

NEEDS ASSESSMENT

Performance Gap Based on Guidelines/Standards/ Expert Interviews	Educational Need	Preliminary Learning Objectives Upon completion of this educational activity, participants should be able to:	Desired Results
Adult patients have received suboptimal care for the maintenance of response and remission of UC and CD	Clinicians involved in the care of adult patients with IBD would benefit from education regarding strategies for implementing evidence-based guidelines and recommendations in the treatment of patients.	Apply evidence-based treatment guidelines to maintain response and remission in adult patients with IBD	Clinicians will treat adult patients with IBD with the appropriate therapy for the individual patient.
Pediatric patients with IBD have received suboptimal care	Because there currently are no worldwide guidelines regarding the optimal treatment of children with IBD, there is a need to translate evidence-based data and expert consensus to treat these patients with appropriate care for the individual patient.	Design effective monitoring and maintenance strategies for pediatric patients with IBD	Clinicians will monitor and treat pediatric patients with IBD with the appropriate therapy for the individual patient.
Nearly 50% of patients with IBD do not take their medication as prescribed, indicating significant non-adherence	Clinicians involved in the care of patients with IBD would benefit from receiving strategies to increase their patients' medication adherence.	Educate patients with IBD regarding the importance of adhering to maintenance therapy	Clinicians will develop strategies to increase patients' medication adherence.

Background

Crohn's disease (CD) and ulcerative colitis (UC)—known collectively as IBD (inflammatory bowel disease)—are chronic, inflammatory disorders that can become disabling over time. Both CD and UC are characterized by alternating periods of active symptomatic disease and periods of remission. Specific treatment recommendations in the recently updated CD and UC management guidelines for adults^{1,2} outline a sequential approach to therapy, with initial treatment aimed at inducing clinical remission in patients with acute disease and then maintaining response or remission^{1,2}. Because IBD is a lifelong chronic inflammatory disorder, the importance of maintaining symptomatic control and remission is critical in order to minimize short- and long-term complications and improve the outcomes and quality of life for patients with this disease.² Although the treatment of active IBD has improved considerably, a high rate of relapse is still associated with the disease and the maintenance of remission remains an unmet medical need.³ The symposium and enduring activity outlined below have been designed to deliver information that will provide new opportunities for clinicians to improve IBD care and achieve better outcomes for adult and pediatric patients with these lifelong, potentially debilitating diseases.

Practice Gaps and Educational Needs

The practice gaps and educational needs were determined by an extensive review of the literature and an in-depth interview with Dr Stephen B. Hanauer, Professor of Medicine and Clinical Pharmacology; Chief, Section of Gastroenterology, Hepatology and Nutrition at the University of Chicago Pritzker School of Medicine in Chicago, Illinois.

Practice Gap 1: Adult patients have received suboptimal care for the maintenance of response and remission of UC and CD.

The need for physician education regarding optimal therapeutic strategies is highlighted by the results of a study⁴ of symptomatic adult patients with IBD, which revealed:

- Patients with IBD have been prescribed sub-optimal maintenance doses of 5-ASA⁴
- 77% of patients with IBD had been treated with corticosteroids for prolonged periods of time without an attempt to employ corticosteroid sparing agents⁴
- 75% of patients with distal UC were not receiving rectal 5-ASA therapy⁴
- Of patients who had ever received steroid therapy for greater than 3 months, 78% had not undergone bone mineral density scanning, and 78% had not received appropriate pharmacologic therapy for prevention of metabolic bone disease⁴

This study was the first to clearly indicate a gap in the quality of care being delivered to patients with IBD.⁵ A more recent study (the first study to examine barriers to the use of the AGA Guidelines on Osteoporosis in IBD) reported the results of a survey regarding whether clinicians were utilizing published practice guidelines to appropriately evaluate and manage osteoporosis in their practices.⁶ The survey results revealed that most of the responding physicians did not utilize these guidelines for their IBD patients, some citing lack of knowledge of the guidelines as a barrier. Unfortunately, the results suggest that the majority of IBD patients at risk for metabolic bone disease are not being evaluated or treated, creating a serious potential comorbidity for numerous patients. This highlights the need for physician education regarding the importance of adoption of guidelines in clinical practice.

Educational Need: Clinicians involved in the care of adult patients with IBD would benefit from education regarding strategies for implementing evidence-based guidelines and recommendations in the treatment of patients.

Practice Gap 2: Pediatric patients with IBD have received suboptimal care.

There currently are no worldwide guidelines regarding the optimal treatment of children with IBD⁷, potentially resulting in variation of care for this population. The need for physician education regarding optimal therapeutic strategies is highlighted by the results of a recent large study⁸ of 246 pediatric patients with IBD at 48 sites, which revealed variation in care:

- Thiopurine methyltransferase (TPMT) was not performed in 39% of patients before treatment with a thiopurine; of those who did receive TPMT testing, 40% of patients received an initial dose of thiopurine that was lower than recommended⁸
- More than 25% of patients on maintenance thiopurine therapy were treated with a dose that was lower than recommended⁸
- 30% of patients did not receive testing for tuberculosis before treatment initiation with infliximab⁸
- 36% of severely underweight patients were not receiving a multivitamin supplement, supplemental formula or tube feeding.⁸

Educational Need: Because there currently are no worldwide guidelines regarding the optimal treatment of children with IBD, there is a need to translate evidence-based data and expert consensus to treat these patients with appropriate care for the individual patient.

Practice Gap 3: Nearly 50% of patients with IBD do not take their medication as prescribed, indicating significant non-adherence.

Patient non-adherence to pharmacotherapy for IBD remains an important care gap.

- Recent studies indicate that nearly 50% of patients with IBD do not take their medication as prescribed, and over 12% had no detectable levels of drug, indicating absolute non-adherence.⁹
- When specifically evaluating adherence to 5-ASA therapy, another recent study reported that only half (54%) of the patients with UC had taken all of their prescribed 5-ASA medication in the previous seven days.¹⁰
- Patient non-adherence to prescribed 5-ASA therapy has been associated with an increase in risk of relapse and resulting decrease in quality of life. In contrast, patient adherence to 5-ASA therapy has been associated with long-term benefits and may be associated with a decreased risk of colorectal cancer.¹¹
- The results of another recent study show that nonadherent patients with IBD suffer a more severe disease course.¹²

Adherence to medication is complex and multifactorial, with studies demonstrating a variety of reasons why patients fail to adhere to their treatment regimens (ie. treatment duration, young age, side effects of medications, and having a period of symptom reduction during remission).¹² A recent study¹² showed that adherence to the treatment is influenced by patient awareness about their disease and medications. The authors concluded that patients should be intensively instructed about the importance of treatment adherence in order to achieve optimal outcomes.¹²

Therefore, effective interventions to improved adherence to these medications are needed, and gastroenterologists should educate patients with IBD regarding the importance of adhering to maintenance therapy and how adherence can influence their treatment success.¹²

Educational Need: Clinicians involved in the care of patients with IBD would benefit from receiving strategies to increase their patients' medication adherence.

References

1. Lichtenstein GR, Hanauer SB, Sandborn WJ. Management of Crohn's disease in adults. *Am J Gastroenterol*. 2009;104:465-483.
2. Kornbluth A, Sachar DB. Ulcerative colitis practice guidelines in adults: American College of Gastroenterology, Practice Parameters Committee. *Am J Gastroenterol*. 2010;105:501-523.
3. Sandborn WJ, Feagan BG, Lichtenstein GR. Medical management of mild to moderate Crohn's disease: evidence-based treatment algorithms for induction and maintenance of remission. *Aliment Pharmacol Ther*. 2007;26:987-1003.
4. Reddy SI, Friedman S, Telford JJ, et al. Are patients with inflammatory bowel disease receiving optimal care? *Am J Gastroenterol*. 2005;100:1357-1361.
5. Kappelman M, Palmer L et al. Quality of care in inflammatory bowel disease: a review and discussion. *Inflamm Bowel Dis*. 2010;16:125-133.

6. Kornbluth A, Hayes M, Feldman S, et al. Do guidelines matter? Implementation of the ACG and A GA osteoporosis screening guidelines in inflammatory bowel disease (IBD) patients who meet the guidelines' criteria. *Am J Gastroenterol*. 2006;101:1546-1550.
7. Markowitz J. Are children with IBD receiving the optimal care? *J Pediatr Gastroenterol Nutr*. 2006;43(2):S23.
8. Colletti RB, Baldasanno RN, Milov DE, et al. Variation in care in pediatric crohn's disease. *J Pediatr Gastroenterol Nutr*. 2009;49(3):297-303.
9. Lopez-Sanroman A, Bermejo F. Review Article: How to control and improve adherence to therapy in inflammatory bowel disease. *Aliment Pharmacol Ther*. 2006; 24 (Suppl 3):45-49.
10. Medical News Today. Accessed online October 20, 2009. <http://www.medicalnewstoday.com/articles/71394.php>
11. Higgins P, Rubin D, et al. Systematic Review: impact of non-adherence to 5-ASA products on the frequency and cost of ulcerative colitis flares. *Aliment Pharmacol Ther*. 2009;29:247-257.
12. Cervany P, Bortlik M et al. Systematic Nonadherence in Inflammatory Bowel Disease: Results of Factor Analysis. *Inflammatory Bowel Diseases*. 2007;13(10):1244-1249.

Target Audience

This activity has been designed to meet the educational needs of gastroenterologists and other health care professionals involved in the care of patients with IBD.

Educational Objectives

At the conclusion of this activity, participants will be able to:

- Apply evidence-based treatment guidelines to maintain response and remission in adult patients with IBD
- Design effective monitoring and maintenance strategies for pediatric patients with IBD
- Educate patients with IBD regarding the importance of adhering to maintenance therapy

Desired Results

This activity has been designed to change knowledge and competence and the participant's ability to:

- Treat adult patients with IBD with the appropriate therapy for the individual patient
- Monitor and treat pediatric patients with IBD with the appropriate therapy for the individual patient
- Develop strategies to increase patients' medication adherence

The Educational Partners will measure the effectiveness of our CME activities in meeting the identified desired outcomes via the *Outcomes Measurement and Activity Evaluation* section detailed within this proposal.