CONVERSATIONS IN PRIMARY CARE

2017

Live Virtual Conferences

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Grant # ME201621532

Final Outcome Report

3 Live Virtual Conferences

Report Date: May 4, 2017

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Course Accreditation

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 *4.0 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 4 contact hours of continuing education.*

* This applies to the entire CME activity entitled Conversations in Primary Care

Commercial Support

Conversations in Primary Care: 2017 series of CME activities were supported through educational grants or donations from the following companies:

Arbor Pharmaceuticals
Bayer HealthCare
Boehringer Ingelheim Pharmaceuticals, Inc.
Lilly USA, LLC
Shire

Dates and Times

Conversations in Primary Care: Update 2017
Live Virtual Conference Schedule

February 11, 2017
10:00am – 2:30pm

March 4, 2017
10:00am – 2:30pm

March 25, 2017
10:00am – 2:30pm

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

Titles of Presentations

- Adult ADHD in Primary Care: Addressing Unmet Needs
- **Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care**
- Atrial Fibrillation: Reducing Risk and Individualizing Therapeutic Choices
- Legalize it? A Clinician's Guide to Medical Marijuana
- Getting Comfortable with SGLT-2 Therapy: New Insights
- Challenges in Hypertension: Incorporating Evolving Clinical Data into Practice
- Leaning in to LARCs; Long Acting Reversible Contraception Options

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

Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities.J Contin Educ Health Prof. 2009 Winter;29(1):1-15

Executive Summary

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Knowledge/Competence	Learners demonstrated statistically significant improvement from pre to post-testing in their answers to *all four* of the case-based questions regarding the evaluation and management of patients at risk for, or with, idiopathic pulmonary fibrosis.
Confidence	Whereas the majority of learners rated themselves as having low to moderate confidence in their ability to recognize features consistent with idiopathic pulmonary fibrosis before the education, most of the learners showed significant gains in confidence after the program.
Intent to Perform	As a result of this program, 94% of learners state they are likely to implement the strategies for the diagnosis and/or treatment of idiopathic pulmonary fibrosis taught in this program.
Change of Practice Behavior 4 Weeks Post N= 231	85% 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 attending the activity.

Level 1: Participation

- 1323 attendees on for all three activities
- 22% Physicians; 73% NPs or PAs; 4% RNs; 1% Other
- 44% in community-based practice
- 80% PCPs, 5% Cardiologist; 3% Hospitalist; 12% Other or did not respond
- 95% provide direct patient care

Level 2: Satisfaction

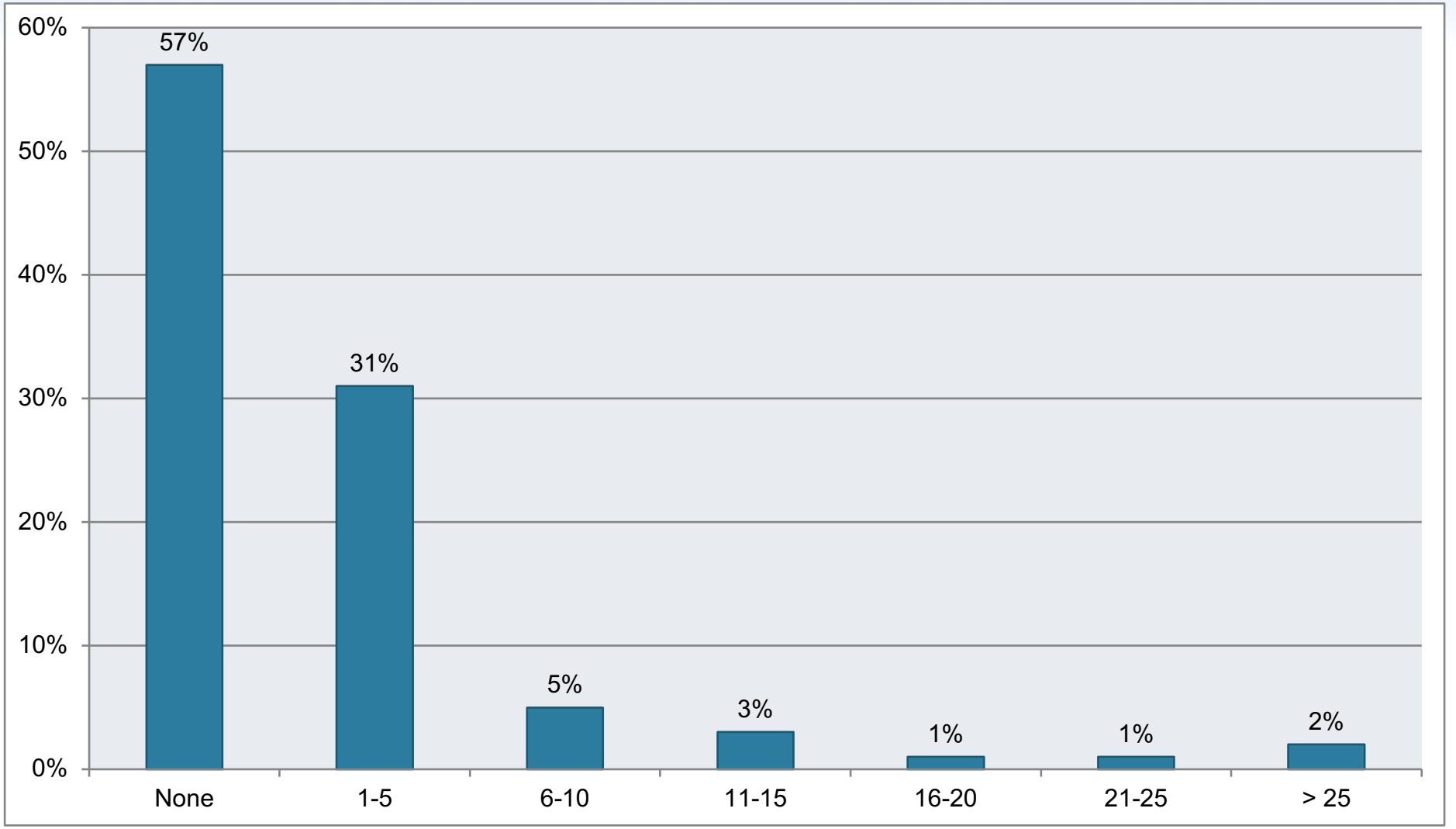
- 99% rated the activity as excellent
- 100% indicated the activity improved their knowledge
- 96% stated that they learned new and useful strategies for patient care
- 97% said they would implement new strategies that they learned in their practice
- 100% said the program was fair-balanced and unbiased

Sample Size: N = approximately 1323

Were our learners satisfied? Yes!

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

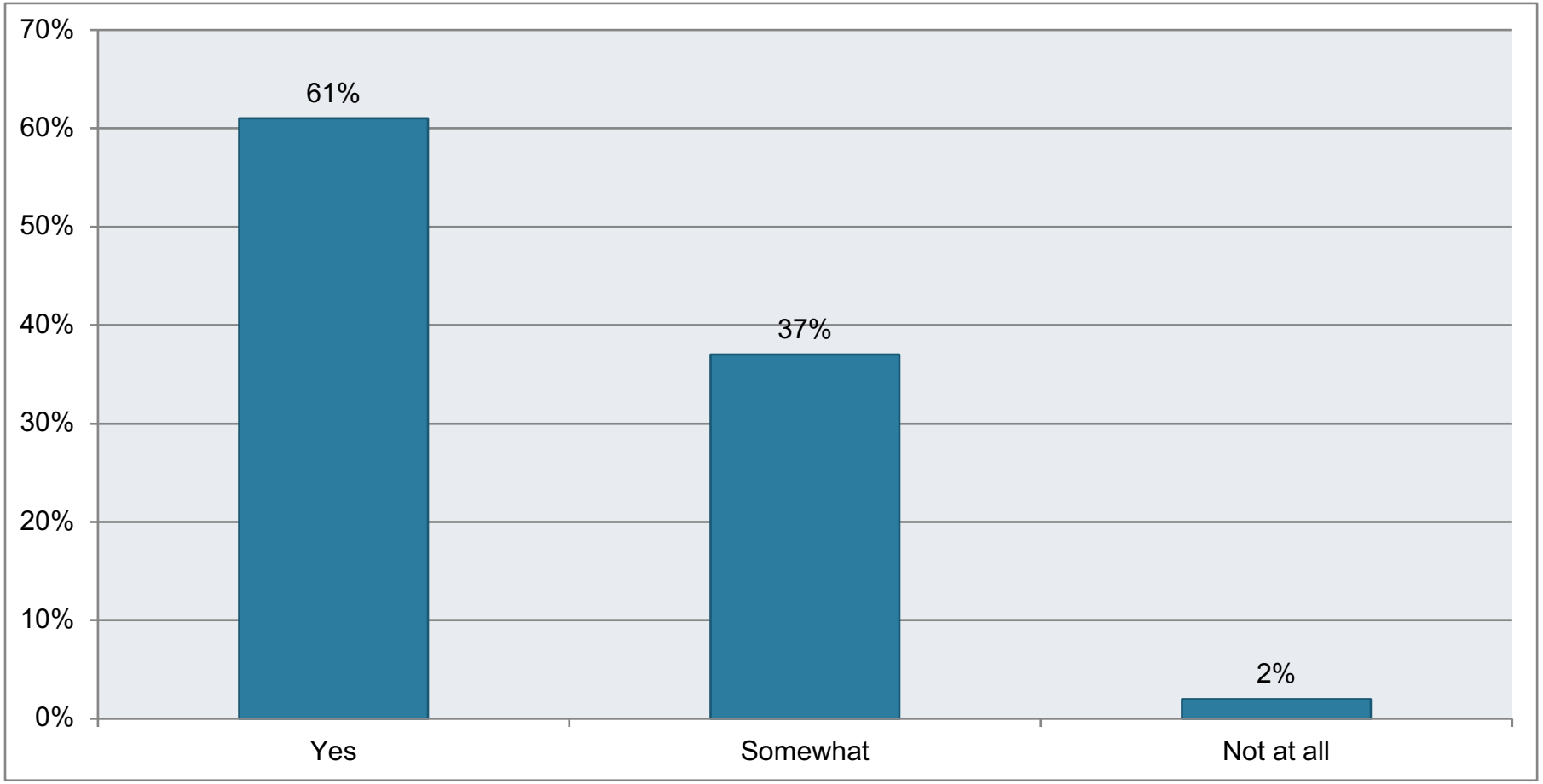
Patients seen each week in a clinical setting with Idiopathic Pulmonary Fibrosis:



Sample Size: N = approximately 1323

Did Learners Say They Achieved Learning Objective?

Upon completion of this activity, I can now – Implement an appropriate strategy for diagnosing a patient with suspected idiopathic pulmonary fibrosis (IPF); discuss and contrast the available pharmacotherapeutic options for patients with IPF; describe the non-pharmacotherapeutic options for IPF patients; establish the clear role for the primary care clinician in diagnosing and managing disease in IPF patients.



Yes! 98% believed they did.

Sample Size: N = approximately 1323

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.

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 Med14(10): 771-80.

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Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Faculty

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Learning Objectives

1. Implement an appropriate strategy for diagnosing a patient with suspected idiopathic pulmonary fibrosis (IPF).
2. Discuss and contrast the available pharmacotherapeutic options for patients with IPF.
3. Describe the non-pharmacotherapeutic options for IPF patients.
4. Establish the clear role for the primary care clinician in diagnosing and managing disease in IPF patients.

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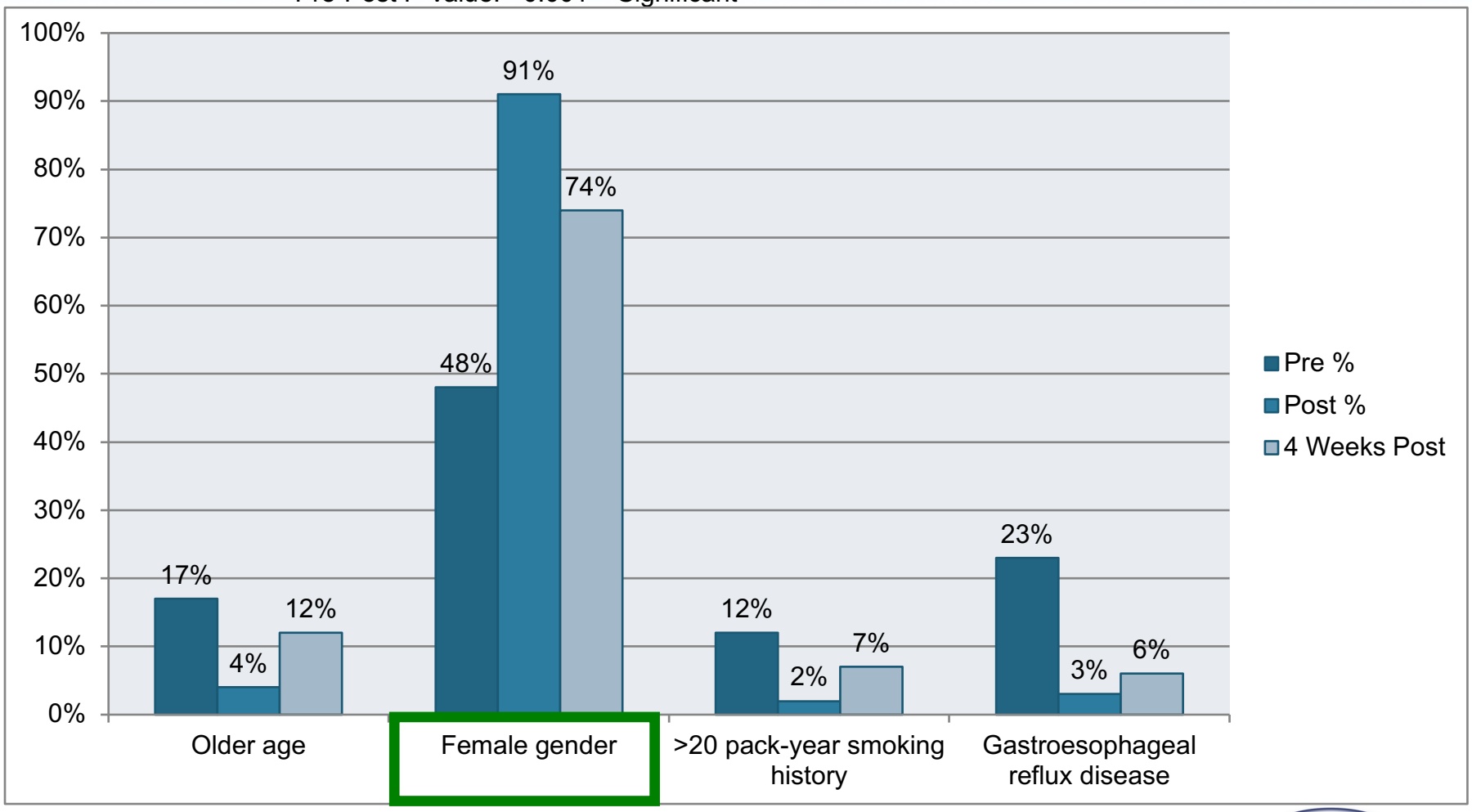
Case Vignette Knowledge and Competence Assessment Questions

(presented pre-post lecture, and after 4 weeks —boxed answer is correct)

All of the following features have been associated with risk for idiopathic pulmonary fibrosis, EXCEPT: (Learning Objective 1)

Pre-Post P Value: <0.001 – Significant



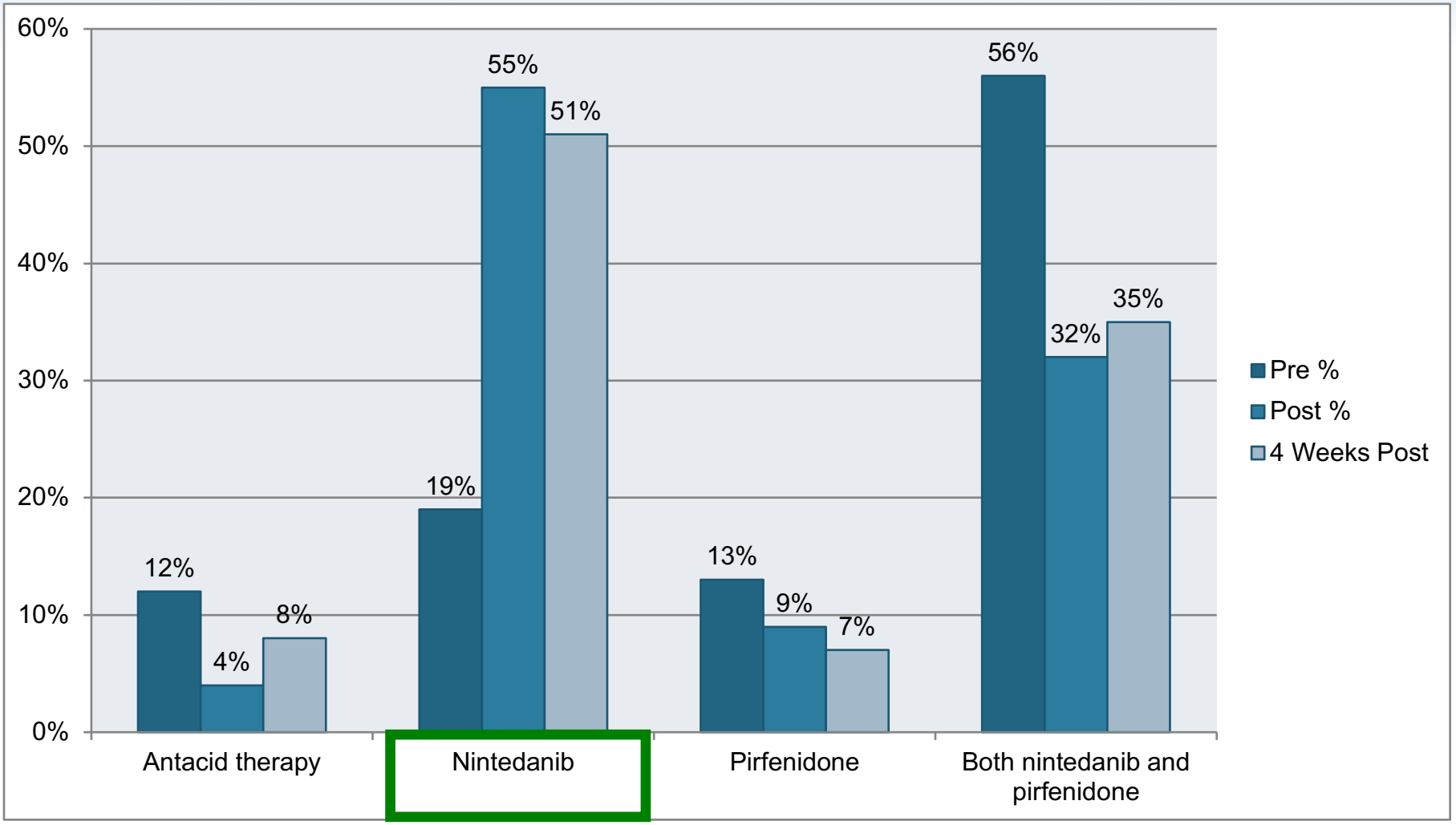
Pre N = 563 Post N = 607 4 Weeks Post N = 231 Green highlight indicates significant difference between pre and post testing.

Case Vignette Knowledge and Competence Assessment Questions

(presented pre-post lecture, and after 4 weeks —boxed answer is correct)

Which of the following therapies recommended for idiopathic pulmonary fibrosis was associated with high rates of diarrhea in clinical trials? (Learning Objective 2)

Pre-Post P Value: <0.001 – Significant



Pre N = 564 Post N = 580 4 Weeks Post N = 231 Green highlight indicates significant difference between pre and post testing.

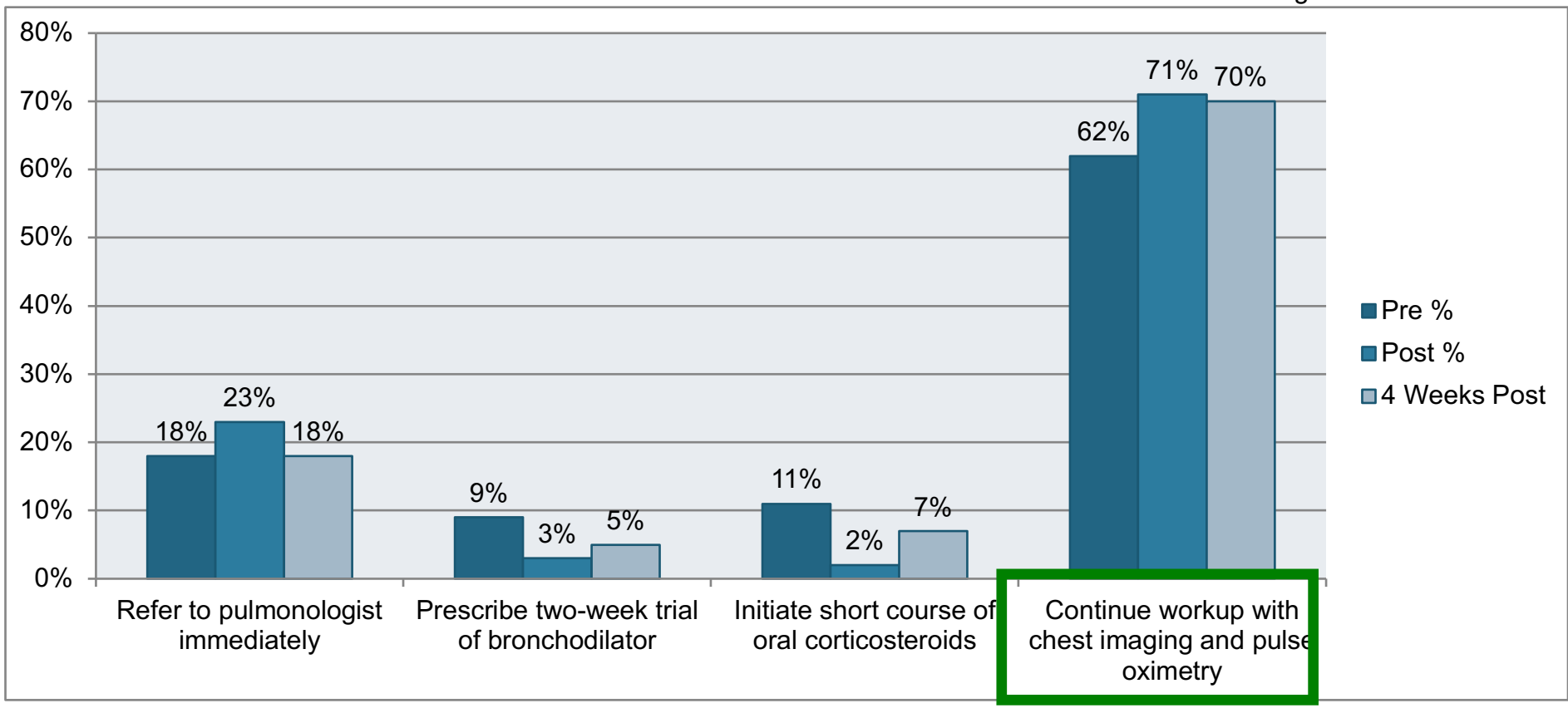
Case Vignette Knowledge and Competence Assessment Questions

(presented pre-post lecture, and after 4 weeks —boxed answer is correct)

A 67-year-old man with a 9-month history of progressive dyspnea on exertion and dry cough presents for evaluation. He is a former smoker (30 pack-years) and has a history of dyslipidemia and GERD. Workup identifies bibasilar crackles, BP 122/74 mmHg, normal sinus rhythm, and no fever. Spirometry identifies a restrictive pattern with no reversibility. Current medications include atorvastatin 80 mg qd and omeprazole 20 mg as needed.

What should his primary care provider do at this time? (Learning Objective 1 and 4)

Pre-Post P Value: <0.001 – Significant



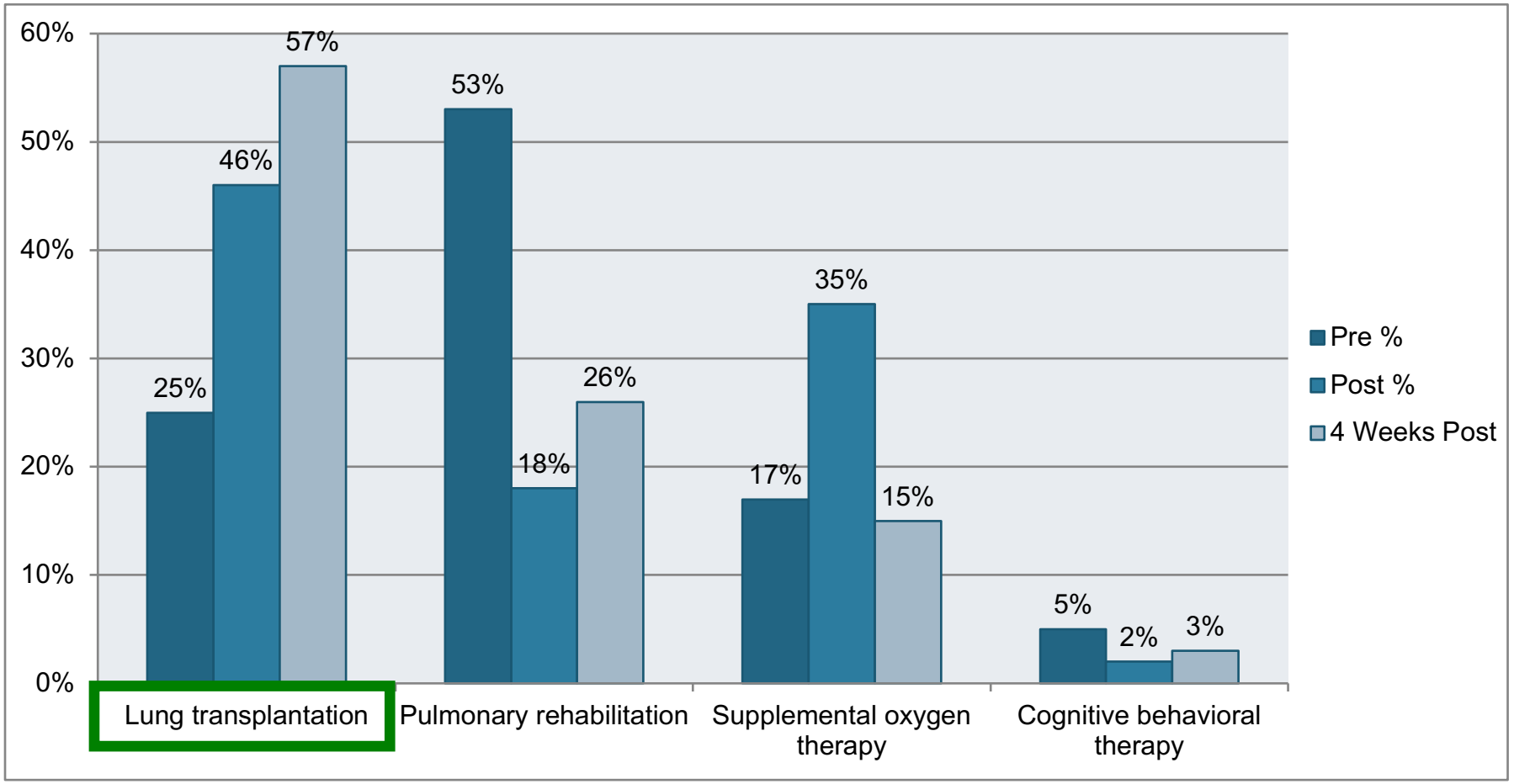
Pre N = 621 Post N = 618 4 Weeks Post N = 231 Green highlight indicates significant difference between pre and post testing.

Case Vignette Knowledge and Competence Assessment Questions

(presented pre-post lecture, and after 4 weeks —boxed answer is correct)

Which of the following non-pharmacologic therapies has been shown to improve survival in patients with idiopathic pulmonary fibrosis? (Learning Objective 3)

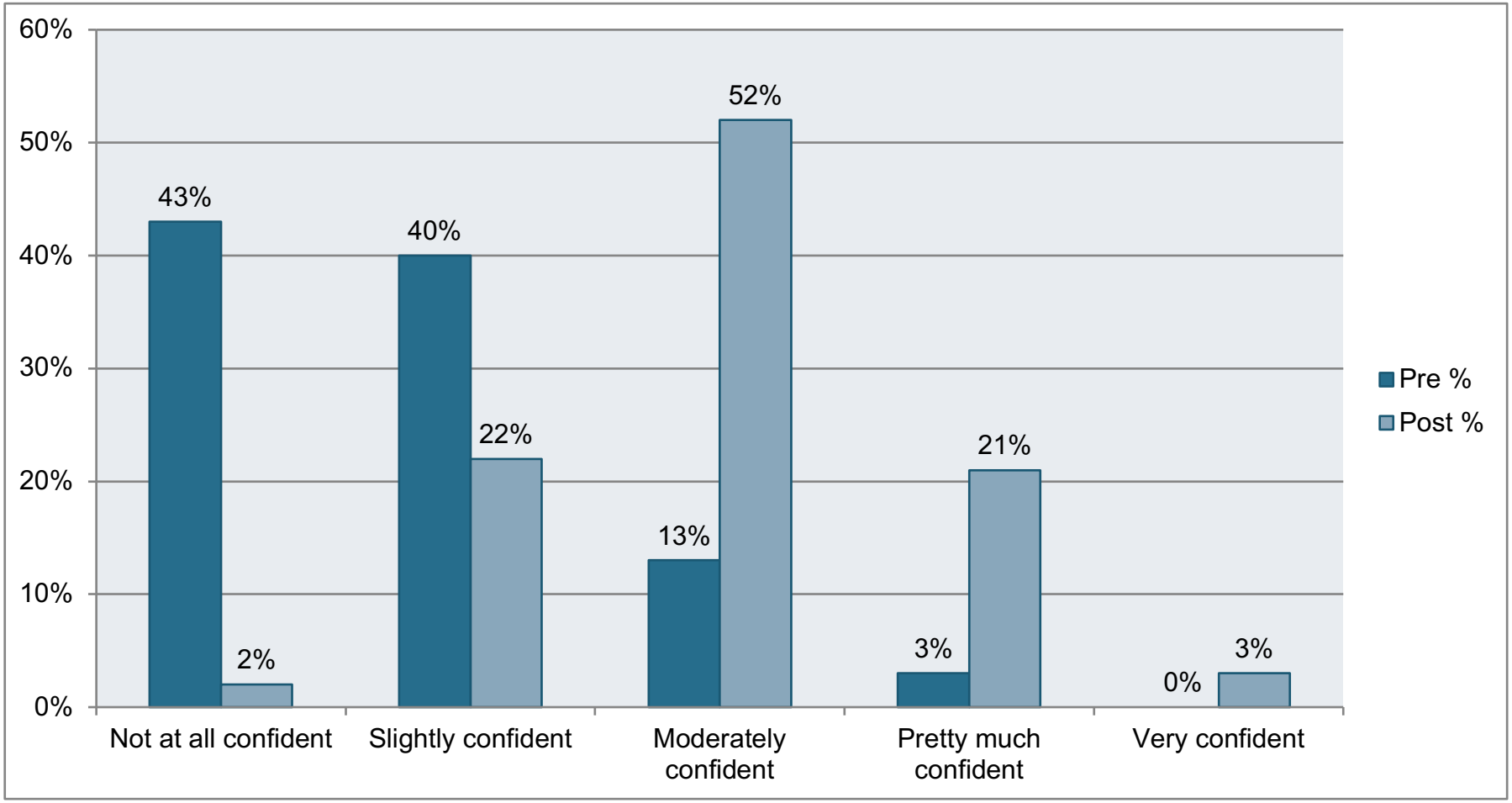
Pre-Post P Value: <0.001 – Significant



Pre N = 445 Post N = 633 4 Weeks Post N = 231 Green highlight indicates significant difference between pre and post testing.

Confidence Question
(Presented pre-post lecture)

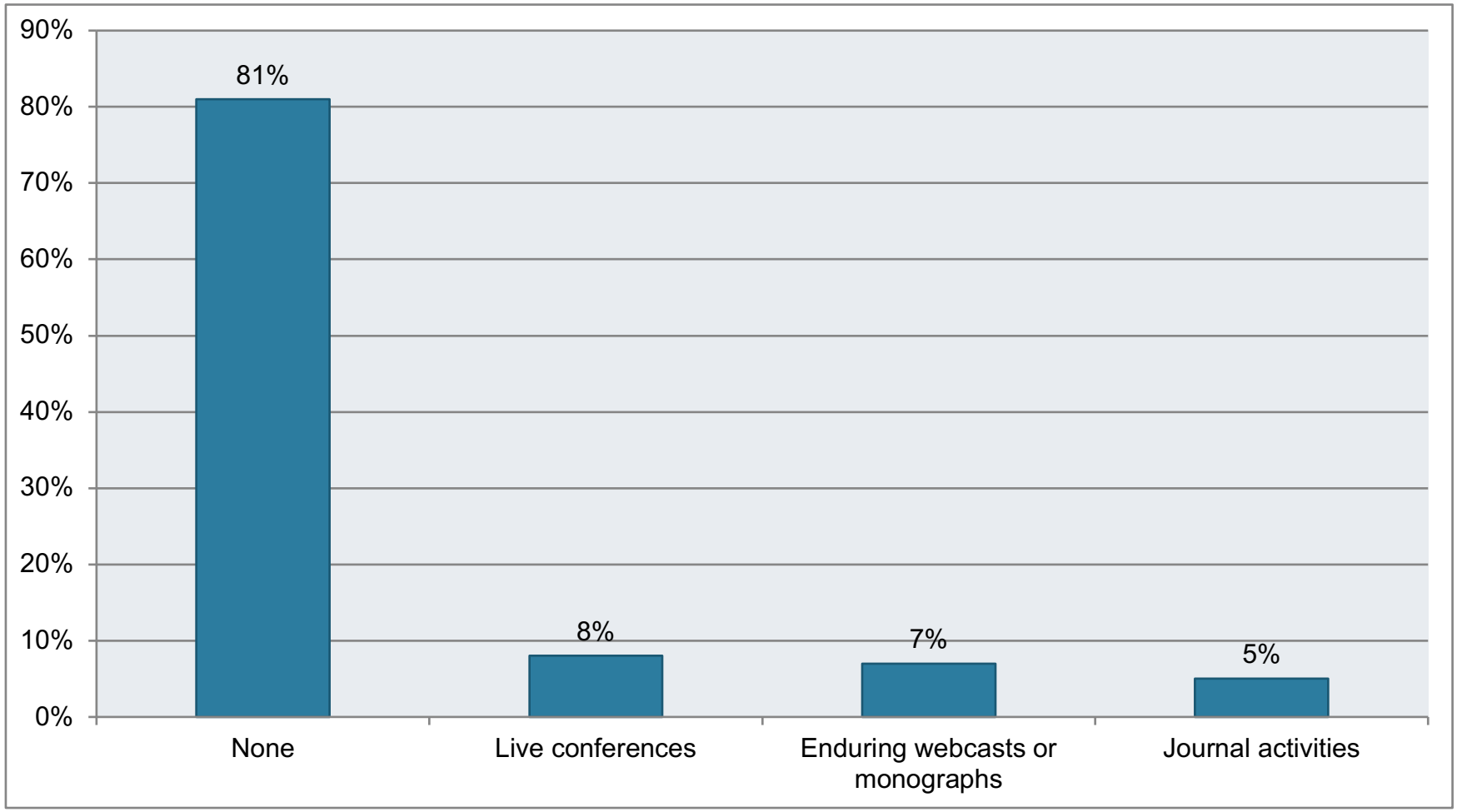
Please rate your confidence in your ability to recognize features consistent with idiopathic pulmonary fibrosis.



Pre N = 643 Post N = 615

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Describe/list any other educational activities that you attended in the last month concerning idiopathic pulmonary fibrosis ?



4 Weeks Post N= 231

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What specific skills or practice behaviors have you implemented for patients with idiopathic pulmonary fibrosis since this CME activity?

(Sample comments received from attendees at 4 week follow up)

- "I have better skills to assess patients with symptoms of cough or SOB"
- "I am considering IPF in the differential diagnosis and evaluation of older male patients who c/o SOB and basilar crackles"
- "I am using imaging tools and recommending latest guidelines for IPF treatments"
- "I am paying closer attention to chronic bibasilar crackles w/o prior evaluation"
- "I consider IPF in a patient with persistent cough, crackles and dyspnea"
- "I am aware that steroids can actually harm the patient who has IPF and understand the importance of thorough work up"
- "I am taking a more detailed history for pulmonary complaints, and obtaining HRCT scan if suspicious"
- "I recognize the need for HRCT and referral to transplant earlier if IPF diagnosed"
- "I have a better understanding of the pathophysiology and medical management of IPF"

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Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

What specific barriers have you encountered that may have prevented you from successfully implementing strategies for patients with patients with idiopathic pulmonary fibrosis since this CME activity?

(Sample comments received from attendees at 4 week follow up)

- Difficulty recognizing symptoms and making the correct diagnosis
- Patient motivation to change behaviors or participate in treatment
- Lack of symptomatic patients
- Lack of time with patients
- Patient adherence and compliance
- Medication coverage
- Patients do not want to quit smoking
- Cost for spirometry and HRCT
- Patient's desire for bronchodilators and/or oxygen
- Patients reluctance to be referred to a specialist if not in an acute exacerbation

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Data Interpretation: 1323 clinicians at 3 live virtual meeting

Participant Educational Gains

Are more aware that female gender is not associated with an increased risk of IPF

Are more aware that nintedanib was associated with high rates of diarrhea in clinical trials

Understand that obtaining chest imaging and pulse oximetry, before initiating empiric pharmacotherapy or pulmonology referral, are important steps a primary care provider can perform in the evaluation of a patient that may be at risk for IPF

Realize that lung transplantation has been demonstrated to improve survival in patients with IPF while pulmonary rehabilitation and supplemental oxygen therapy have not

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Data Interpretation: 1323 clinicians at 3 live virtual meeting

Persistent Educational Gaps at 4 Weeks:

Appropriate diagnostic evaluation for a patient at risk for IPF

FDA approved treatment options for IPF

Non-pharmacologic treatments for IPF

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

New Specific Behaviors Reported at 4 weeks

Better skills to assess patients with symptoms of cough or SOB

Considering IPF in a patient with persistent cough, crackles and dyspnea

Taking a more detailed history for pulmonary complaints, and obtaining HRCT scan if suspicious

Greater use of imaging tools and recommending latest guidelines for IPF treatments

Greater understanding of the pathophysiology and medical management of IPF

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Reported Barriers to Care at 4 weeks

- Difficulty recognizing symptoms and making the correct diagnosis
- Patient adherence and compliance
- Diagnostic Procedure/Medication cost
- Insurance coverage and formulary restrictions
- Time constraints

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Data Interpretation: 1323 clinicians at 3 live virtual meeting

85% of learners indicated they had changed practice behaviors within four weeks after attending the activity.

475% improvement in confidence levels in the ability to recognize features consistent with IPF

KEY TAKE HOME POINTS

Significant improved awareness of the role of Primary Care in evaluating patients at risk for IPF, before initiating empiric pharmacotherapy or pulmonology referral

Greater understanding of the pathophysiology and medical management of IPF

Discussion and Implications

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

The need for continued education in the area of IPF, 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 1323 clinicians after 3 meetings, indicated statistically significant improvement in knowledge, and competence in all 4 of the questions presented. Participants also indicated marked increase in confidence. Specifically, as a result of this lecture, participants:

1. Are more aware that female gender is not associated with an increased risk of IPF;
2. Are more aware that nintedanib was associated with high rates of diarrhea in clinical trials;
3. Understand that obtaining chest imaging and pulse oximetry, before initiating empiric pharmacotherapy or pulmonology referral, are important steps a primary care provider can perform in the evaluation of a patient that may be at risk for IPF;
4. Realize that lung transplantation has been demonstrated to improve survival in patients with IPF while pulmonary rehabilitation and supplemental oxygen therapy have not.

Moderate to very confident levels in the ability to recognize features consistent with IPF rose 475% from 16% to 76%. 97% of participants are likely to utilize information learned from this presentation in their practice. 85% 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 attending the activity.

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Discussion and Implications

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

The program content was reinforced to participants with a “Clinical Highlights” document containing key teaching points from the program. This was distributed 1 week after each meeting.

4 Week Follow Up Data

Data obtained from participants 4 weeks after the program demonstrated some decline from post test scores in three areas, but overall better than pre-test results. Participants demonstrated even greater appreciation for the role of lung transplantation in the management of IPF. These results indicate that participants had retained much of what they learned in this program.

Persistent gaps in knowledge were evident with additional education needed in the following areas:

1. Appropriate diagnostic evaluation for a patient at risk for IPF
2. FDA approved treatment options for IPF
3. Non-pharmacologic treatments for IPF

New Practice Behaviors

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

1. Better skills to assess patients with symptoms of cough or SOB
2. Considering IPF in a patient with persistent cough, crackles and dyspnea
3. Greater awareness that steroids can actually harm the patient who has IPF and understand the importance of thorough work up
4. Taking a more detailed history for pulmonary complaints, and obtaining HRCT scan if suspicious
5. Greater use of imaging tools and recommending latest guidelines for IPF treatments
6. Greater understanding of the pathophysiology and medical management of IPF

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Discussion and Implications

Recognition and Management of Idiopathic Pulmonary Fibrosis: The Role of Primary Care

Barriers to Care

Barriers to care reported by clinicians at 4 weeks included:

1. Difficulty recognizing symptoms and making the correct diagnosis
2. Patient adherence and compliance
3. Diagnostic Procedure/Medication cost
4. Insurance coverage and formulary restrictions
5. Time constraints
6. Lack of symptomatic patients

1 month after this conference, 81% of attendees had no other exposure to a CME program on this topic, indicating that much of their behavior change was likely a result of this program.

What Can We Learn:

After the program, there were knowledge gains in all areas addressing the recognition and management of Idiopathic Pulmonary Fibrosis. There was some decline in knowledge after 4 weeks suggesting persistent educational gaps. The notable changes in post test scores, practice pattern and confidence levels signify a clear gap in knowledge and an unmet need among primary care clinicians. It continues to be an important area for future educational programs.

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