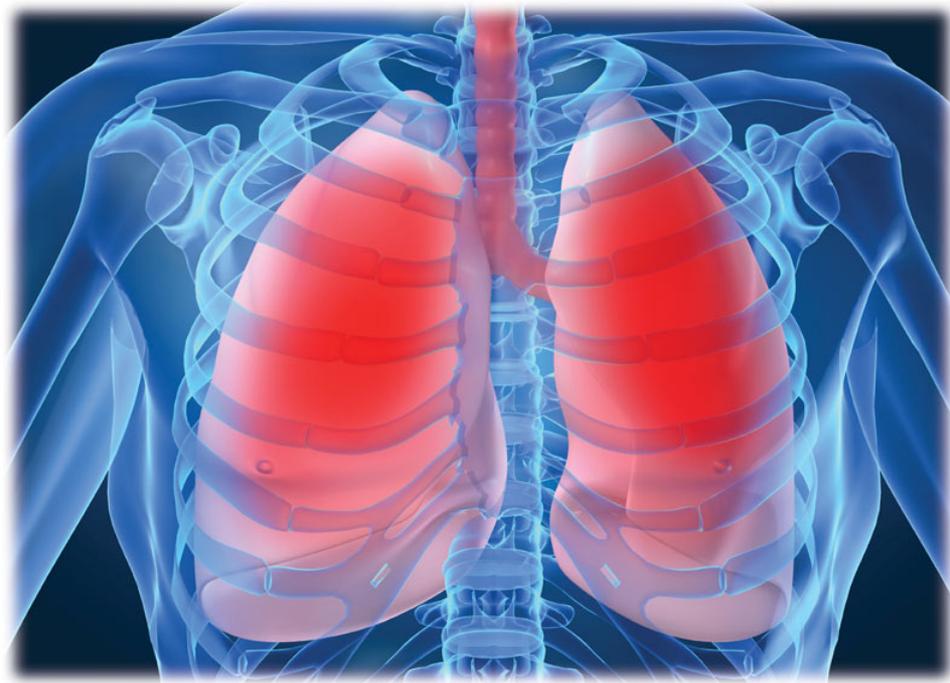




NATIONAL ASSOCIATION FOR CONTINUING EDUCATION

COPD: Bridging the Gaps

Final Outcome Report



Challenges in Pulmonary and Critical Care: 2015

**Presented at:
Cleveland Clinic Florida
Weston, Florida
November 21, 2015**

Report Date: January 21, 2016

Course Director

Franck Rahaghi, MD, MHS, FCCP

Director, Pulmonary Hypertension Clinic
Director, Pulmonary Education and Rehabilitation
Cleveland Clinic Florida
Weston, FL

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 8 *AMA PRA Category 1 Credits*[™]. Physicians should only claim 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 8.0 contact hours of continuing education (which includes 1.25 hours of pharmacology).

Commercial Support

Challenges in Pulmonary and Critical Care: 2015 CME activity was supported through educational grants from the following companies:

Actelion

Baxalta

Boehringer Ingelheim Pharmaceuticals, Inc.

CSL Behring

Grifols

Mallinckrodt Pharmaceuticals

United Therapeutics Corporation

Agenda

7:00-7:45	Registration and Breakfast	12:15- 1:00	Lunch and Exhibits
7:45-8:00	Welcome Remarks Franck Rahaghi, MD, MHS, FCCP	1:00-2:00	Identifying and Managing Patients with Sarcoidosis Franck Rahaghi, MD, MHS, FCCP
8:00-9:00	Pulmonary Hypertension: Goal Oriented Therapy Abubakr Bajwa, MD	2:00-3:00	Pathology of Pulmonary Diseases: COPD/Sarcoidosis/Idiopathic Pulmonary Fibrosis/ Hypersensitivity Pneumonitis Pablo A. Bejarano, MD
9:00-10:00	Idiopathic Pulmonary Fibrosis: How to Use our New Treatments Felipe Martinez, MD		
10:00- 10:15	Break/Exhibits	3:00-3:15	Break/Exhibits
10:15-11:15	Alpha One Anti-trypsin Deficiency: Challenges in Diagnosis and Treatment Franck Rahaghi, MD, MHS, FCCP	3:15-4:15	COPD: Bridging the Gaps Anas Hadeh, MD, FCCP
		4:15-5:15	Palliative Care and Chronic Pulmonary Diseases Nydia Martinez Galvis, MD
11:15-12:15	Lung Cancer: Screening and the New Outlook Jinesh Mehta, MD	5:15-5:30	Concluding Remarks Franck Rahaghi, MD, MHS, FCCP

Levels of Evaluation

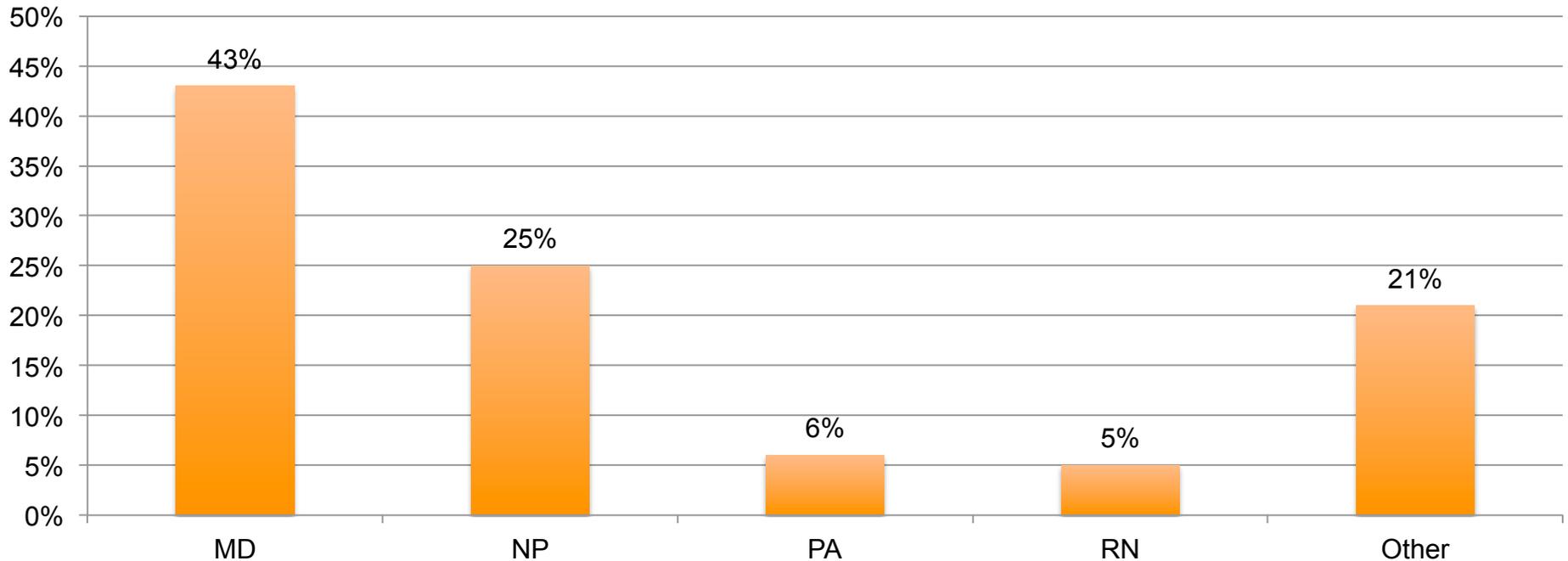
Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on the following model:

1. Participation
2. Satisfaction
3. Learning
 - A. Declarative Knowledge
 - B. Procedural Knowledge
4. Competence
5. Performance
6. Patient Health
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.

Level 1: Participation

- 156 attendees
- 43% Physicians; 25% NPs; 6% PAs; 5% RNs; 21% Other
- Over 36% in community-based practice
- 47% PCPs, 26% Pulmonology; 2% Cardiology; 1% Endocrinology
- 24% Other or did not respond



N = 105

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

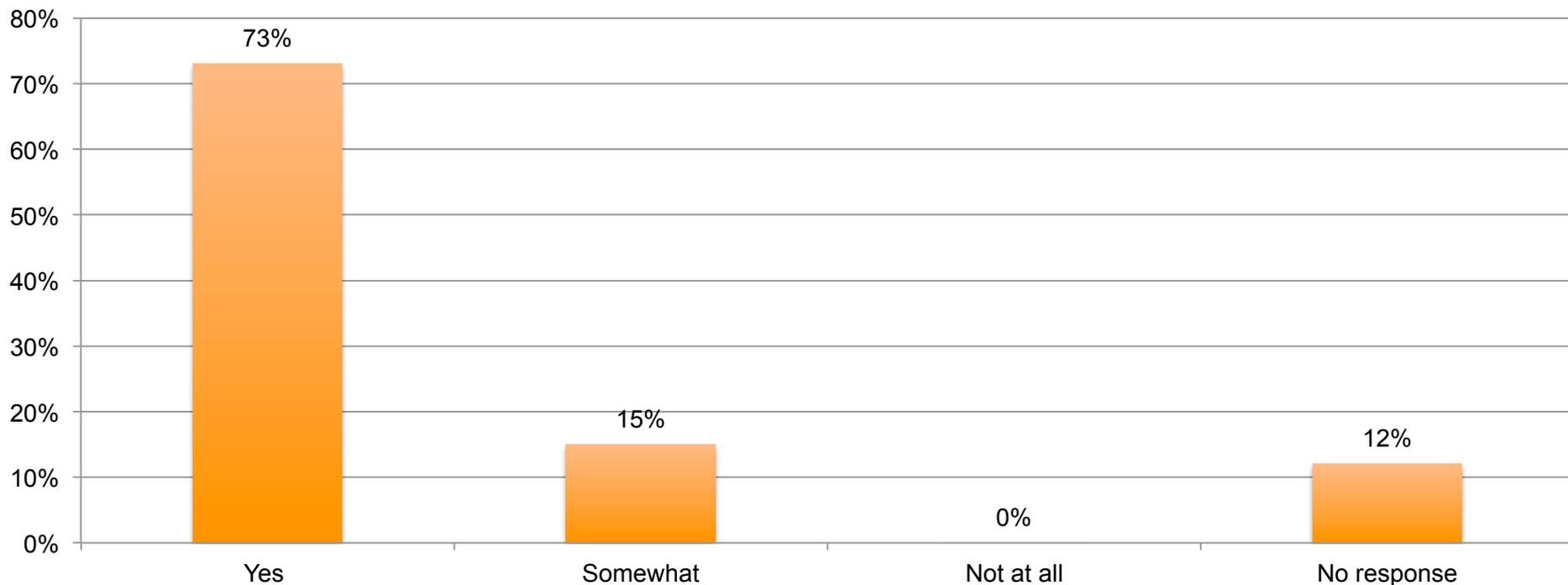
Level 2: Satisfaction

- 99% rated the activity as very good to excellent
- 100% indicated the activity improved their knowledge
- 100% stated that they learned new strategies for patient care
- 83% said they would implement new strategies that they learned in their practice
- 100% said the program was fair-balanced and unbiased

Were our learners satisfied? **Yes!**

Level 2: Satisfaction

Upon completion of this activity, I can now – Understand clinical assessment of COPD patients in developing an effective individualized plan of care; implement guideline directed care for patients with COPD; discuss effective pharmacologic therapies and delivery options to reduce COPD; discuss exacerbations while improving quality of life; and recognize the impact of comorbidities such as diabetes and cardiovascular disease in the management of patients with COPD.



N =146

Did learners indicate they achieved the learning objectives?

Yes! 88% believed they did.

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. 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

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.

Outcome Study Methodology (Cont.)

4. Readiness to Change Behavior (Prochaska and DeClemente Model)

CME activities can motivate providers to move through different stages of change which can ultimately lead them to take action and modify their practice behavior in accordance with the objectives of the education. Movement through these stages of change is an important dependent variable to consider in evaluating the impact of CME. Participants were asked to evaluate their stage of change with respect to specific topics being presented.

- **Pre-contemplation stage:** I do not manage (COPD), nor do I plan to this year.
- **Contemplation stage:** I did not manage (COPD) before this course, but as a result of attending this course I'm thinking of managing it now.
- **Pre-contemplation/confirmation stage:** I do manage patients with (COPD) and this course confirmed that I do **not** need to change my treatment methods.
- **Preparation for action stage:** I do manage patients with (COPD) and this course helped me change my treatment methods.

COPD: Bridging the Gaps

Faculty

Anas Hadeh, MD, FCCP

Director, Pulmonary and Critical Care Medicine Fellowship Program,
Affiliate Assistant Professor of Clinical Biomedical Science,
FAU Charles E. Schmidt College of Medicine
Cleveland Clinic Florida
Weston, FL

Learning Objectives

- Understand clinical assessment of COPD patients in developing an effective individualized plan of care
- Implement guideline directed care for patients with COPD
- Discuss effective pharmacologic therapies and delivery options to reduce COPD
- Discuss exacerbations while improving quality of life
- Recognize the impact of comorbidities such as diabetes and cardiovascular disease in the management of patients with COPD

Key Findings

COPD: Bridging the Gaps

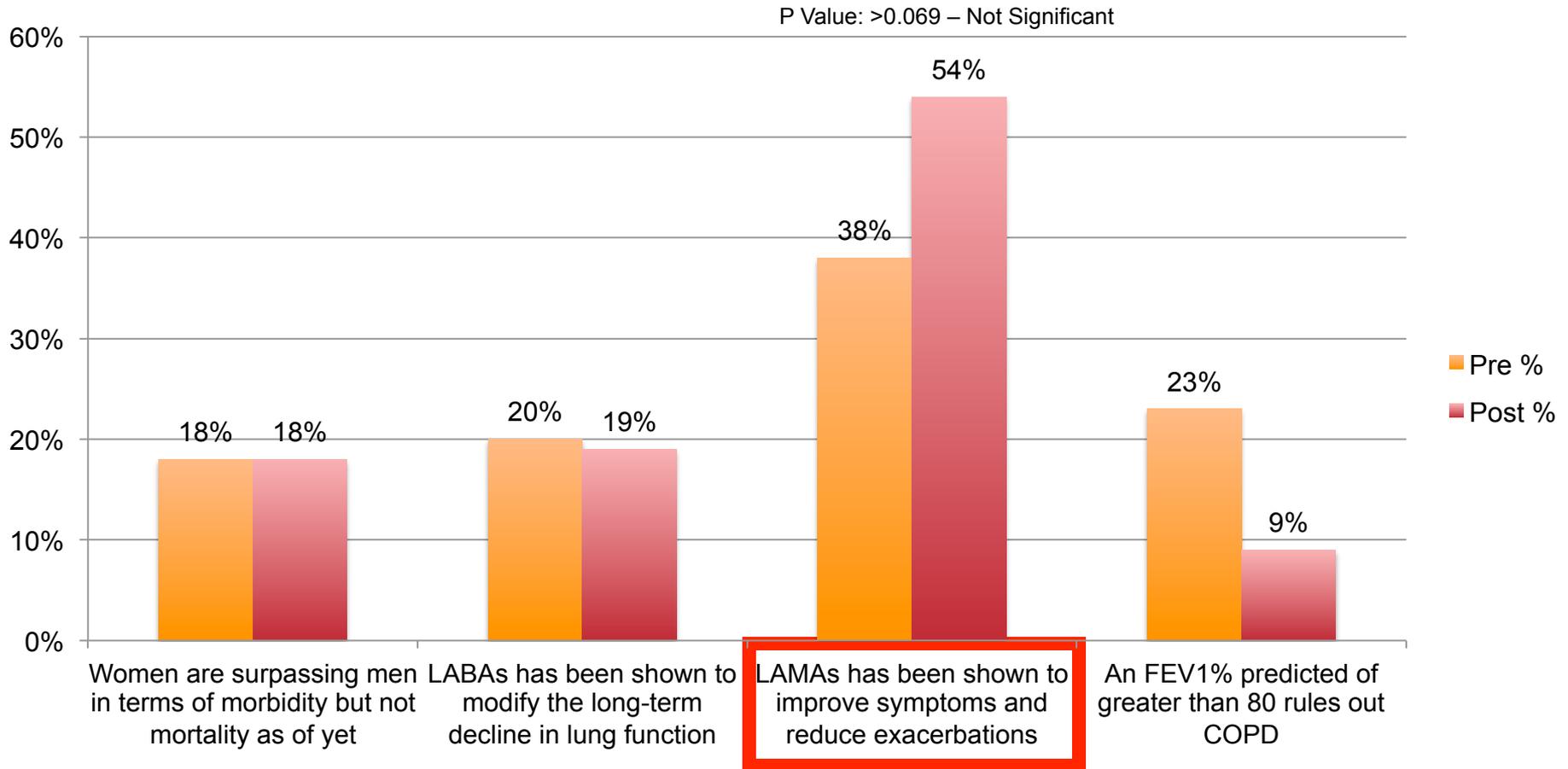
Knowledge/Competence	Learners demonstrated improvement from pre to post-testing in their answers to three of the four case-based post-test questions regarding COPD, however, only one question showed a statistically significant difference between pre and post-testing.
Confidence	The majority of learners rated themselves as having moderate to high levels of confidence in their understanding of treating COPD before the education and this remained the same following the presentation.
Intent to Perform	As a result of this program, 18% of learners who did not manage patients with COPD before are considering doing so, while 58% indicated that they will change their treatment methods.
Change of Practice Behavior	97% 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.

N=60

Case Vignette Knowledge and Competence Assessment Questions

presented before and after lecture. Boxed answer is correct

Which of the following statements is true:



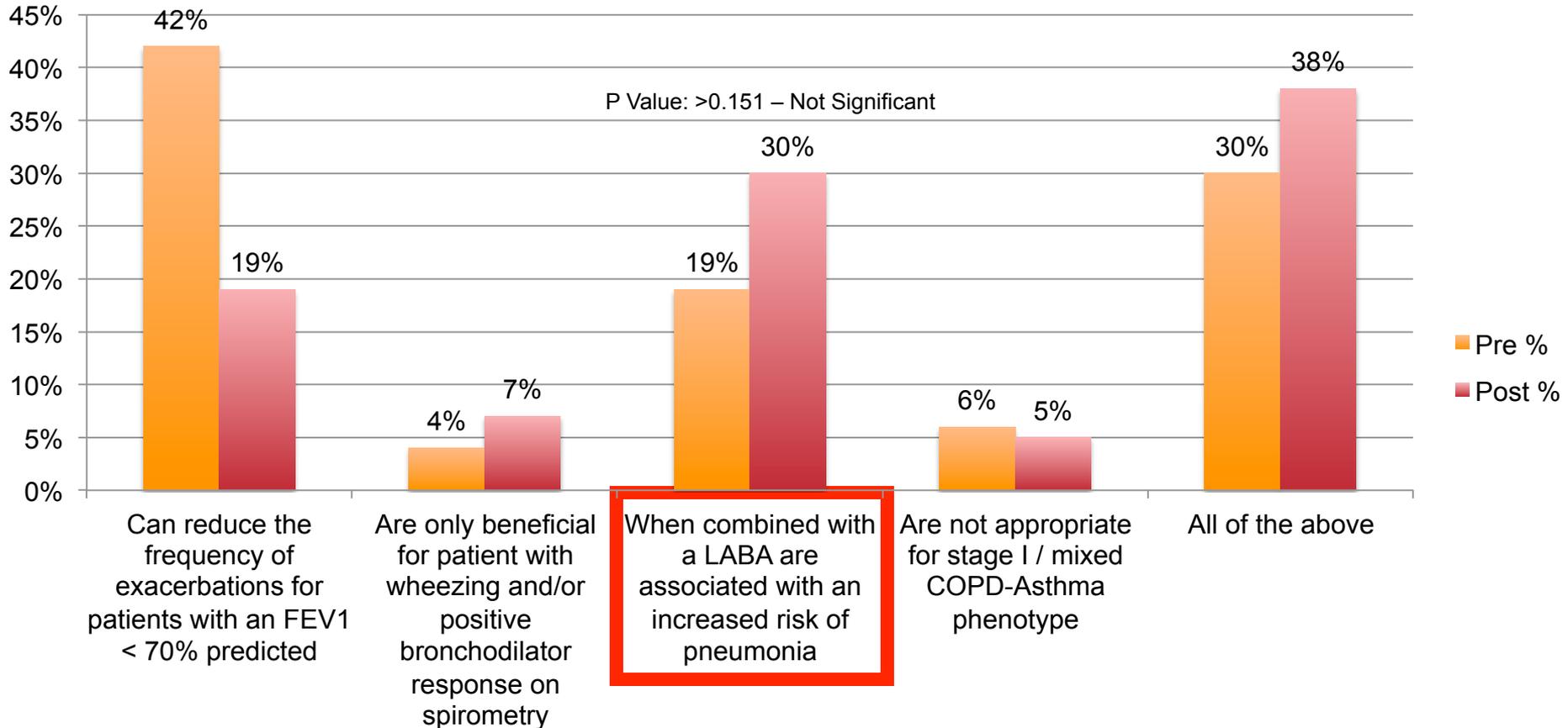
Pre N =60
Post N = 74

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.)

Inhaled corticosteroids (ICS) in COPD:



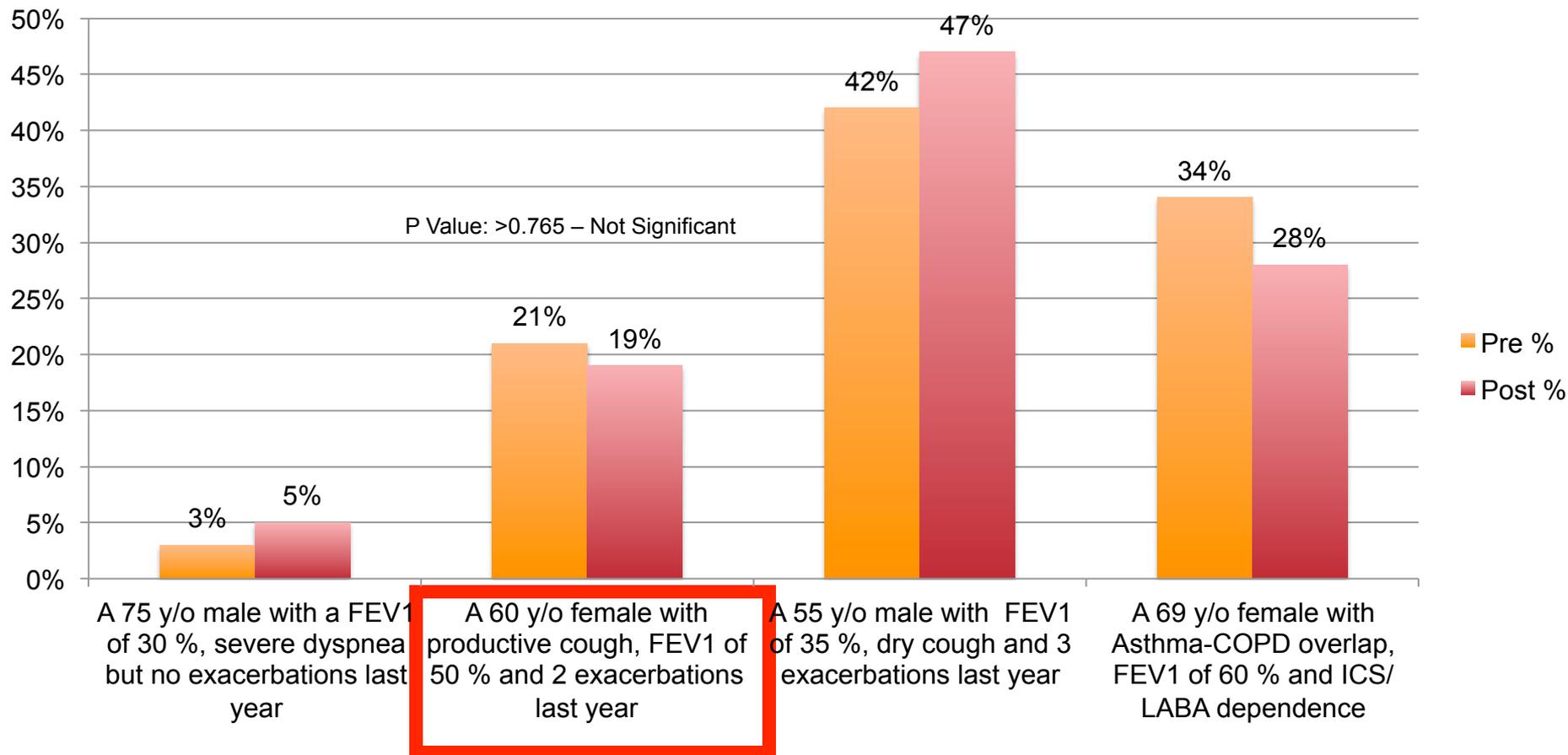
Pre N = 53
Post N = 73

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.)

Who will benefit the most from Phosphodiesterase-4 Inhibitors:



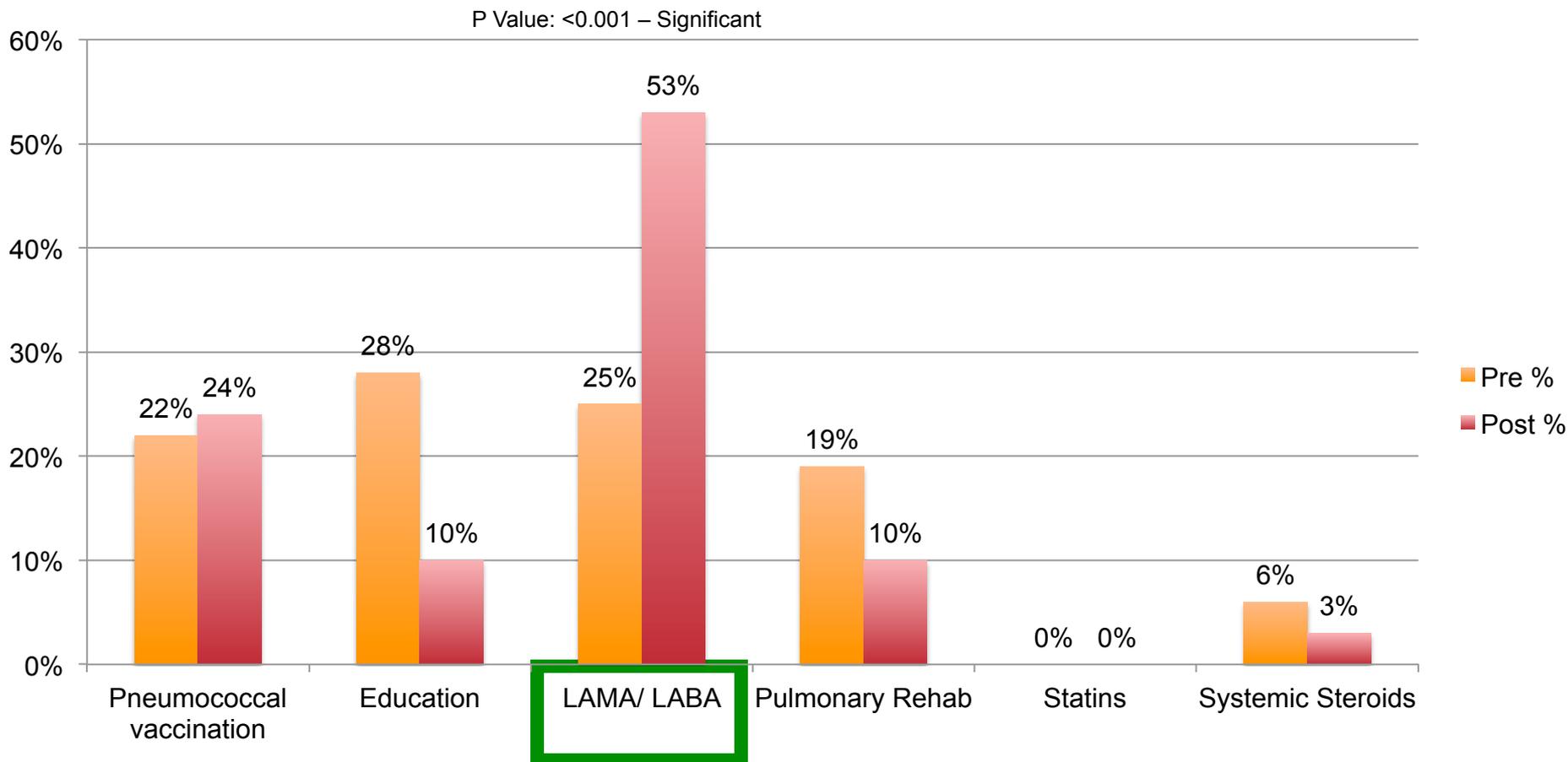
Pre N = 62
Post N = 74

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.)

Based on the 2015 ACCP/ CTS COPD exacerbation prevention guidelines; Which one of the following intervention prevents AECOPD the most:



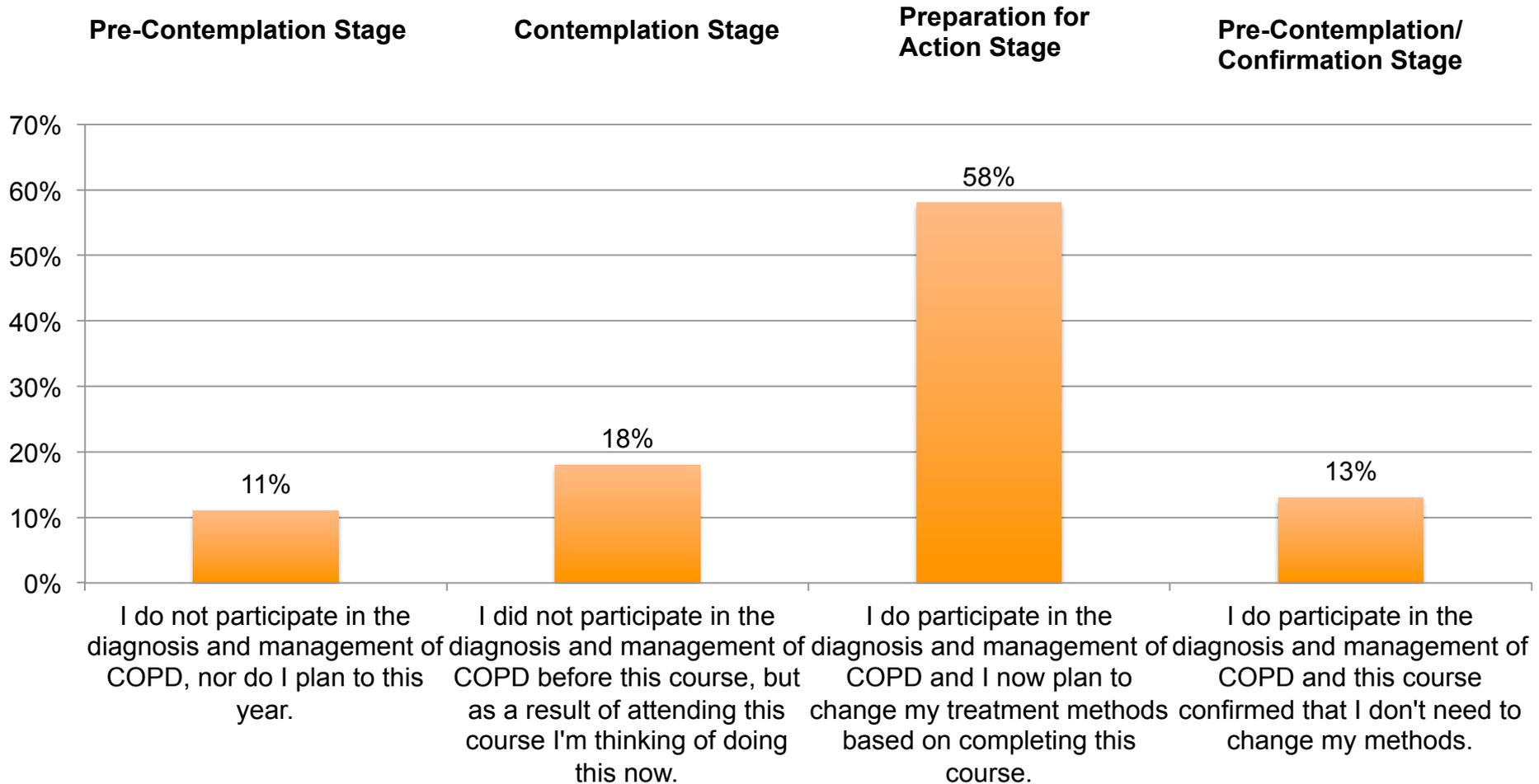
Pre N = 64
Post N = 70

Green highlight indicates significant difference between pre and post testing.

Change in Practice Behavior Question

Presented after lecture.

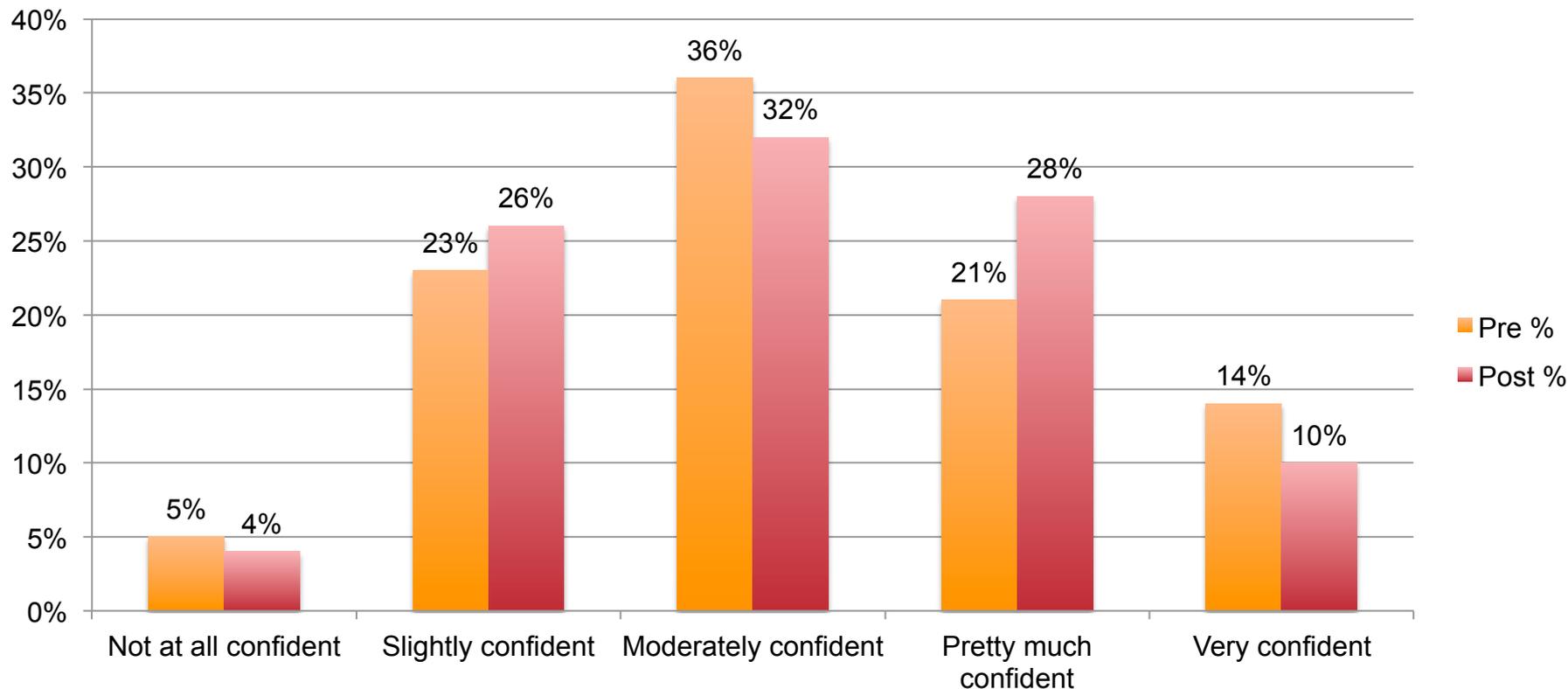
Which of the statements below describes your approach to participating in the diagnosis and management of COPD:



Changes in Confidence from Pre to Post-Testing

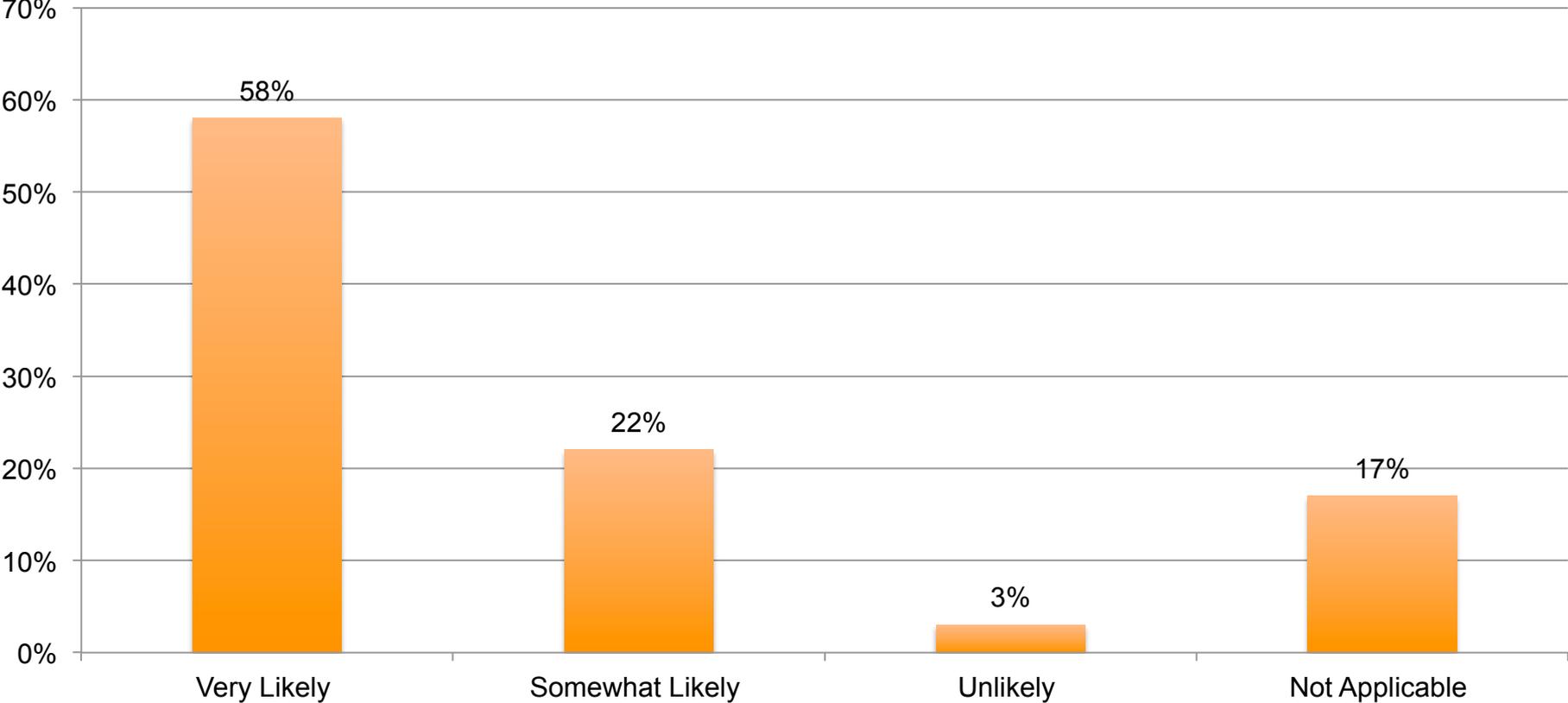
COPD: Bridging the Gaps

On a scale of 1 to 5, please rate how confident you would be in the diagnosis and management of COPD:



Pre N = 56
Post N = 69

Intention to Change Practice Behavior and Implement Learning



N =146

Discussion and Implications

COPD: Bridging the Gaps

Chronic obstructive pulmonary disease (COPD) is a major cause of morbidity, mortality, and disability. COPD is underdiagnosed and its management is suboptimal. The need for continued education in the area of COPD was stated in a comprehensive needs assessment and gap analysis completed prior to the activity. Planners sought to help the audience: understand the procedures involved in doing a clinical assessment of COPD patients and to develop an effective individualized plan of care; implement guideline directed care for patients with COPD and discuss effective pharmacologic therapies and delivery options to reduce COPD; discuss exacerbations while improving quality of life; and to recognize the impact of comorbidities such as diabetes and cardiovascular disease in the management of patients.

Knowledge/Competence: Attendee knowledge was assessed at two points for this activity: prior to the activity and immediately following the activity using the case vignettes and knowledge questions listed earlier. The results indicated improvement in knowledge as measured by positive changes in pre to post-test scores on three of the four questions asked (one statistically significant). This suggests that there is still significant knowledge gap for the learners regarding COPD, in particular regarding the choice and combination of therapies.

Readiness to Change: Fifty-eight percent of attendees noted that they currently treat patients with COPD and that this activity provided information that would lead to further changes in their care of patients with COPD. Eight percent indicated that they did not treat patients with COPD prior to this activity, but would consider doing so after having been exposed to the information taught.

Confidence: Overall levels of confidence in treating patients with COPD before and after the program did not change much. About 70% of providers were moderately confident to very confident before and after the program.

Intention for Change in Practice Behavior: Fifty eight percent of participants reported that they were very likely to utilize information learned from this activity in their practice.

Summary: This activity was successful in the goal of improving understanding of COPD to attendees and had a positive impact in terms of self-reported likelihood of practice change. Based on the data collected at this educational activity, there appears to be a need for further education on this topic.