



Emerging Challenges in Primary Care 2018
17th Annual Regional and Online CME Conference Series



Finding the Needle in the Haystack

Diagnosing and Managing Alpha-1 Antitrypsin Deficiency in Patients with COPD

Final Live Outcome Report

Grifols Grant ID 3370 : January 31, 2019

Executive Summary

- ❖ This curriculum focused on the pathophysiology of AAT, the need to screen patients at increased risk for having it, especially those with COPD, and how to appropriately incorporate therapies into the care of these patients.
- ❖ 729 attendees in multiple professional specialties were reached via both live onsite and online formats
- ❖ Improvement across all learning domains was noted ranging from 23% to 227%
- ❖ Overall, the program improved the ability of learners to screen patients at risk for AATD, and recommend appropriate treatment options



Persistent Educational Gaps

- ❖ Though improvements were observed, learners demonstrated score slippage on the PCA indicating persistent gaps in several areas including:
 - ❖ Mechanism of action of alpha-1 antitrypsin and the impact of its deficiency on lung tissue
 - ❖ Effective screening strategies and laboratory testing to diagnose AATD
 - ❖ Benefits of AAT replacement therapy as demonstrated in Registry or RCTs

The post-test scores, and intent to change practice patterns regarding the management of patients with AATD signifies a clear gap in knowledge and an unmet need among clinicians. It continues to be an important area for future educational programs.

*These numbers represent the total number of attendees, irrespective of assessment participation

Learning Objectives

- 1 Discuss the pathophysiology of Alpha-1 antitrypsin deficiency (AATD) and its impact on chronic obstructive pulmonary disease (COPD) risk.
- 2 Interpret the clinical significance of laboratory test results for AATD.
- 3 Discuss treatment options for AATD and latest GOLD guideline recommendations.
- 4 Discuss strategies to enhance detection and treatment of AATD in clinical practice.

Live Curriculum Overview

1 Accredited Live Regional Symposia 10/20/2018



1 Accredited Live Virtual Symposium:, 9/22/2018



Enduring CME Symposium Webcast

Launch Date: October 8, 2018

End Date: October 7, 2019

Available at: http://naceonline.com/CME-Courses/course_info.php?course_id=1050

Finding the Needle in the Haystack: Diagnosing and Managing Alpha-1 Antitrypsin Deficiency in Patients with COPD

NCME363

Free

Oct 08 2018

Oct 07 2019


Pulmonology

Primary Care Physicians, Nurse Practitioners, Physician

FREE CME Register Now

Clinical Highlights eMonograph

eMonograph, containing key teaching points from the CME activity was distributed 1 week after the meeting to all attendees.



Emerging Challenges in Primary Care

LIVE CONFERENCE SERIES



2018 Clinical Highlights

Finding the Needle in the Haystack: Diagnosing and Managing Alpha-1 Antitrypsin Deficiency in Patients with COPD

Faculty

Franck Rahaghi, MD, MHS, FCCP
Director of Advanced Lung Disease Clinic
Director, Pulmonology

- Alpha-1 Antitrypsin deficiency (AATD) is the most prevalent potentially fatal genetic disorder in the United States.
- Approximately one of out every 13 Americans is a carrier for the disease.
- 1-3% of all patients with COPD have Alpha-1 Antitrypsin Deficiency.

Course Director

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Director of Advanced Lung Disease Clinic
Director, Pulmonary Hypertension Clinic
Chairman, Dept. of Pulmonary and Critical Care
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Executive VP and Medical Director, AlphaNet
Medical Director, AlphaNet Canada
Coral Gables, FL



Emerging Challenges in Primary Care 2018

17th Annual Regional and Online CME Conference Series

Commercial Support

The Emerging Challenges in Primary Care: 2018 series of CME activities were supported through educational grants or donations from the following companies:

- ❖ Actelion Pharmaceuticals US, Inc.
- ❖ Amgen, Inc.
- ❖ AstraZeneca Pharmaceuticals LP
- ❖ Boehringer Ingelheim Pharmaceuticals, Inc.
- ❖ ER/LA Opioid Analgesic REMS Program Companies
- ❖ Grifols
- ❖ Lilly USA, LLC
- ❖ Novo Nordisk, Inc.
- ❖ Sanofi Genzyme and Regeneron Pharmaceuticals
- ❖ Sanofi US

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



Level 1:
Participation and Demographics

Level 1: Participation



729 total attendees



1 city: 128 attendees



1 live Virtual Symposium: **601** attendees

2018 Activity	Date	Attendees
Virtual Symposium	9/22/18	601
Denver, CO	10/20/18	128
Total		729

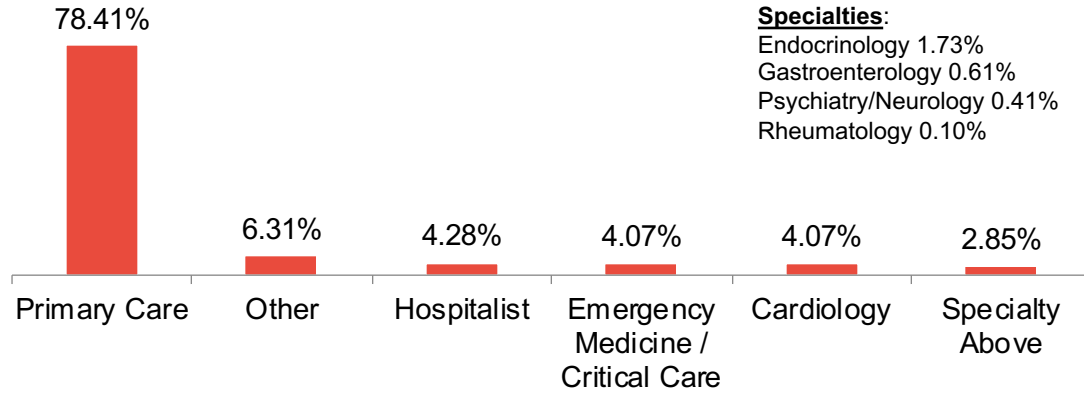


95%

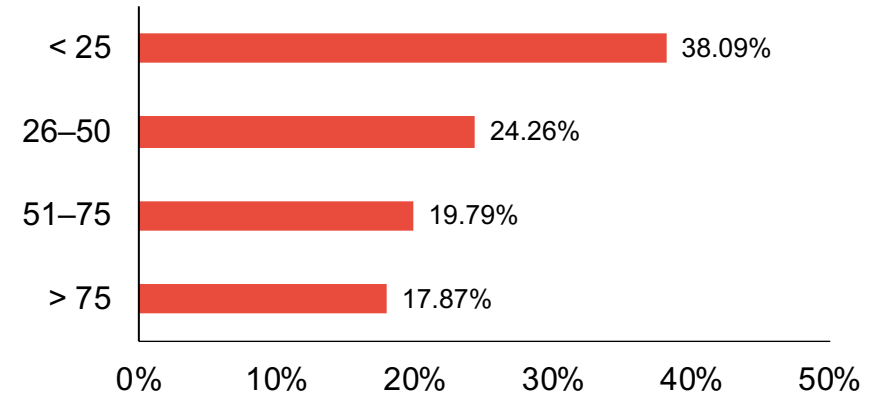
Provide direct patient care

Level 1: Demographics and Patient Reach

Specialty

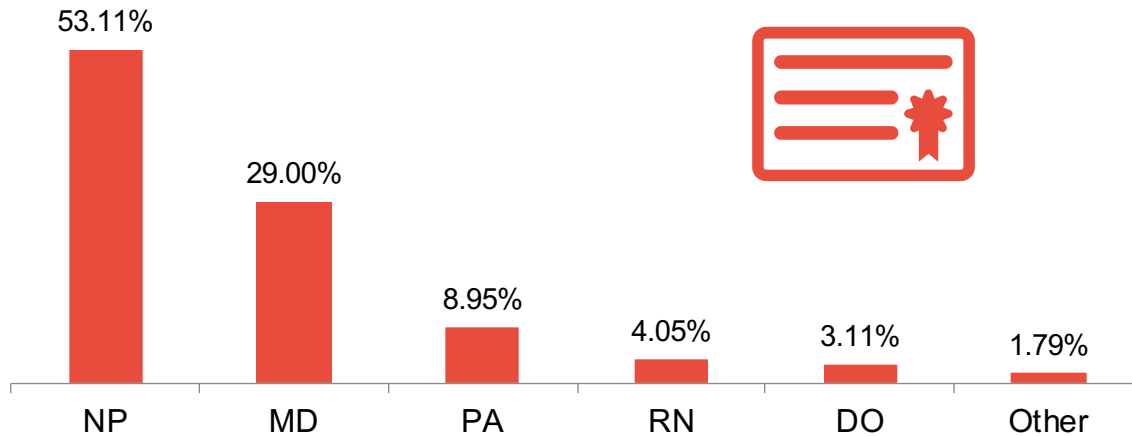


Patients seen each week, in any clinical setting:

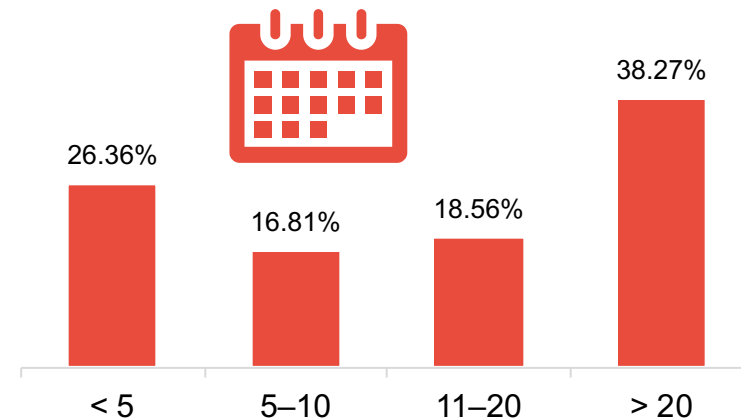


Patient Care Focus: 95%

Profession



Years in Practice





Level 2-5:
Outcomes Metrics

Level 2: Satisfaction



99% rated the activity as excellent



99% indicated the activity improved their knowledge



97% stated that they learned new and useful strategies for patient care



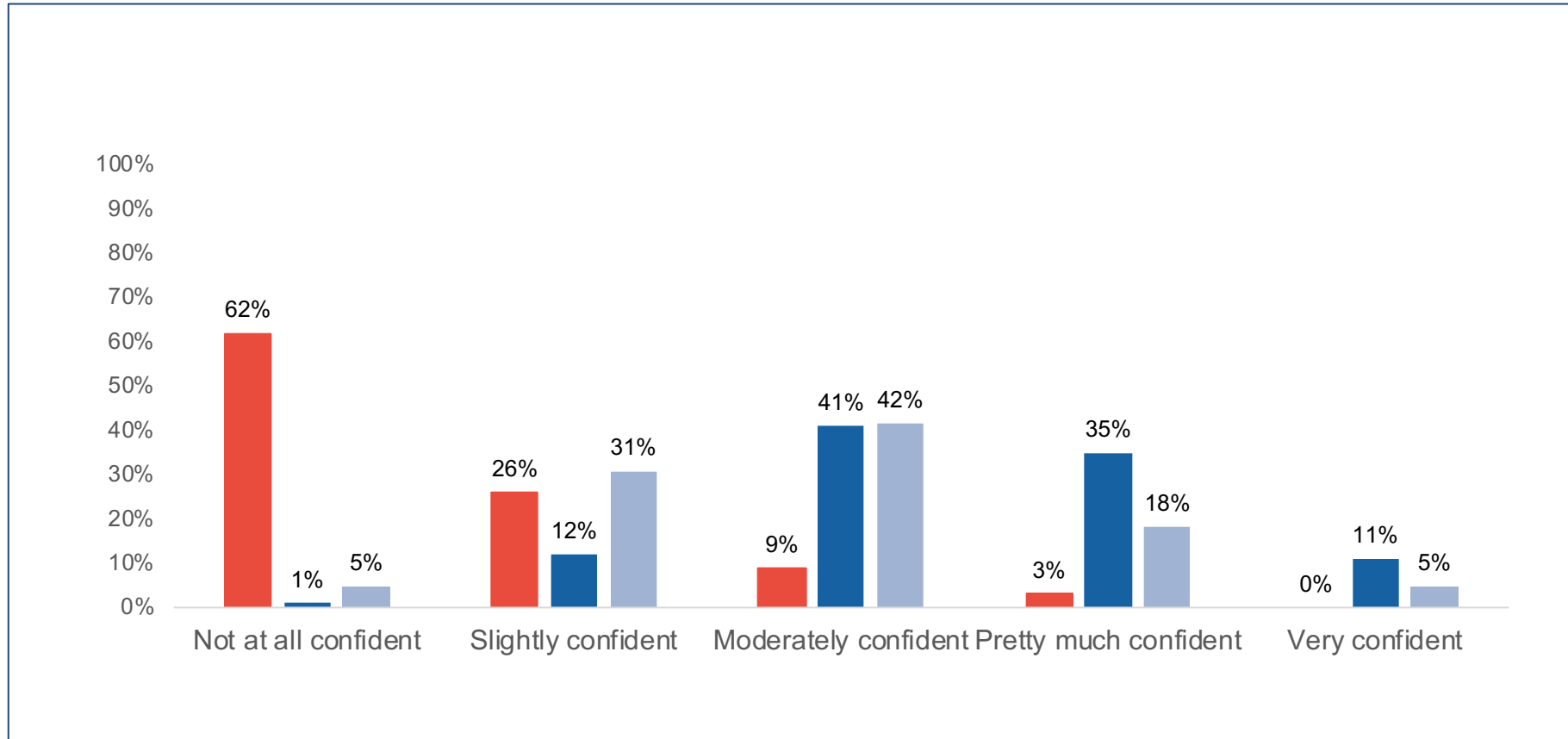
91% said they would implement new strategies that they learned



100% said the program was fair-balanced and unbiased

Please rate your confidence in your ability to integrate the assessment and management of AATD into the care of patients with COPD:

Learning Objectives 1,2,3,4

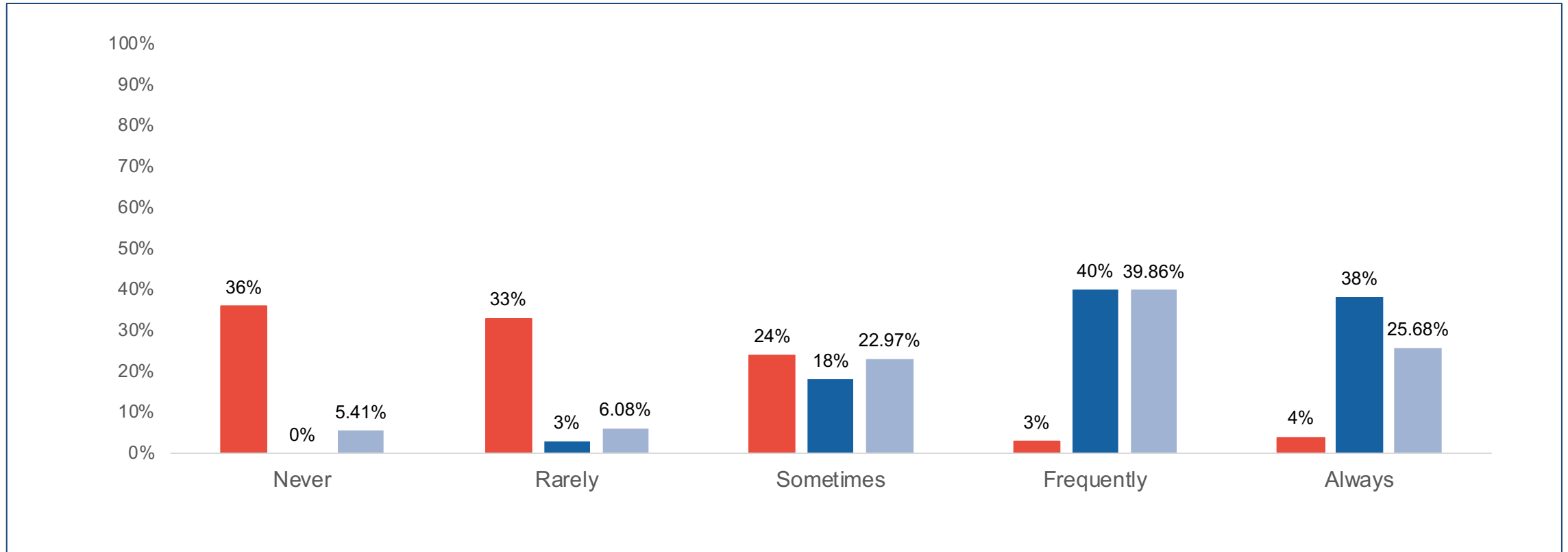


N= Pre: 381 Post: 377 PCA: 183

Pre-Post Change (1.55 - 2.87)	85%
Pre-PCA Change (1.55 - 2.95)	90%

How often do you consider screening patients with COPD for AATD?

(Learning Objectives 1,2,3,4)



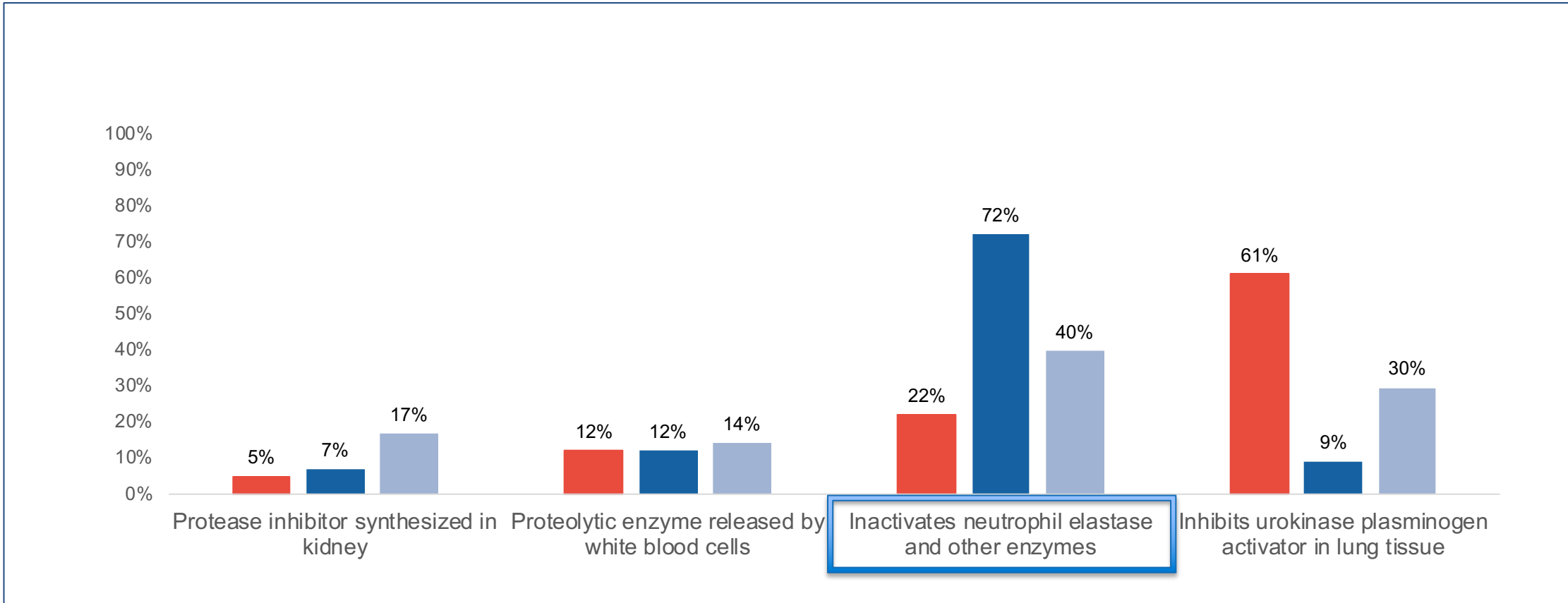
N= Pre: 381 Post: 377 PCA: 183

Pre-Post Change (2.09 – 3.94) 86%

Pre-PCA Change (2.09 – 3.76) 80%

Which of the following statements about alpha-1 antitrypsin is correct? (Learning Objective 1)

P Value: <=0.05



N= Pre: 381 Post: 377 PCA: 183

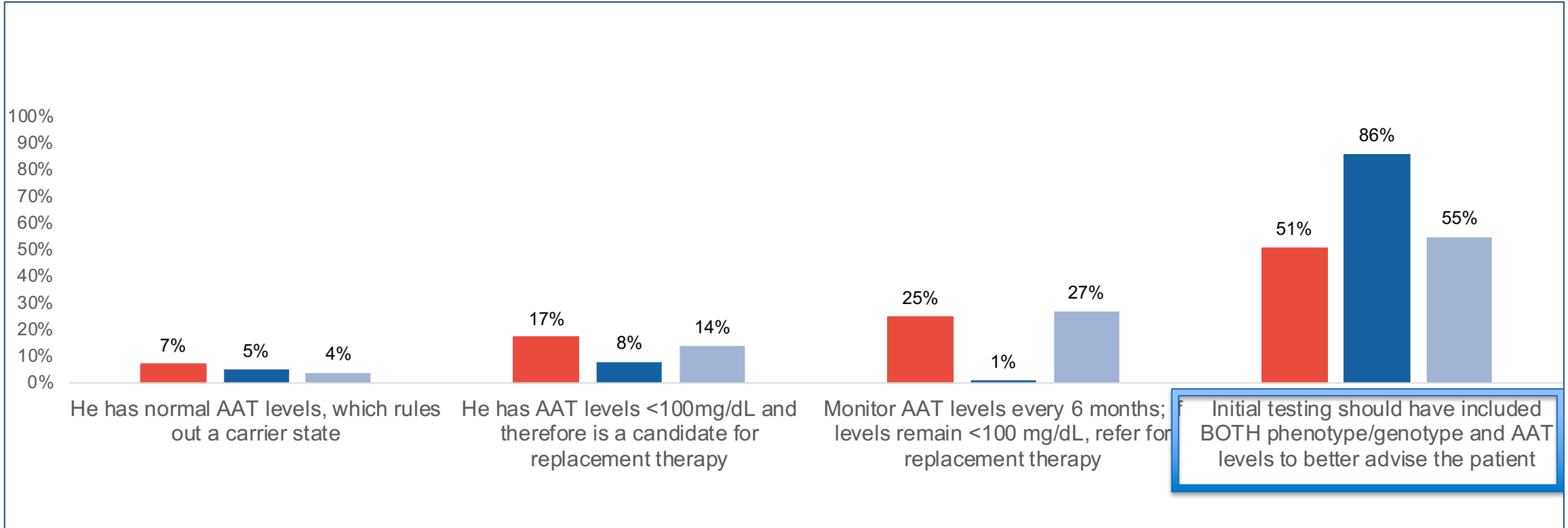
Pre-Post Change 227%
Pre-PCA Change 82%

A 42-year-old man with no smoking history is diagnosed with COPD. Testing for AATD identifies serum AAT 90 mg/dL.

Which of the following statements is correct?

(Learning Objective 2 and 3)

P Value: ≤ 0.05



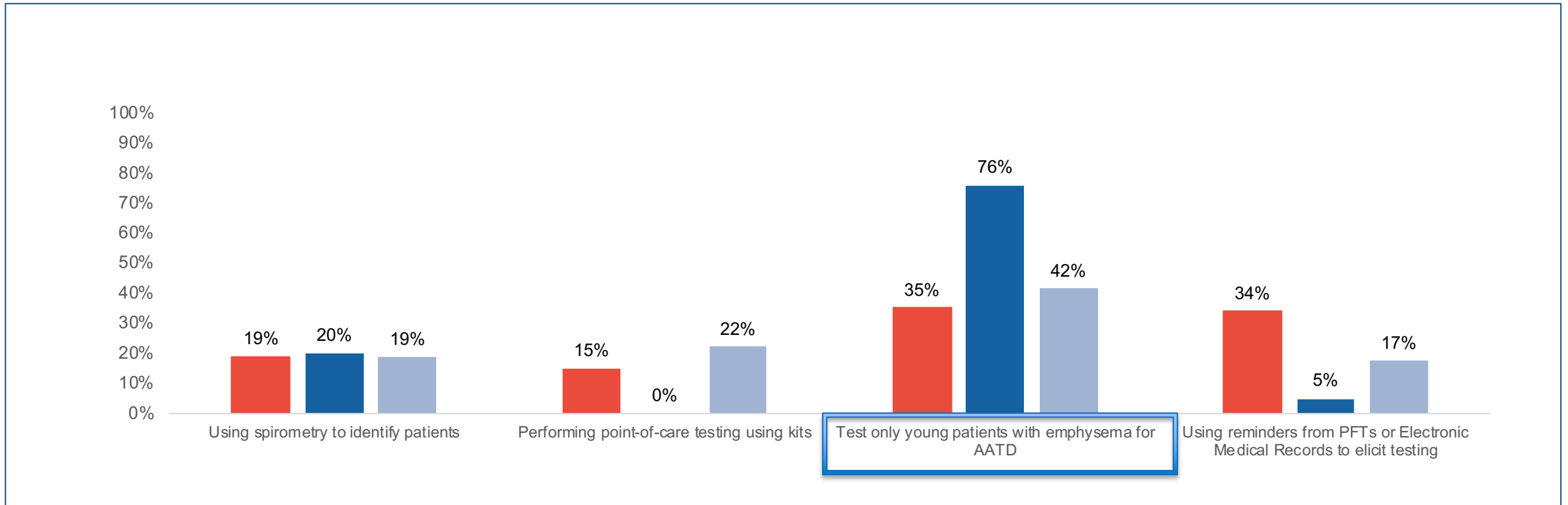
N= Pre: 381 Post: 377 PCA: 183

Pre-Post Change 69%
Pre-PCA Change 8%

Methods for identifying the majority of patients with AATD include all the following, EXCEPT:

(Learning Objective 4)

P Value: ≤ 0.05



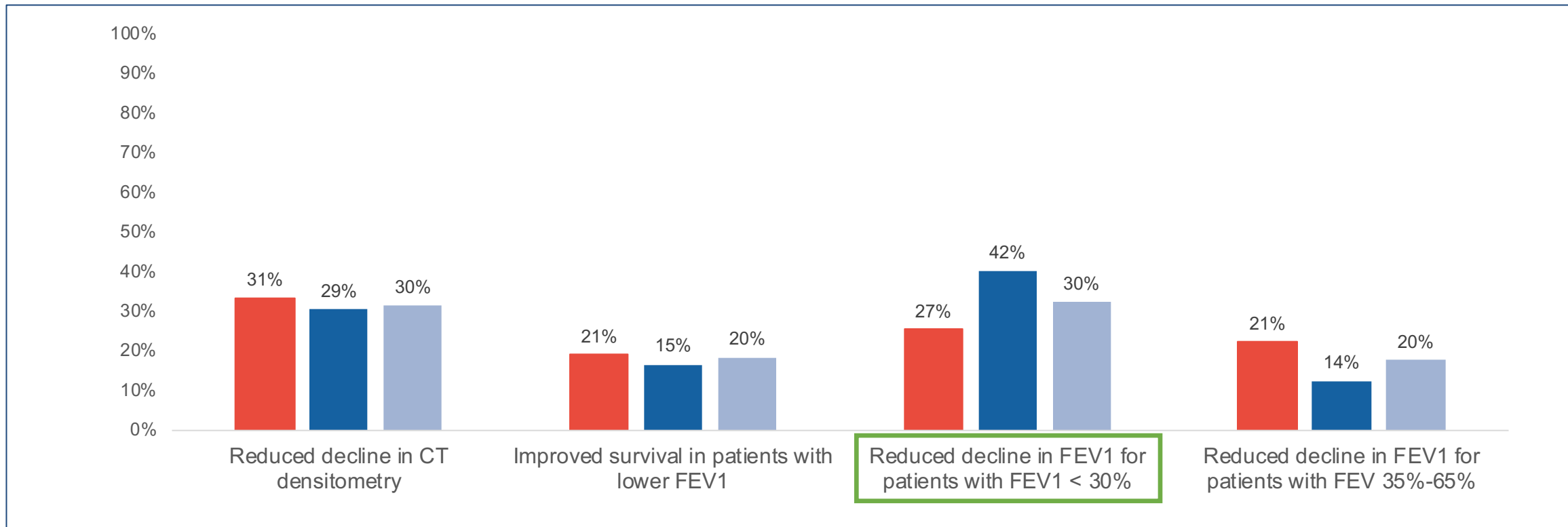
N= Pre: 381 Post: 377 PCA: 183

Pre-Post Change 117%
Pre-PCA Change 20%

All of the following benefits of AATD replacement therapy have been demonstrated (Registry or RCT), EXCEPT:

(Learning Objective 3)

P Value: <=0.05



N= Pre: 381 Post: 377 PCA: 183

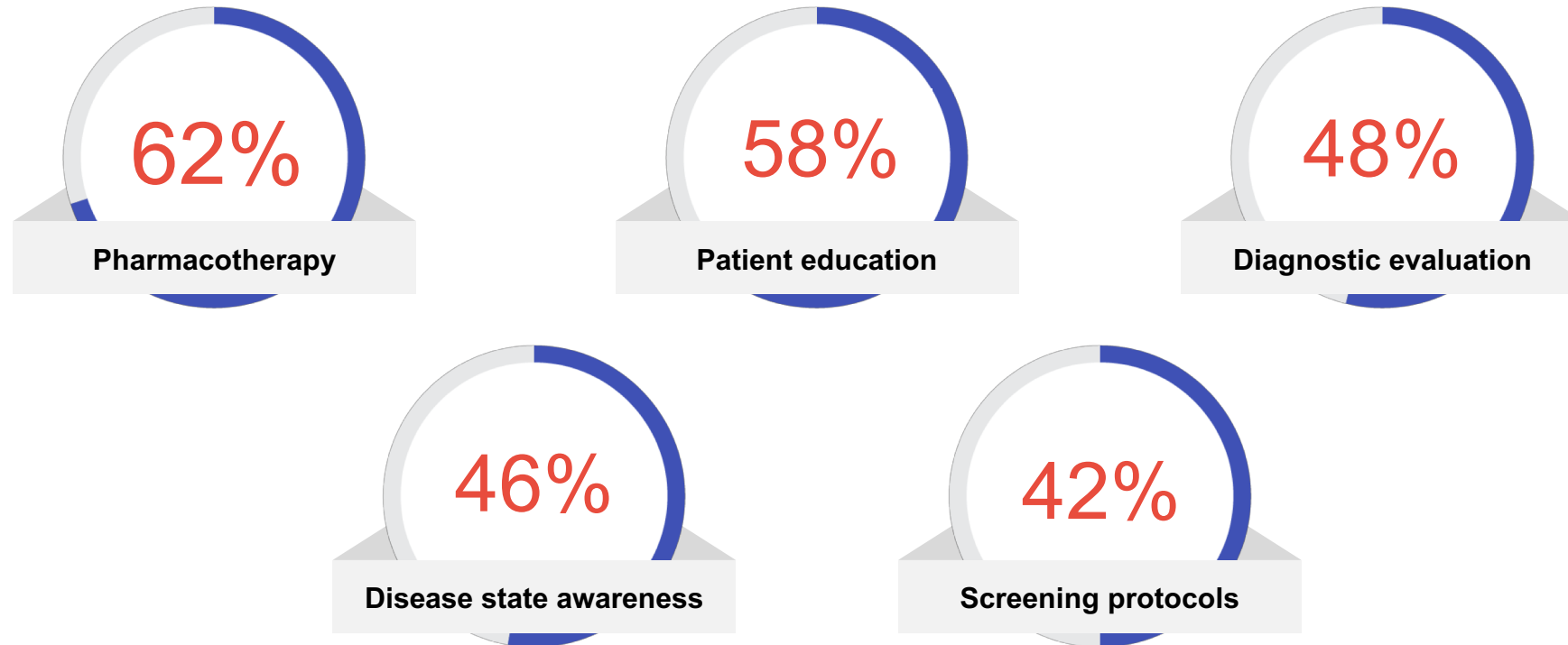
Pre-Post Change 56%

Pre-PCA Change 11%

(4-week Post Assessment)

Please select the specific areas of *skills, or practice behaviors*, you have improved regarding the screening, diagnosis and treatment of AATD since this CME activity. (Select all that apply.)

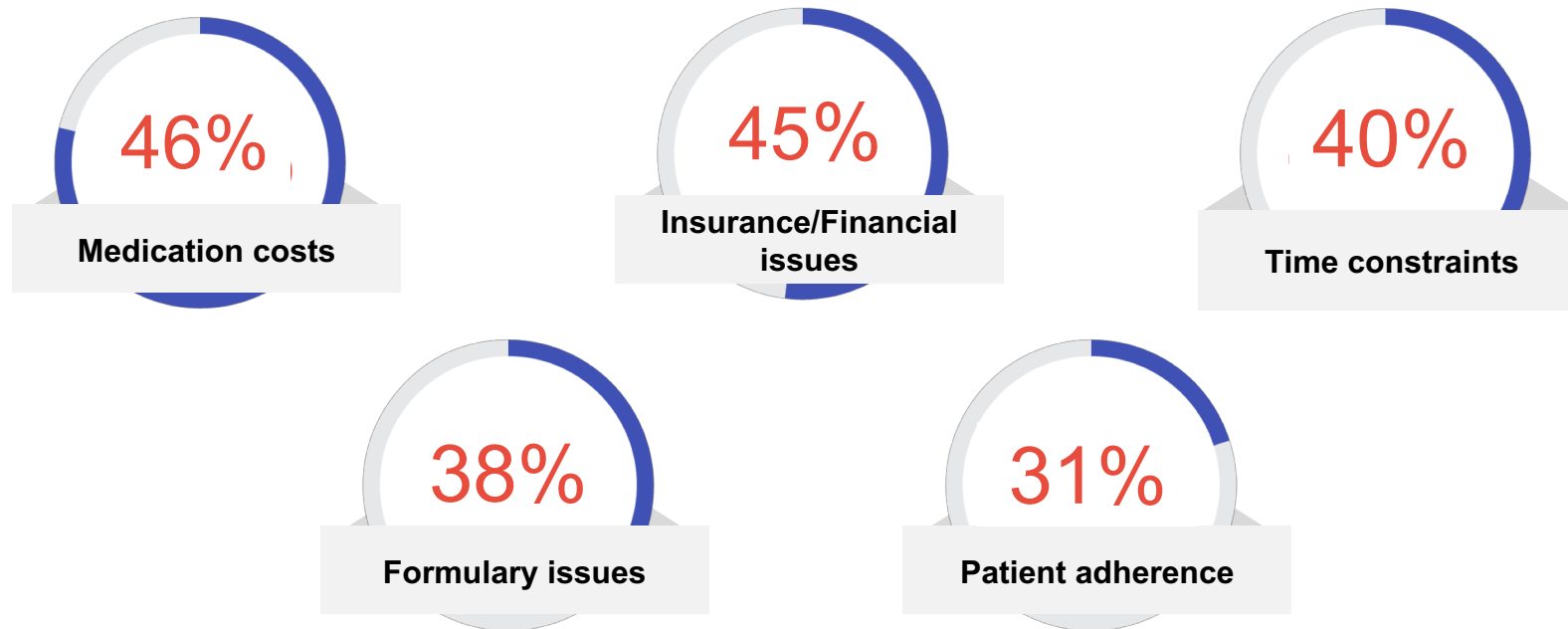
N=183



(4-week Post Assessment)

What specific *barriers* have you encountered that may have prevented you from successfully implementing screening, diagnosis and treatment of AATD strategies for patients with PAH since this CME activity? (Select all that apply)

N=183



Participant Educational Gains

227% improvement in awareness of the mechanism of action of alpha-1 antitrypsin and the impact of its deficiency on lung tissue

117% increased awareness of effective strategies to increase early detection of AATD, including testing all patients with emphysema, not only the young

69% increase in recognition that initial evaluation should include phenotype/genotyping in addition to AAT levels

56% increased recognition that AATD replacement therapy has not demonstrated a reduced decline in FEV1 for patients with an FEV1 < 30%



Persistent Educational Gaps After 4 Weeks

Mechanism of action of alpha-1 antitrypsin and the impact of its deficiency on lung tissue

Laboratory testing to diagnose AATD

Effective screening strategies to identify the maximum number of patients with AATD

Benefits of AAT replacement therapy as demonstrated in Registry or RCTs



Key Take-home Points

80% improvement in intent to screen for AATD in patients with COPD, that persisted 4 weeks after the program

85% improved confidence in ability to integrate the assessment and management of AATD into the care of patients with COPD that persisted after 4 weeks



After 4 weeks, the following improved skills were reported regarding the **screening, diagnosis and treatment of AATD** : 62% pharmacotherapy, 58% patient education and 48% diagnostic evaluation

Net gains were seen in all learning domains but some score slippage after 4 weeks reinforces the need for continued education on the management of AATD.