[20]
- An evidence-based position statement on the management of irritable bowel syndrome[25]
- Evidence-based position statement on the management of irritable bowel syndrome in North America[26]
- How to reduce your malpractice risk[27]
- Thinking on paper: documenting decision making[19]
- Simple tools to increase patient satisfaction with the referral[28]
- Exam documentation: charting within the guidelines[29]
- Health Coaching: Teaching Patients to Fish[30]
- Simple tools to increase patient satisfaction with the referral process[28]
- Engaging Patients in Collaborative Care Plans[31]
- Encouraging patients to change unhealthy behaviors with motivational interviewing[32]
- FamilyDoctor.org. Irritable Bowel Syndrome | Overview (patient resource)[33]

References

1. International Foundation for Functional Gastrointestinal Disorders (IFFGD). Statistics: IBS. 2013; http://www.aboutibs.org/site/about-ibs/facts-about-ibs/statistics. Accessed May, 2013.

2. Hulisz D. The burden of illness of irritable bowel syndrome: current challenges and hope for the future. *Journal of managed care pharmacy : JMCP*. Jul-Aug 2004;10(4):299-309.

3. Hungin AP, Chang L, Locke GR, Dennis EH, Barghout V. Irritable bowel syndrome in the United States: prevalence, symptom patterns and impact. *Alimentary pharmacology & therapeutics*. Jun 1 2005;21(11):1365-1375.

4. AAFP. 2012 CME Needs Assessment: Clinical Topics. American Academy of Family Physicians; 2012.

5. American Academy of Family Physicians (AAFP). AAFP FMX CME Outcomes Report. Leawood KS: AAFP; 2015.

6. American Academy of Family Physicians (AAFP). AAFP Assembly CME Outcomes Report. Leawood KS: AAFP; 2014.

7. Burbige EJ. Irritable bowel syndrome: diagnostic approaches in clinical practice. *Clinical and experimental gastroenterology.* 2010;3:127-137.

8. Spiegel BM, Farid M, Esrailian E, Talley J, Chang L. Is irritable bowel syndrome a diagnosis of exclusion?: a survey of primary care providers, gastroenterologists, and IBS experts. *The American journal of gastroenterology.* Apr 2010;105(4):848-858.

9. Jellema P, van der Windt DA, Schellevis FG, van der Horst HE. Systematic review: accuracy of symptom-based criteria for diagnosis of irritable bowel syndrome in primary care. *Alimentary pharmacology & therapeutics.* Oct 2009;30(7):695-706.

10. Engsbro AL, Begtrup LM, Kjeldsen J, et al. Patients Suspected of Irritable Bowel Syndrome-Cross-Sectional Study Exploring the Sensitivity of Rome III Criteria in Primary Care. *The American journal of gastroenterology.* Feb 19 2013.

11. Holten KB, Wetherington A, Bankston L. Diagnosing the patient with abdominal pain and altered bowel habits: is it irritable bowel syndrome? *American family physician.* May 15 2003;67(10):2157-2162.

12. Wilkins T, Pepitone C, Alex B, Schade RR. Diagnosis and management of IBS in adults. *American family physician.* Sep 1 2012;86(5):419-426.

13. Sultan S, Falck-Ytter Y, Inadomi JM. The AGA institute process for developing clinical practice guidelines part one: grading the evidence. *Clinical gastroenterology and hepatology : the official clinical practice journal of the American Gastroenterological Association.* Apr 2013;11(4):329-332.

14. Foxx-Orenstein AE. New and emerging therapies for the treatment of irritable bowel syndrome: an update for gastroenterologists. *Therapeutic advances in gastroenterology.* 2016;9(3):354-375.

15. CenterWatch. FDA Approved Drugs for Nutrition and Weight Loss. 2015; https://www.centerwatch.com/drug-information/fda-approved-drugs/therapeutic-area/27/nutrition-and-weight-loss. Accessed Mar, 2015.

16. Spiller R, Aziz Q, Creed F, et al. Guidelines on the irritable bowel syndrome: mechanisms and practical management. *Gut.* Dec 2007;56(12):1770-1798.

17. Legare F, Ratte S, Stacey D, et al. Interventions for improving the adoption of shared decision making by healthcare professionals. *Cochrane Database Syst Rev.* 2010(5):CD006732.

18. Legare F, Turcotte S, Stacey D, Ratte S, Kryworuchko J, Graham ID. Patients' perceptions of sharing in decisions: a systematic review of interventions to enhance shared decision making in routine clinical practice. *The patient.* 2012;5(1):1-19.

19. Edsall RL, Moore KJ. Thinking on paper: documenting decision making. *Family practice management.* Jul-Aug 2010;17(4):10-15.

20. Graham L. ACG Releases Recommendations on the Management of Irritable Bowel Syndrome. *American family physician.* June 15, 2009 2009;79(12):1108-1117.

21. Halder SL, Locke GR, 3rd, Schleck CD, Zinsmeister AR, Melton LJ, 3rd, Talley NJ. Natural history of functional gastrointestinal disorders: a 12-year longitudinal population-based study. *Gastroenterology.* Sep 2007;133(3):799-807.

22. Soares RL. Irritable bowel syndrome: a clinical review. *World journal of gastroenterology : WJG.* Sep 14 2014;20(34):12144-12160.

23. Heidelbaugh JJ, Stelwagon M, Miller SA, Shea EP, Chey WD. The spectrum of constipation-predominant irritable bowel syndrome and chronic idiopathic constipation:

US survey assessing symptoms, care seeking, and disease burden. *The American journal of gastroenterology.* Apr 2015;110(4):580-587.

24. Hughes LS. Antidepressants and Psychological Therapies Are Effective for IBS. *American family physician.* Jan 15 2015;91(2):134.

25. American College of Gastroenterology Task Force on Irritable Bowel S, Brandt LJ, Chey WD, et al. An evidence-based position statement on the management of irritable bowel syndrome. *The American journal of gastroenterology.* Jan 2009;104 Suppl 1:S1-35.

26. American College of Gastroenterology Functional Gastrointestinal Disorders Task F. Evidence-based position statement on the management of irritable bowel syndrome in North America. *The American journal of gastroenterology.* Nov 2002;97(11 Suppl):S1-5.

27. Achar S, Wu W. How to reduce your malpractice risk. *Family practice management.* Jul-Aug 2012;19(4):21-26.

28. Jarve RK, Dool DW. Simple tools to increase patient satisfaction with the referral process. *Family practice management.* Nov-Dec 2011;18(6):9-14.

29. Moore KJ. Exam documentation: charting within the guidelines. *Family practice management.* May-Jun 2010;17(3):24-29.

30. Ghorob A. Health Coaching: Teaching Patients to Fish. *Family practice management.* 2013;20(3):40-42.

31. Mauksch L, Safford B. Engaging Patients in Collaborative Care Plans. *Family practice management.* 2013;20(3):35-39.

32. Stewart EE, Fox CH. Encouraging patients to change unhealthy behaviors with motivational interviewing. *Family practice management.* May-Jun 2011;18(3):21-25.

33. FamilyDoctor.org. Irritable Bowel Syndrome | Overview. 1996; http://familydoctor.org/familydoctor/en/diseases-conditions/irritable-bowel-syndrome.html. Accessed August, 2013.

