



Clinical Updates for Nurse Practitioners and Physician Assistants: 2016



Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

Grant # IGRC 2016-028

**Final Outcome Report
for 1 City**

Report Date: January 11, 2017

Course Director

Gregg Sherman, MD
Family Practice
Plantation, FL

Activity Planning Committee

Gregg Sherman, MD
Harvey C. Parker, PhD, CCMEP
Michelle Frisch, MPH, CCMEP
Alan Goodstat, LCSW
Cheryl C. Kay



Course Accreditation

The Association of Black Cardiologists, Inc. is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The Association of Black Cardiologists, Inc. designates this live activity for a maximum of 1 *AMA PRA Category 1 Credit*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

The National Association for Continuing Education is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The National Association for Continuing Education designates this live activity for a maximum of 6 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

National Association for Continuing Education is approved as a provider of nurse practitioner continuing education by the American Association of Nurse Practitioners. AANP Provider Number 121222. This program has been approved for 7 contact hours of continuing education (which includes 3.25 pharmacology hours).

AAPA accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit*[™] from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of 7 Category 1 credits for completing this activity.*

* This applies to the full day CME activity entitled Clinical Updates for Nurse Practitioners and Physician Assistants.



Commercial Support

The Clinical Updates for Nurse Practitioners and Physician Assistants 2016 series of CME activities were supported through educational grants or donations from the following companies:

Allergan
Boehringer Ingelheim Pharmaceuticals, Inc.
BioReference, An OPKO Company
Gilead
Grifols
Novartis
Prometheus
Sanofi US

Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes is supported by an educational grant from Prometheus.



Cities and Dates

Clinical Updates for Nurse Practitioners and Physician Assistants Update 2016 Conference Schedule

September 17, 2016
Orlando, FL

October 22, 2016
Phoenix, AZ

September 24, 2016
Cincinnati, OH

October 29, 2016
Charlotte, NC

October 1, 2016
Pittsburgh, PA

November 5, 2016*
Columbia, SC

October 8, 2016
Fairfax, VA

November 12, 2016
White Plains, NY

October 15, 2016*
Dallas, TX

November 19, 2016
Seattle, WA

***Simulcast and Live Conference**

** **Bolded** cities are where the lecture was given

Enduring Monograph Expected Launch Date – February 1, 2017

Titles of Presentations

Prostate Cancer Screening in the Primary Care Setting:
Understanding the Role of Bio-Markers

Atrial Fibrillation:
Reducing Risk and Individualizing Therapeutic Choices

Screening, Counseling, and Linkage to Care Education in Hepatitis B
(SCALE HBV)

Clinical Challenges in Individualized Heart Failure Treatment

Postprandial Hyperglycemia and GLP-1 Receptor Agonists:
Effective Strategies to Achieve Goals

The Inflammatory State of Psoriasis: New and Emerging Therapies

**Avoiding the Pitfalls in IBD Care:
Diagnostic and Management Strategies to Improve Outcomes**

Chronic Obstructive Pulmonary Disease (COPD) and Alpha-1 Antitrypsin Deficiency (AATD):
Bridging the Gaps in Diagnosis and Treatment

Idiopathic Pulmonary Fibrosis:
Making Sense of Diagnostic and Therapeutic Options in Primary Care

Optimizing Disease Management: IBS and Chronic Idiopathic Constipation

Levels of Evaluation

Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on Moore's model. This outcome study reaches Level 5.

- Level 1: Participation
- Level 2: Satisfaction
- Level 3: Declarative and Procedural Knowledge
- Level 4: Competence
- Level 5: Performance
- Level 6: Patient Health
- Level 7: Community Health

Level 1: Participation

- 339 attendees in 1 city (214 On Site, 126 Remote Simulcast)
- 81% NPs or PAs; 11% Physicians; 7% RNs; 2% Other
- 50% in community-based practice
- 63% PCPs, 7% Cardiologist; 3% Gastroenterology; 27% Other or did not respond
- 97% provide direct patient care

Participation Breakdown

Dallas, TX*	MDs/DOs	NPs	PAs	RNs	Other	TOTAL
Live	2	150	26	22	14	214
Simulcast	22	80	18	4	1	125

Did we reach the right audience? **Yes!**



Level 2: Satisfaction

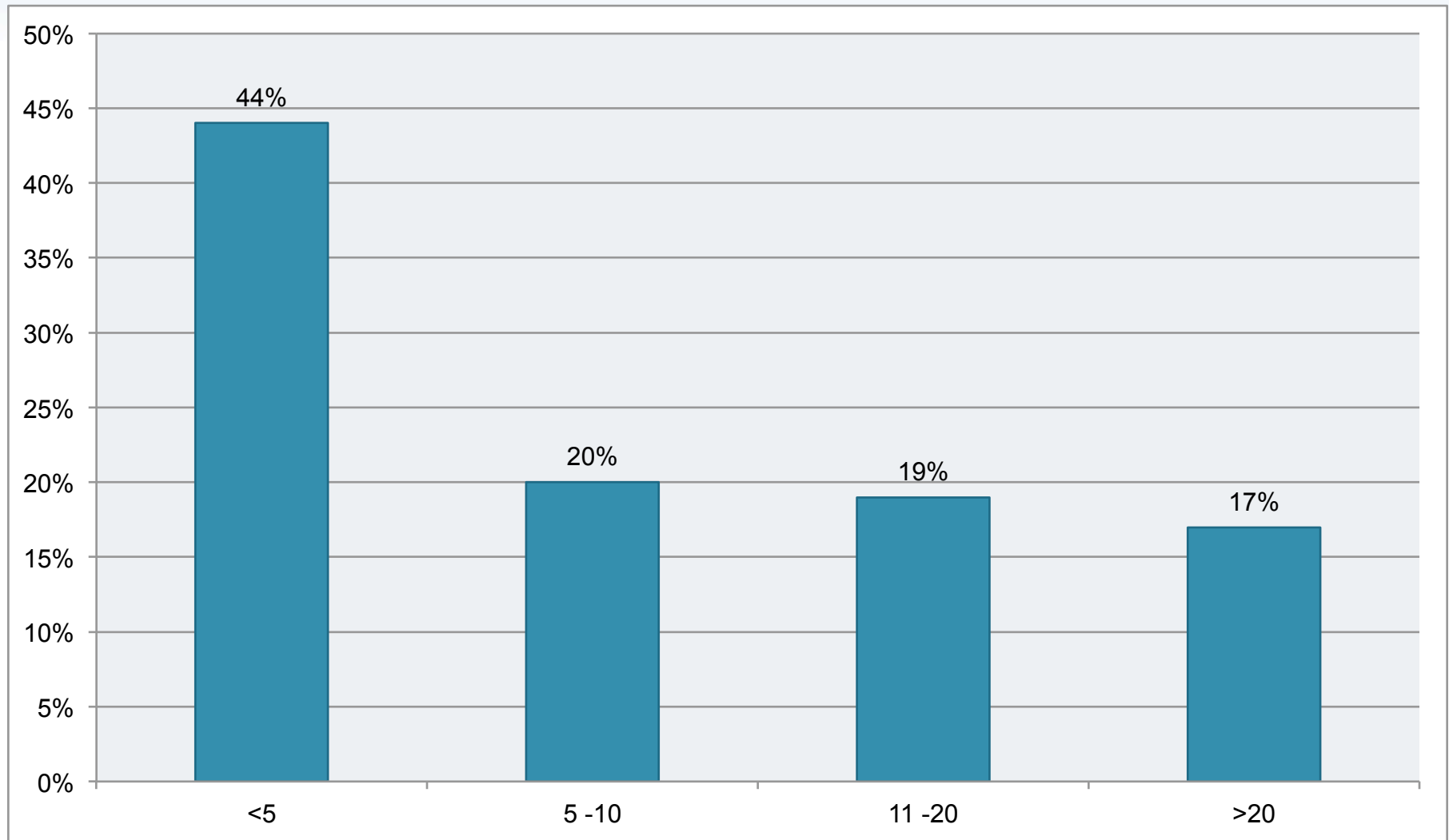
- 99% rated the activity as excellent
- 100% indicated the activity improved their knowledge
- 98% stated that they learned new and useful strategies for patient care
- 99% said they would implement new strategies that they learned in their practice
- 100% said the program was fair-balanced and unbiased

Sample Size: N = approximately 339

Were our learners satisfied? **Yes!** Data was collected in one city for the **Clinical Updates for Nurse Practitioners and Physician Assistants program.**

Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

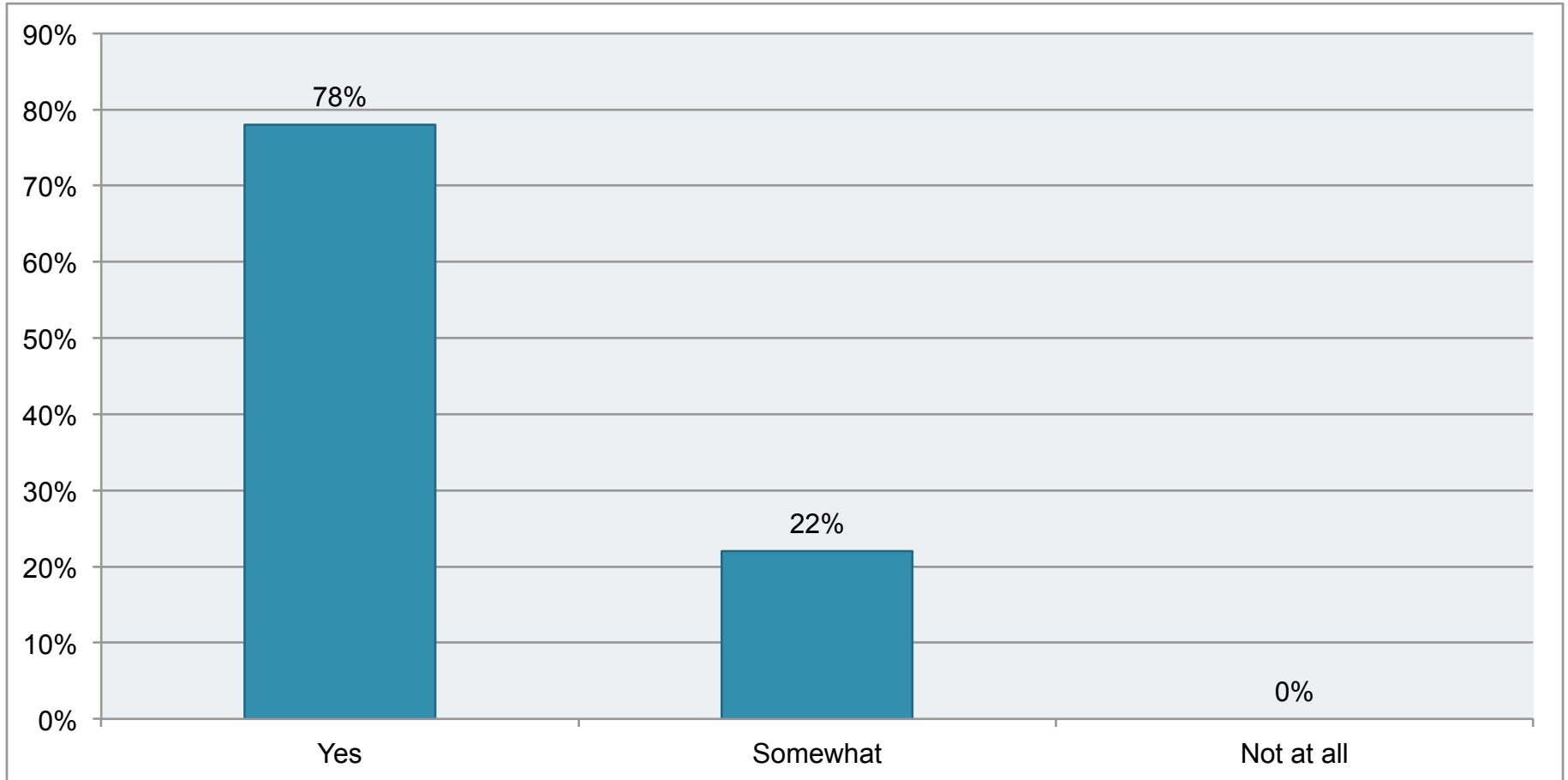
Clinicians number of years in practice:



N = 126

Did Learners Say They Achieved Learning Objective?

Upon completion of this activity, I can now –Describe the impact of delayed diagnosis of inflammatory bowel disease (IBD) on outcomes; Determine when and why a therapeutic regimen is failing; Choose effective treatment strategies for IBD; Identify patients requiring specialist referral for diagnosis and/or treatment of IBD:



Yes! 100% believed they did. Data was collected in 1 city.

Sample Size: N = approximately 339

Outcome Study Methodology

Goal

To determine the effect this CME activity had on learners with respect to competence to apply critical knowledge, confidence in treating patients with diseases or conditions discussed, and change in practice behavior.

Dependent Variables

1. Level 3-5: Knowledge, Competence, and Performance

Case-based vignettes and pre- and post-test knowledge questions were asked with each session in the CME activity. Identical questions were also asked to a sample of attendees 4 weeks after the program to assess retention of knowledge. Responses can demonstrate learning and competence in applying critical knowledge. The use of case vignettes for this purpose has considerable predictive value. Vignettes, or written case simulations, have been widely used as indicators of actual practice behavior.¹

2. Practitioner Confidence

Confidence with the information relates directly to the likeliness of actively using knowledge. Practitioner confidence in his/her ability to diagnose and treat a disease or condition can affect practice behavior patterns.

3. Level 5: Self-Reported Change in Practice Behavior

Four weeks after CME activity, practitioners are asked if they changed practice behavior and what barriers they encountered.

1. Peabody, J.W., J. Luck, P. Glassman, S. Jain, J. Hansen, M. Spell and M. Lee (2004). Measuring the quality of physician practice by using clinical vignettes: a prospective validation study. *Ann Intern Med* 14(10): 771-80.



Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

Faculty

Gerald Dryden, MD, MSPH, MSc, AGAF, FASGE

Learning Objectives

1. Describe the impact of delayed diagnosis of inflammatory bowel disease (IBD) on outcomes.
2. Determine when and why a therapeutic regimen is failing.
3. Choose effective treatment strategies for IBD.
4. Identify patients requiring specialist referral for diagnosis and/or treatment of IBD.

Key Findings

Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

Knowledge/Competence	Learners demonstrated improvement from pre to post-testing in their answers to <i>three</i> out of <i>four</i> of the case-based questions on the diagnosis and management of patients with inflammatory bowel disease.
Confidence	Whereas the majority of learners rated themselves as having very low confidence in their understanding of treating patients with diabetes before the education, most of the learners showed moderate gains in confidence after the program.
Intent to Perform	As a result of this program, 34% participate in the treatment of patients with inflammatory bowel disease, before are considering doing so, while 27% who do, indicated that they will change their treatment methods.
Change of Practice Behavior	87% of learners who responded to our four week survey indicated that they had changed their practice behavior to implement the learning objectives of this program within four weeks after they attended the activity.

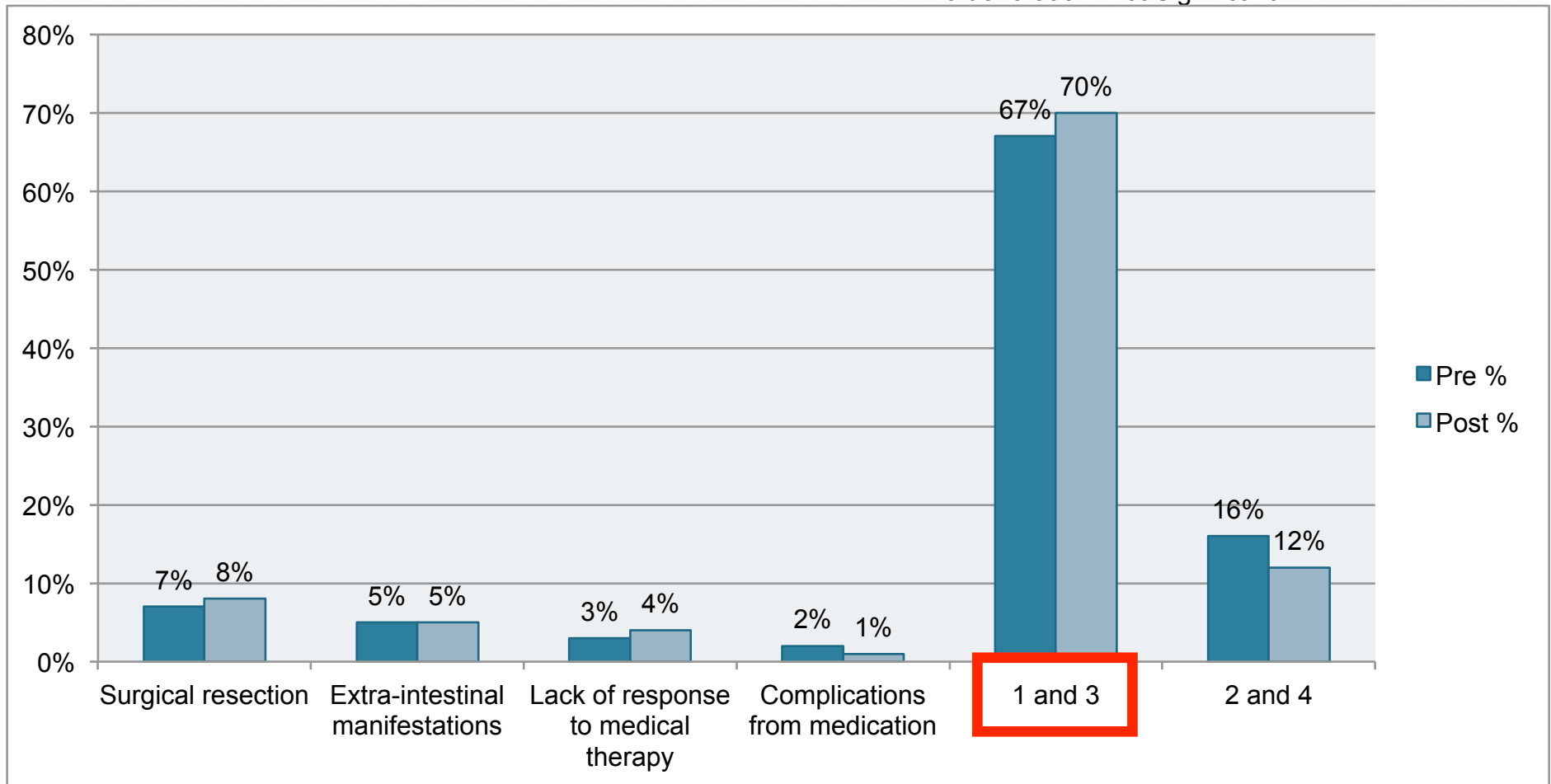
4 Weeks Post N= 104



Case Vignette Knowledge and Competence Assessment Questions (presented before and after lecture—boxed answer is correct)

A delay in diagnosis of Crohn's disease increases the risk of which of the following complications?
(Learning Objective 1)

P Value: 0.530 – Not Significant



Pre N = 130 Post N = 152

Red highlight indicates no significant difference between pre and post testing.

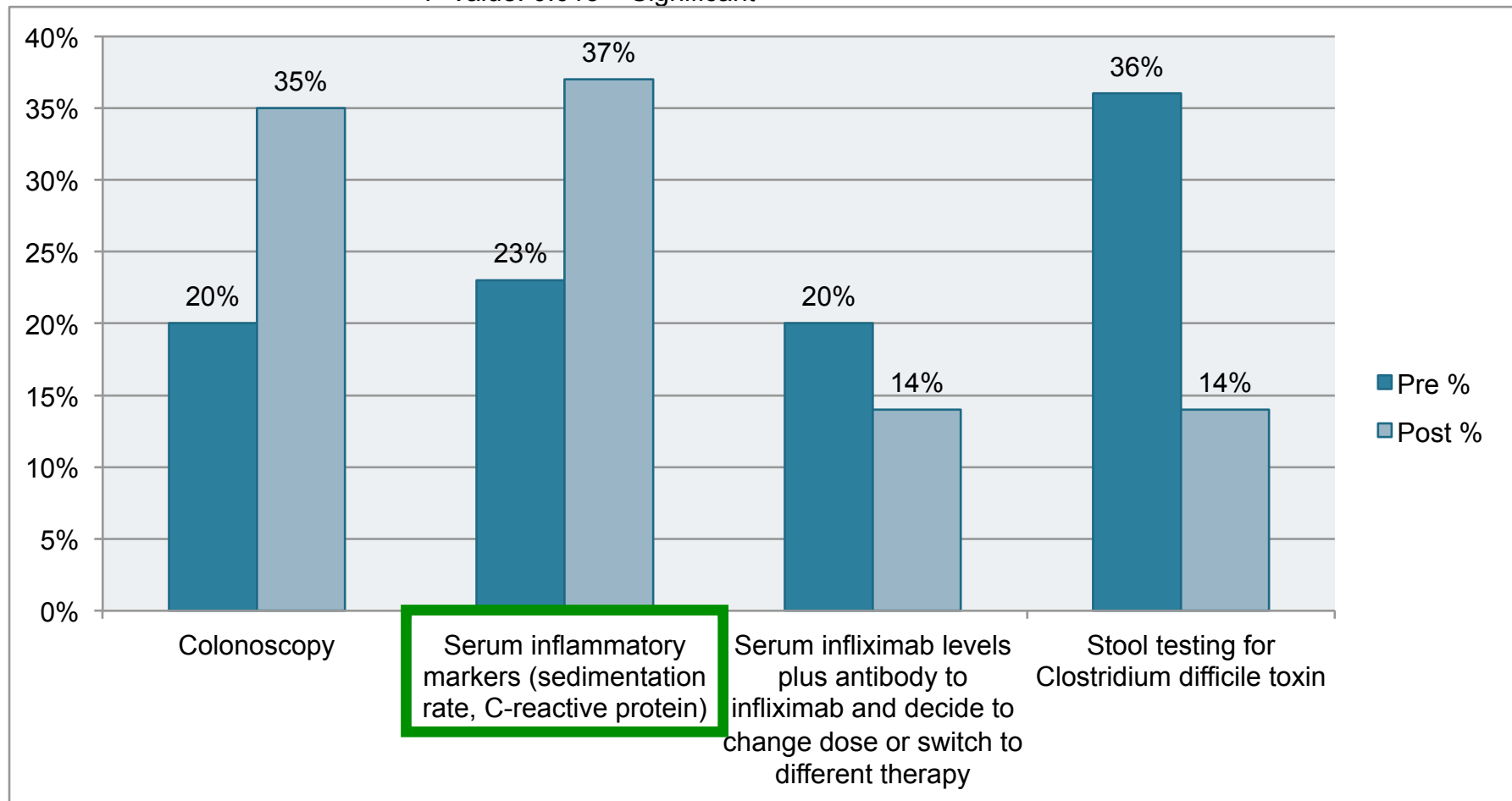
Case Vignette Knowledge and Competence Assessment Questions

(presented before and after lecture—boxed answer is correct)

You fear that return of your patient's UC sx are a result of a flare of their IBD. Which of the following approaches is not helpful in determining a cause of failure?

(Learning Objective 2)

P Value: 0.013 – Significant



Pre N = 133 Post N = 155

Green highlight indicates significant difference between pre and post testing.

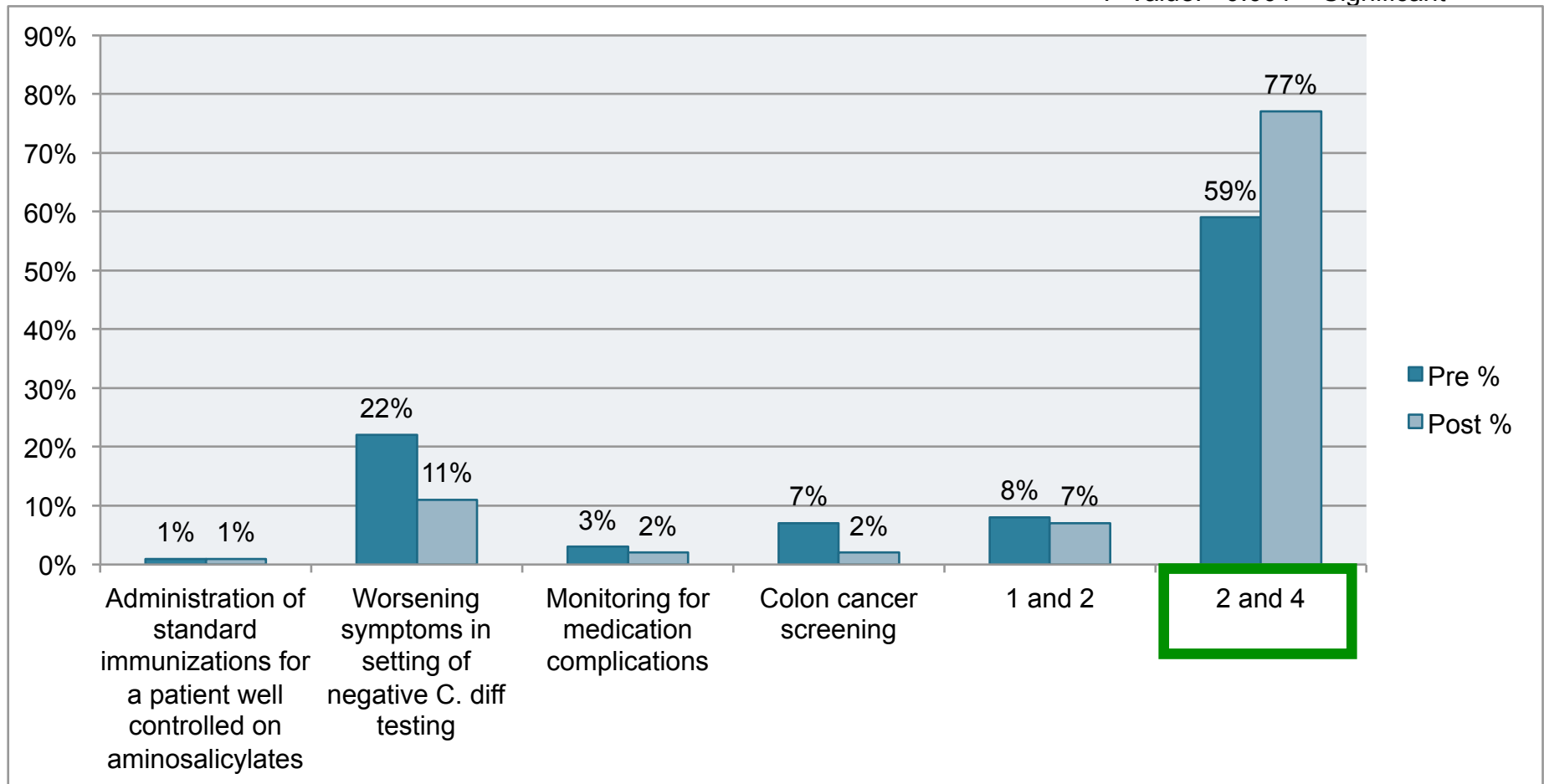
Case Vignette Knowledge and Competence Assessment Questions

(presented before and after lecture—boxed answer is correct)

You have been following a 35 year old female for UC since diagnosis 8 years ago. She has been doing well, but you now have some concerns that you feel should be addressed by a GI specialist. Which of the following should prompt a referral to specialty care?

(Learning Objective 3, 4)

P Value: <0.001 – Significant



Pre N = 151 Post N = 163

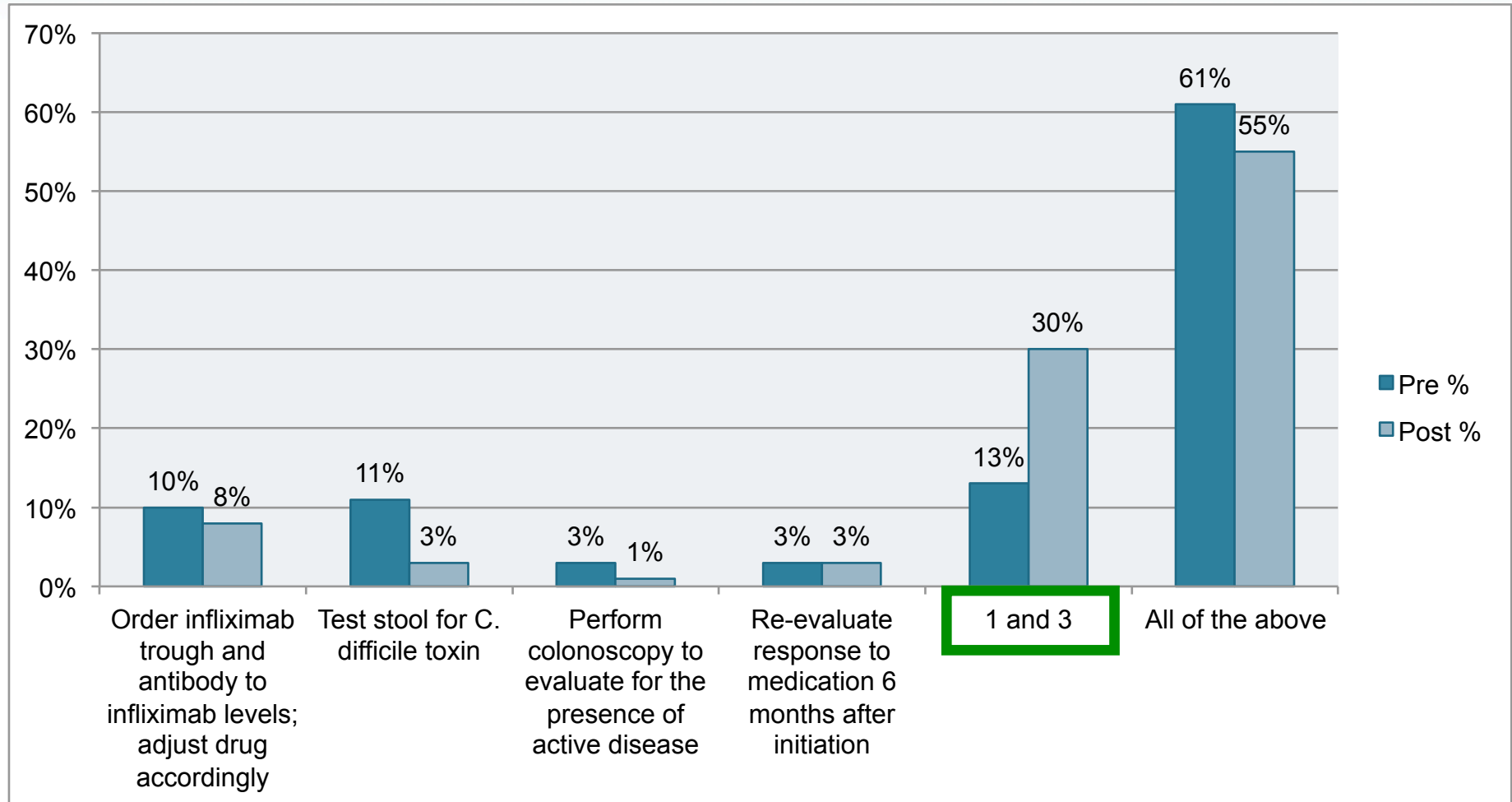
Green highlight indicates significant difference between pre and post testing.

Case Vignette Knowledge and Competence Assessment Questions (presented before and after lecture—boxed answer is correct)

Your patient with severe Crohn's colitis has been controlled on infliximab, but now she presents with worsening RLQ pain and diarrhea. The principle of "Treat to Target" would suggest that you:

(Learning Objectives 2,3,4)

P Value: <0.001 – Significant

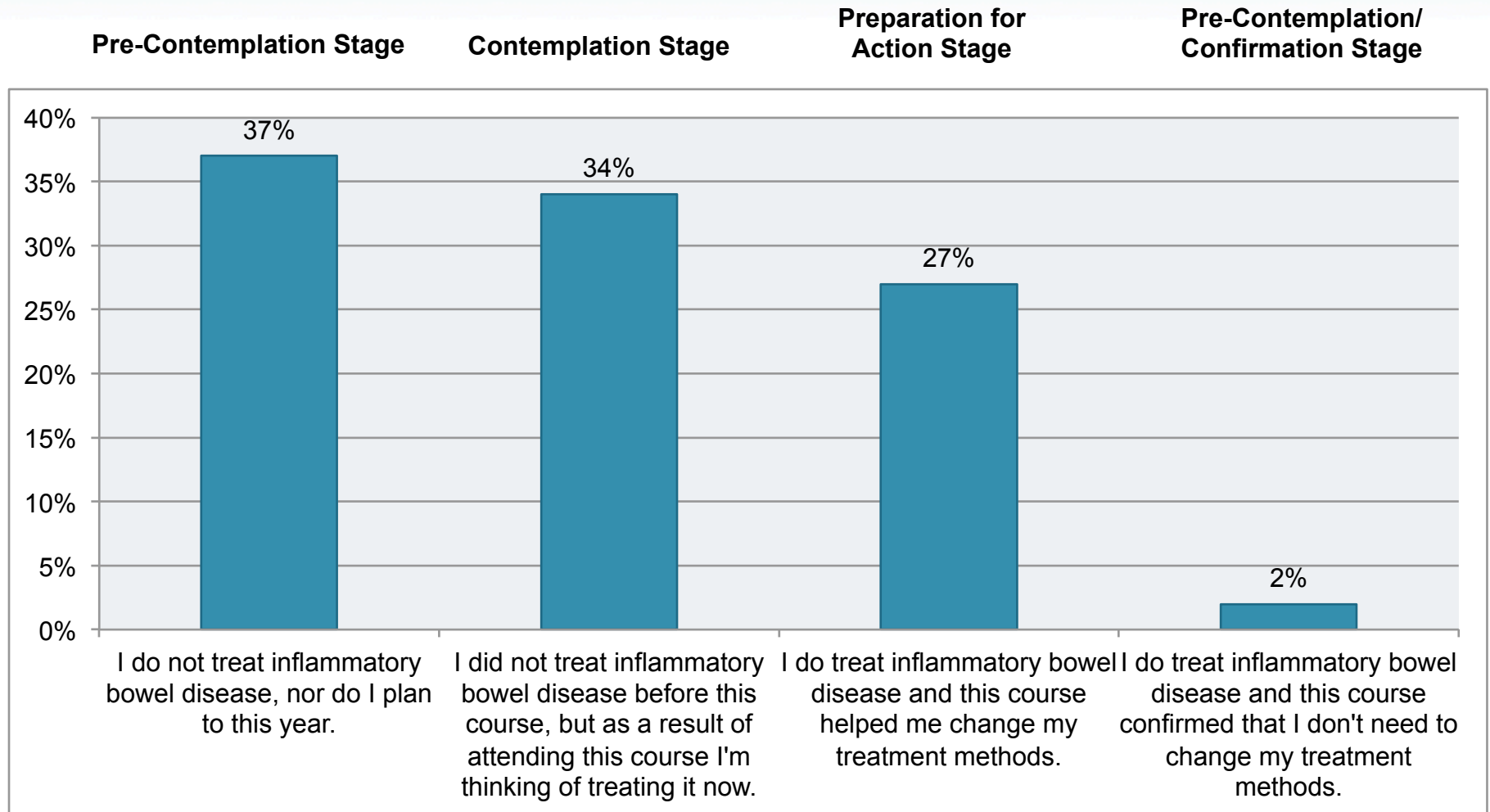


Pre N = 150 Post N = 157

Green highlight indicates significant difference between pre and post testing.

Change in Practice Behavior Question (presented after the lecture)

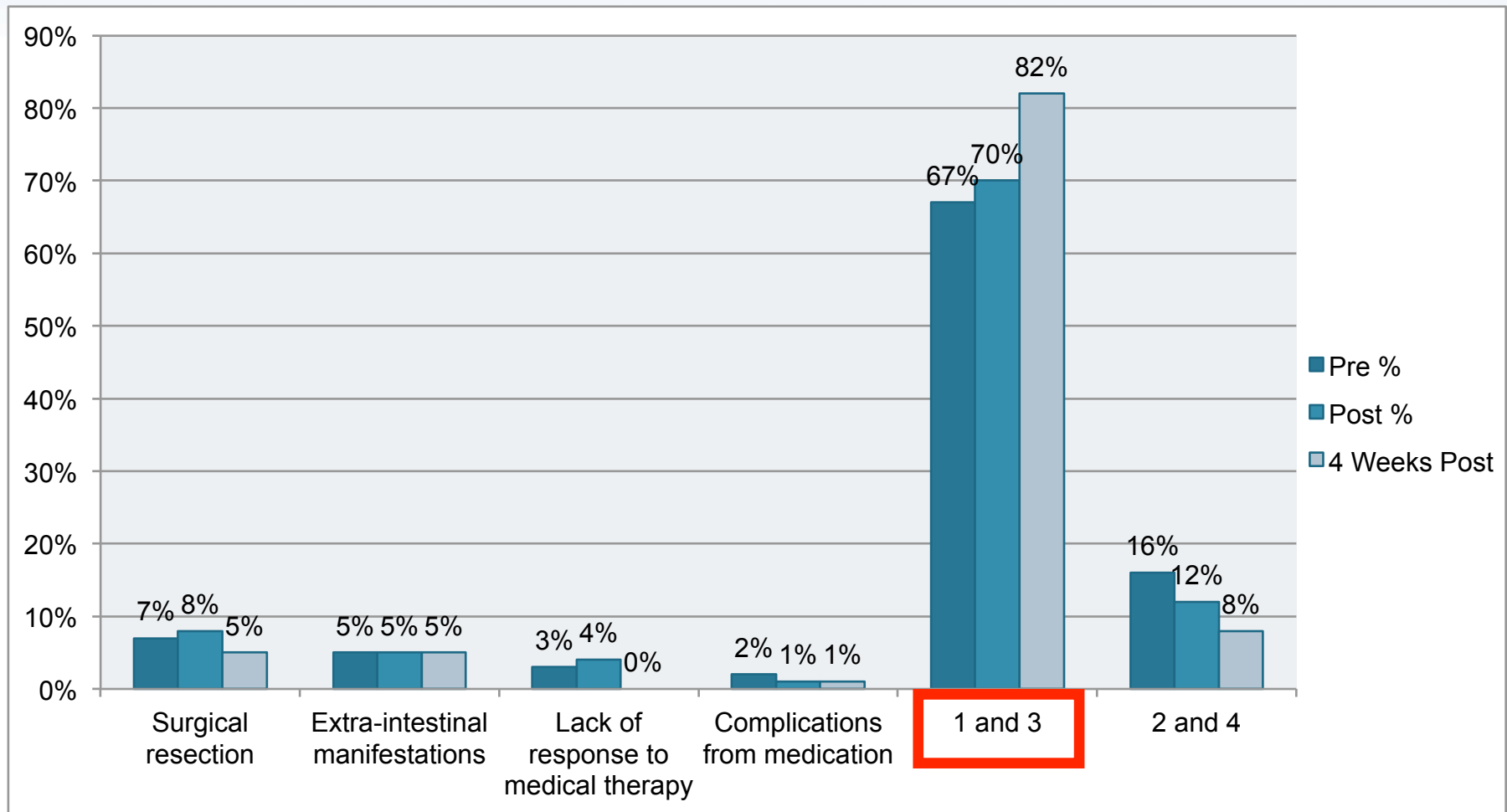
Which of the statements below describes your treatment of patients with inflammatory bowel disease?



Four Week Case Study Questions

(boxed answer is correct)

A delay in diagnosis of Crohn's disease increases the risk of which of the following complications?
(Learning Objective 1)

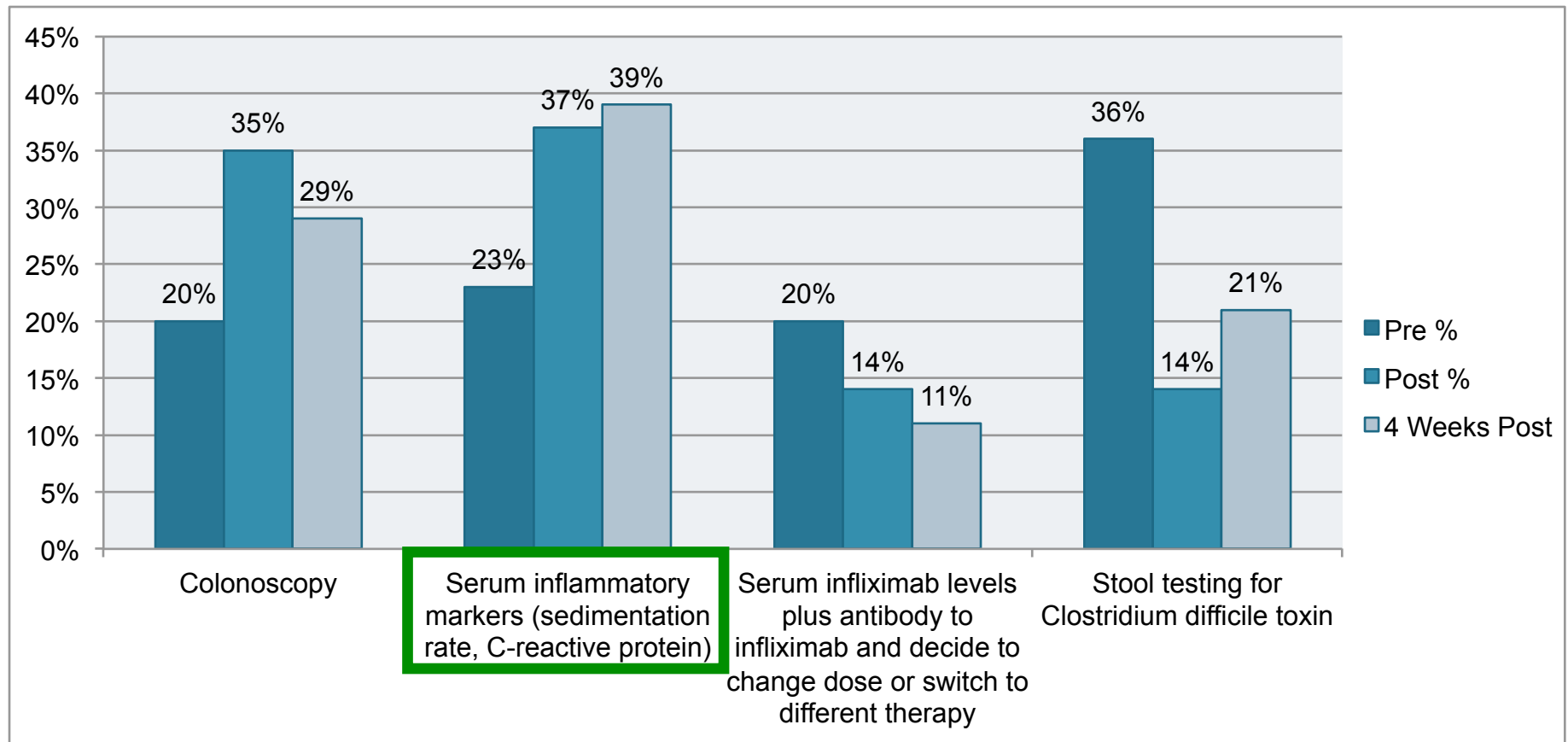


Four Week Case Study Questions

(boxed answer is correct)

You fear that return of your patient's UC sx are a result of a flare of their IBD. Which of the following approaches is not helpful in determining a cause of failure?

(Learning Objective 2)

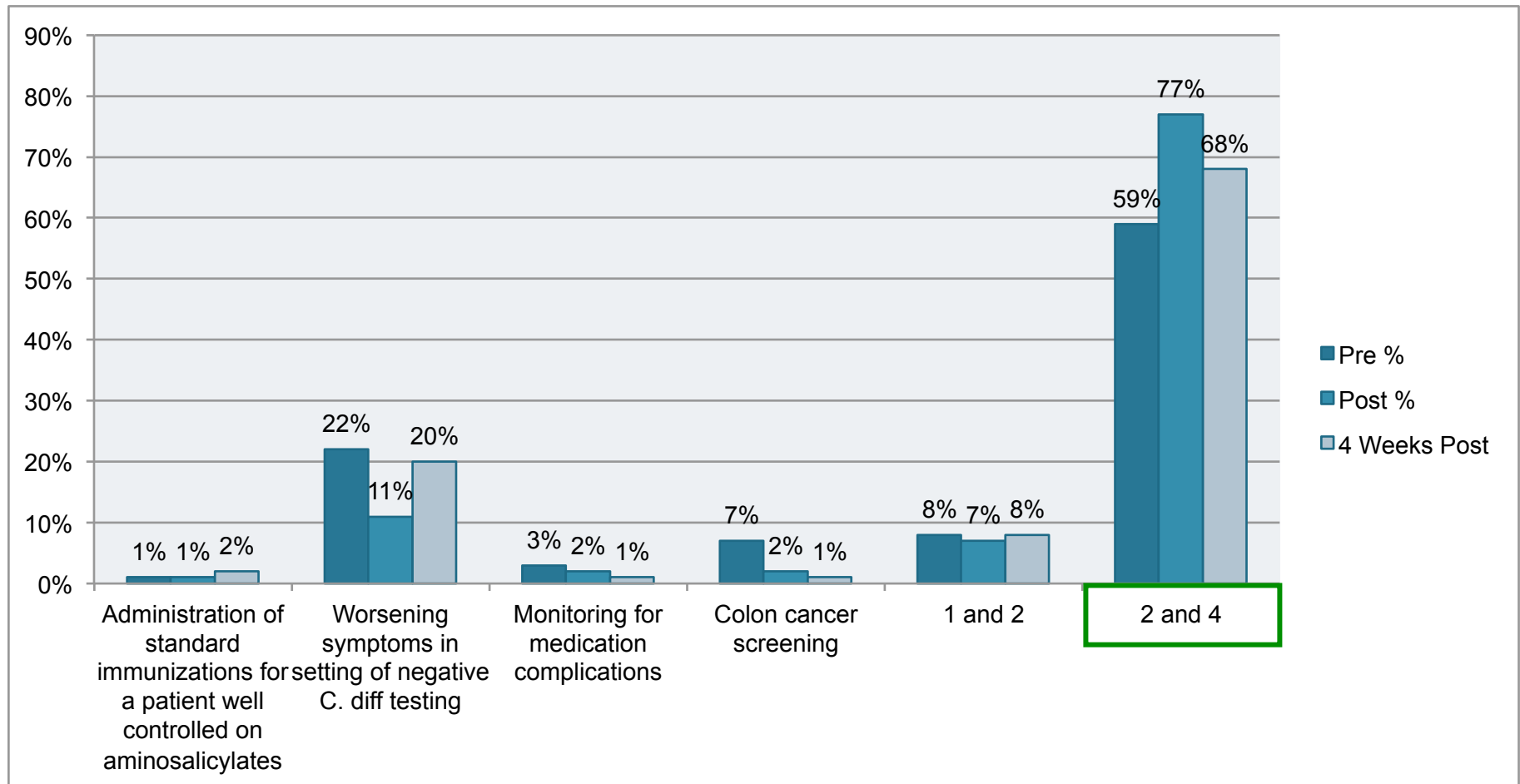


Four Week Case Study Questions

(boxed answer is correct)

You have been following a 35 year old female for UC since diagnosis 8 years ago. She has been doing well, but you now have some concerns that you feel should be addressed by a GI specialist. Which of the following should prompt a referral to specialty care?

(Learning Objective 3, 4)



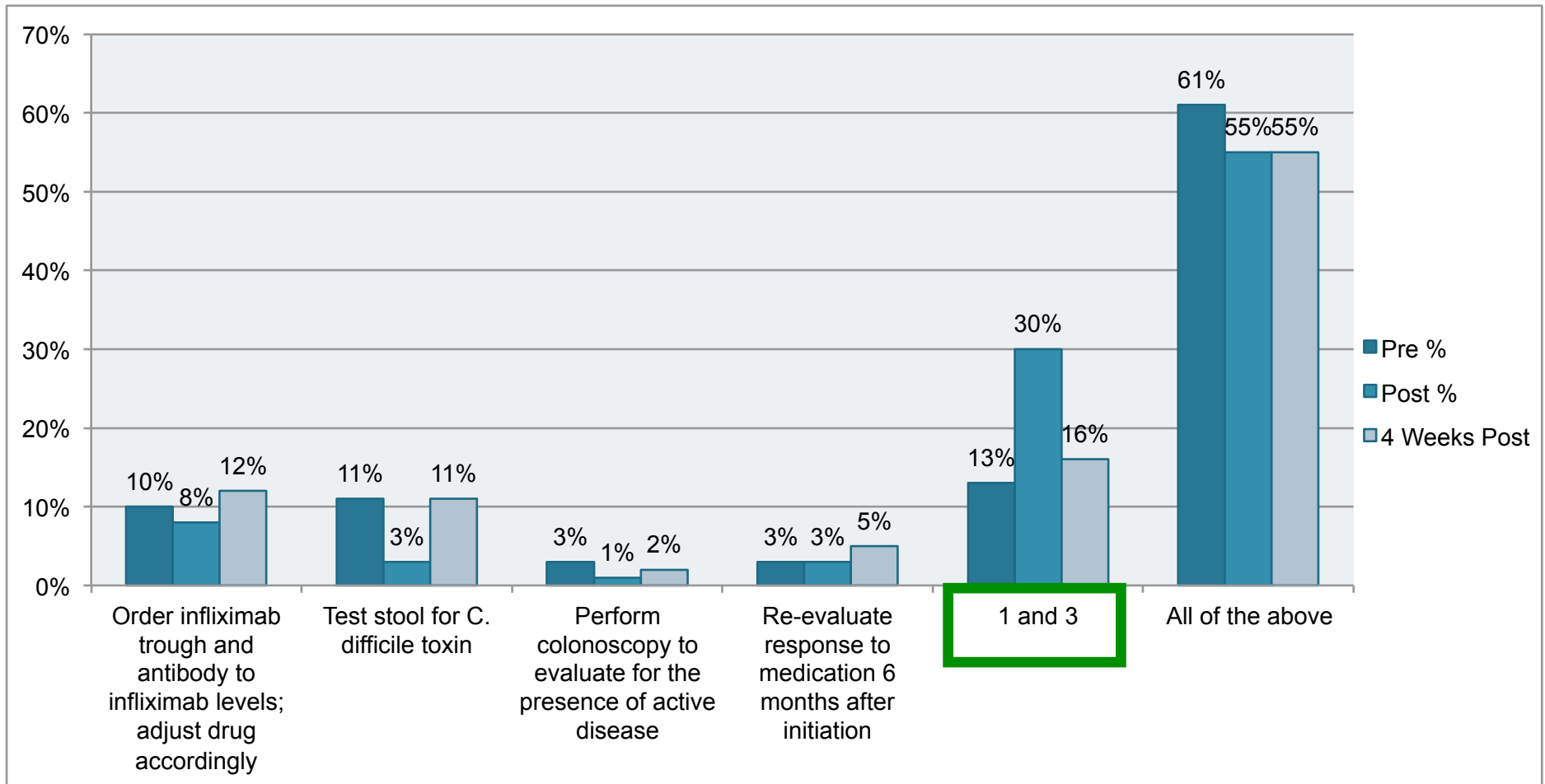
Pre N = 151 Post N = 163 4 Weeks Post N = 104 Green highlight indicates significant difference between pre and post testing.

Four Week Case Study Questions

(boxed answer is correct)

Your patient with severe Crohn's colitis has been controlled on infliximab, but now she presents with worsening RLQ pain and diarrhea. The principle of "Treat to Target" would suggest that you:

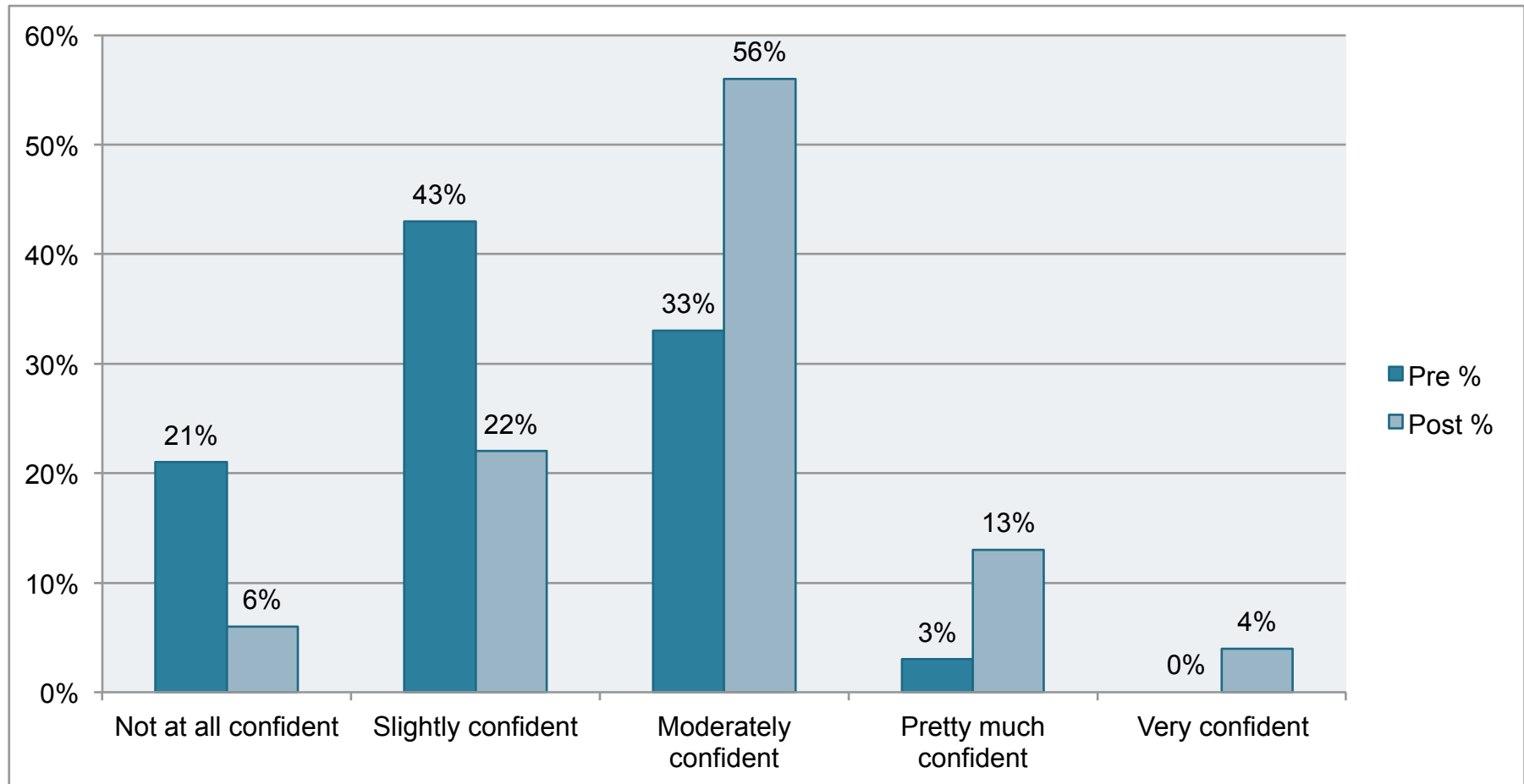
(Learning Objectives 2,3,4)



Pre N = 150 Post N = 157 4 Weeks Post N = 104 Green highlight indicates significant difference between pre and post testing.

Atrial Fibrillation: Reducing Risk and Individualizing Therapeutic Choices

On a scale of 1 to 5, please rate how confident you would be in evaluating and treating a patient with inflammatory bowel disease (IBD):

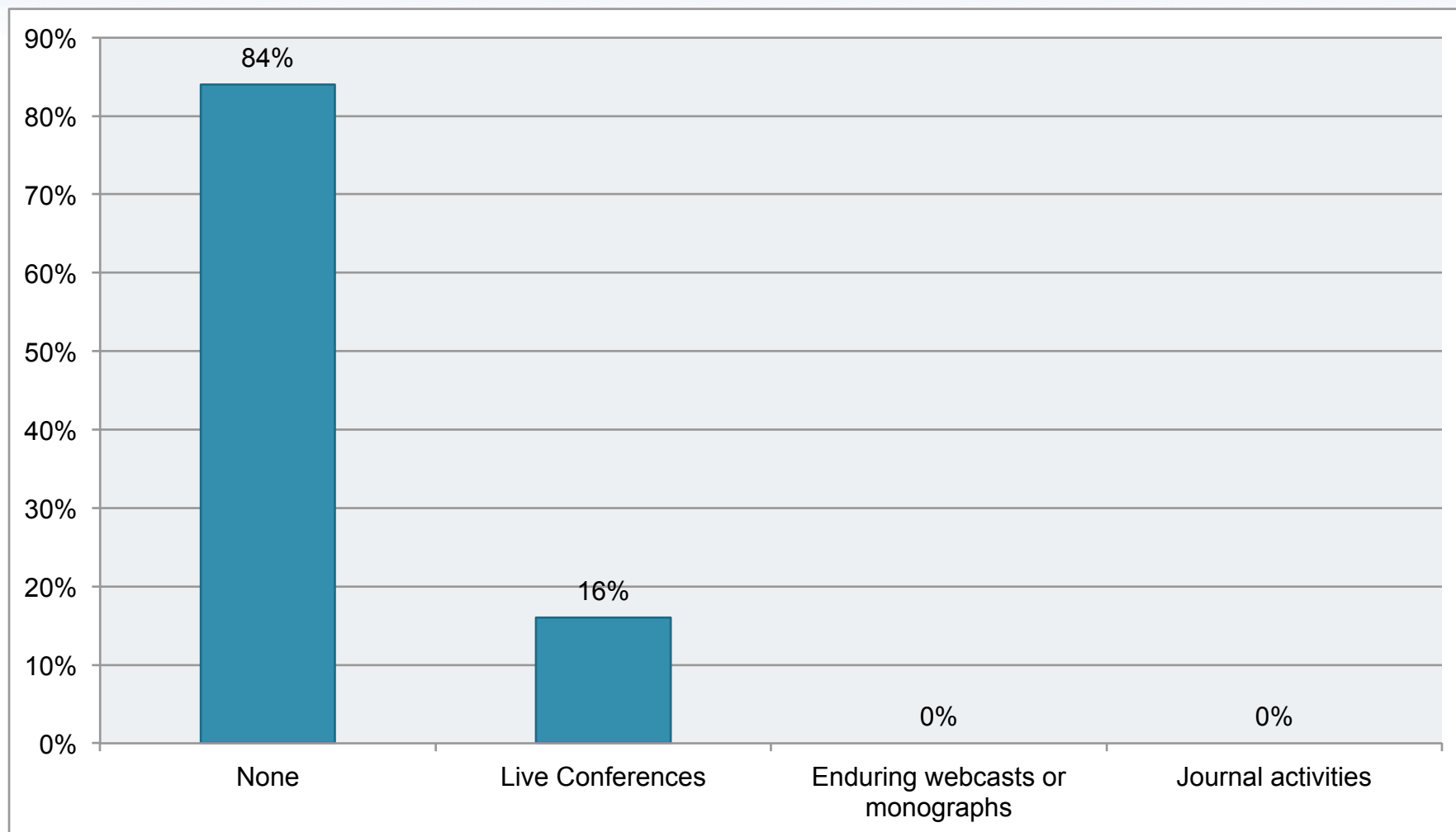


Pre N = 136 Post N = 146



Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

Describe/list any other educational activities that you attended in the last month concerning the treatment of inflammatory bowel disease?



Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

What specific skills or practice behaviors have you implemented for patients with Inflammatory Bowel Disease since this CME activity?
(Comments received from attendees at 4 week follow up)

- “I am more aware of IBD signs and symptoms to make an early diagnosis”
- “I have changed in my referral practice”
- “I am testing to rule out C. Diff causing diarrhea when appropriate”
- “I am monitoring medication response”
- “I have better knowledge of tests to evaluate patients with symptoms of IBD”
- “I include IBD as a differential dx and obtain a better history”
- “I encourage colon cancer screening more regularly”
- “I have increased my colonoscopy referral for patients with high suspicion for IBD”
- “I learned when to refer patient to GI specialist”
- “I take a more detailed history”

Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

What specific barriers have you encountered that may have prevented you from successfully implementing strategies for patients with Inflammatory Bowel Diseases since this CME activity? (Comments received from attendees at 4 week follow up)

- Patient is not compliant with treatment due to financial and mental issues
- Cost of therapy
- Knowing how and where to test for biologic levels and antibodies
- Time constraints
- Not completely comfortable, lack of exposure
- Small private practice with limited resources
- It's still a bit difficult to diagnose IBD right away
- Lack of confidence
- Patient failed to describe his/her symptoms accurately, medication non-compliance
- Lack of CME to further skills
- Some patients are embarrassed to discuss their bowel habits

Discussion and Implications

Avoiding the Pitfalls in IBD Care: Diagnostic and Management Strategies to Improve Outcomes

The need for continued education in the area of Inflammatory Bowel Disease, was demonstrated based on literature reviews and surveys completed prior to the conference series. Attendee knowledge was assessed at 3 points for this program: prior to the lecture, immediately following the lecture and again at 4 weeks after the conference using the case vignettes listed above.

Data Interpretation:

Data collected from 339 clinicians after 1 meeting, indicated a statistically significant improvement in knowledge in all 4 of the questions presented. Specifically, as a result of this lecture, participants:

1. Are more aware of appropriate laboratory evaluation to determine the cause of a flare of IBD;
2. Recognize the signs and symptoms that should prompt referral for GI specialist evaluation;
3. Understand the principle of “Treat to Target” and recognize strategies to appropriately evaluate a patient with worsening symptoms.

Learners had a relatively high baseline knowledge that a delay in diagnosis of Crohn’s disease increases the risk of surgical resection and lack of response to medical therapy, but there was a small improvement after the program that did not reach statistical significance.

Moderate to very confident levels in the evaluation and management of a patient with inflammatory bowel disease rose from 36% to 73%.

Discussion and Implications

Avoiding the Pitfalls in IBD Care:

Diagnostic and Management Strategies to Improve Outcomes

Data obtained from participants 4 weeks after the program demonstrated some decline in learning from the post-test scores in 2 areas, but continued improvement from pre-test scores in the remaining 2 areas. Persistent gaps in knowledge were evident with additional education needed in the following areas:

1. Laboratory evaluation to determine the cause of treatment failure
2. Appropriate timing of GI specialist referral
3. Management strategies for a patient with worsening abdominal pain and diarrhea

Attendees indicated multiple new, specific, practice behaviors they implemented as a result of this program that included:

1. Greater awareness of the signs and symptoms of IBD
2. More comfort in monitoring medication response
3. Increased knowledge of when to refer for GI evaluation
4. Better history taking
5. More colon cancer screening

84% of learners had no other exposure to CME programs on Inflammatory Bowel Disease in the month after attending this program indicating their behavior changes were likely related to this program.

Discussion and Implications

Avoiding the Pitfalls in IBD Care:

Diagnostic and Management Strategies to Improve Outcomes

Barriers to care included:

1. Patient non-compliance
2. Medication costs
3. Lack of confidence for the clinician
4. Limited resources

The notable changes in post test scores, and intent to change practice patterns regarding diagnosis and management of Inflammatory Bowel Disease, signifies a clear gap in knowledge and an unmet need among primary care clinicians. It continues to be an important area for future educational programs.