

Challenges in Pulmonary and Critical Care



NACE

LIVE CME CONFERENCE



Alpha-1 Antitrypsin Deficiency: New Hope for Diagnosis and Treatment

Final Live Outcome Report
Prepared For CSL Behring
February 14, 2019

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Executive Summary

- ❖ This curriculum focused on discussing the pathophysiology and diagnosis of AATD, recognizing its impact on risk of COPD and other comorbidities, treatment options according to the latest GOLD guidelines and strategies to increase detection in practice.
- ❖ 495 attendees in multiple professional specialties were reached via both live onsite and online formats.
- ❖ Improvement across all learning domains was noted ranging from 43% to 138%.
- ❖ Overall, the program improved the ability of learners to recognize the impact of AATD on the risk for COPD, understand the pathophysiology of disease, incorporate laboratory testing and treat patients with AATD and COPD.



495* total attendees



on site: **113** attendees



National online simulcast: **382** attendees

Persistent Educational Gaps

- ❖ Though improvements were observed, learners demonstrated score slippage on the PCA indicating persistent gaps in the several areas including:
 - ❖ Mechanism of action of alpha-1 antitrypsin and the impact of its deficiency on lung tissue
 - ❖ Laboratory testing in AATD
 - ❖ Treatment strategies for patients with AATD and COPD
 - ❖ Comorbid conditions associated with AATD

The post-test scores, and self reported confidence regarding the management of patients with PAH, 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 AAT 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.

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*Presented the AATD Lecture

Challenges in Pulmonary and Critical Care



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The Challenges in Pulmonary and Critical Care: 2018 CME activity was supported through educational grants or donations from the following companies:

- ❖ Bayer HealthCare Pharmaceuticals, Inc.
- ❖ Actelion Pharmaceuticals US, Inc.
- ❖ Boehringer Ingelheim Pharmaceuticals, Inc.
- ❖ CSL Behring, LLC.
- ❖ Grifols
- ❖ Insmed
- ❖ Mallinckrodt Pharmaceuticals, LLC

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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



December 1, 2018 Fort Lauderdale, FL



90%
Provide direct
patient care



495 total attendees



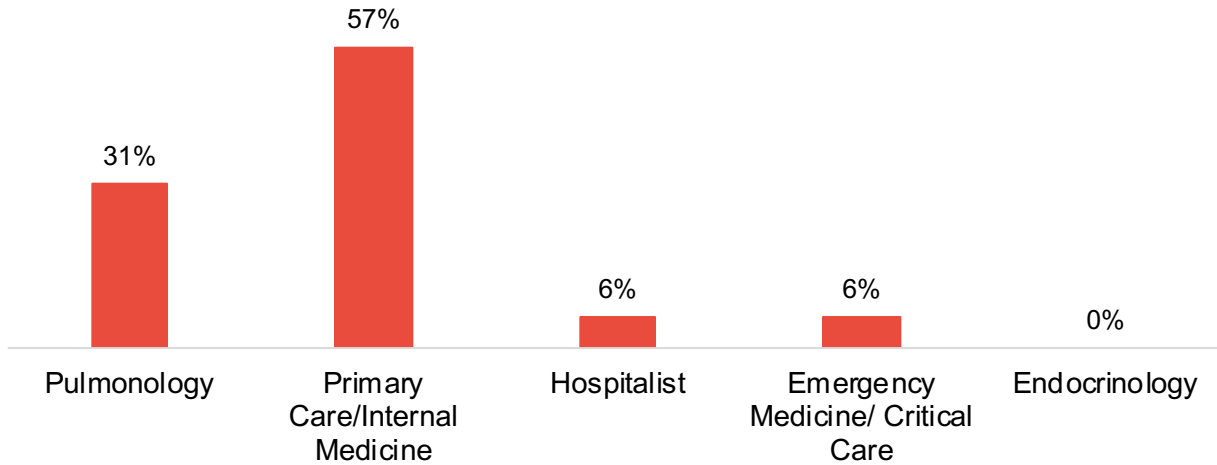
On site: **113** attendees



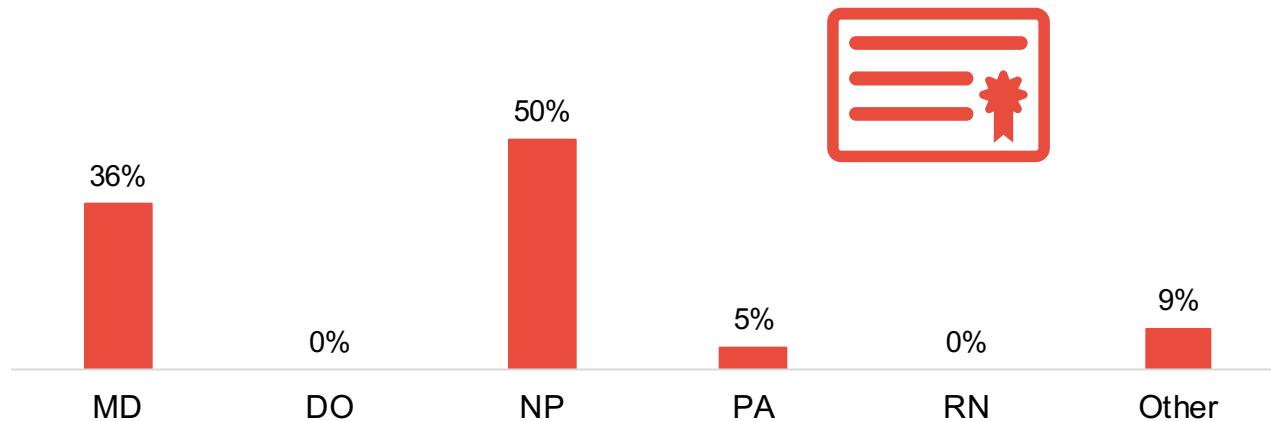
National online simulcast : **382** attendees

Level 1: Demographics and Patient Reach

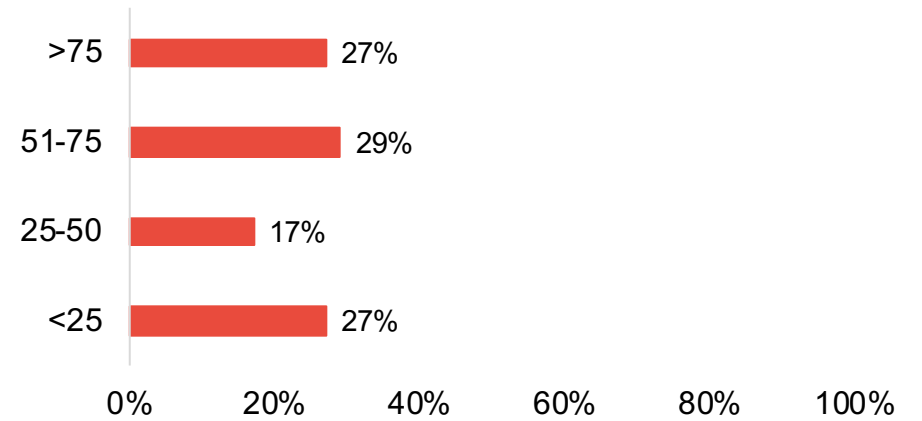
Specialty



Profession

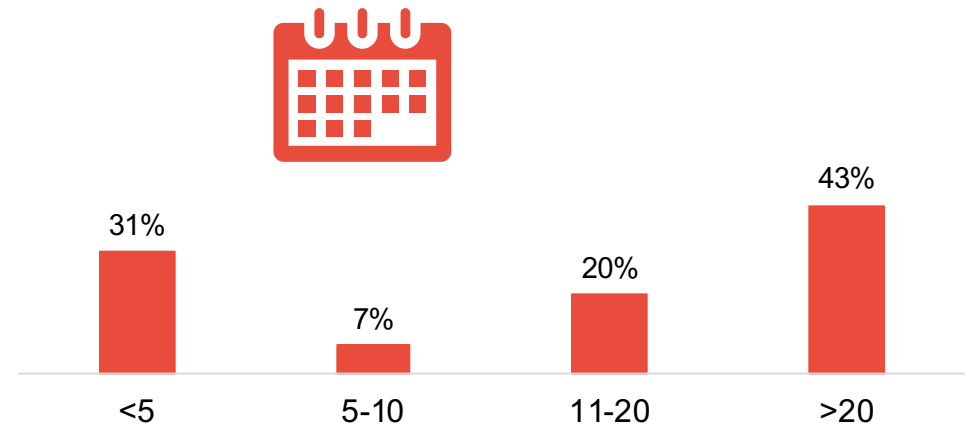


Patients seen each week, in any clinical setting:



Patient Care Focus: 90%

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

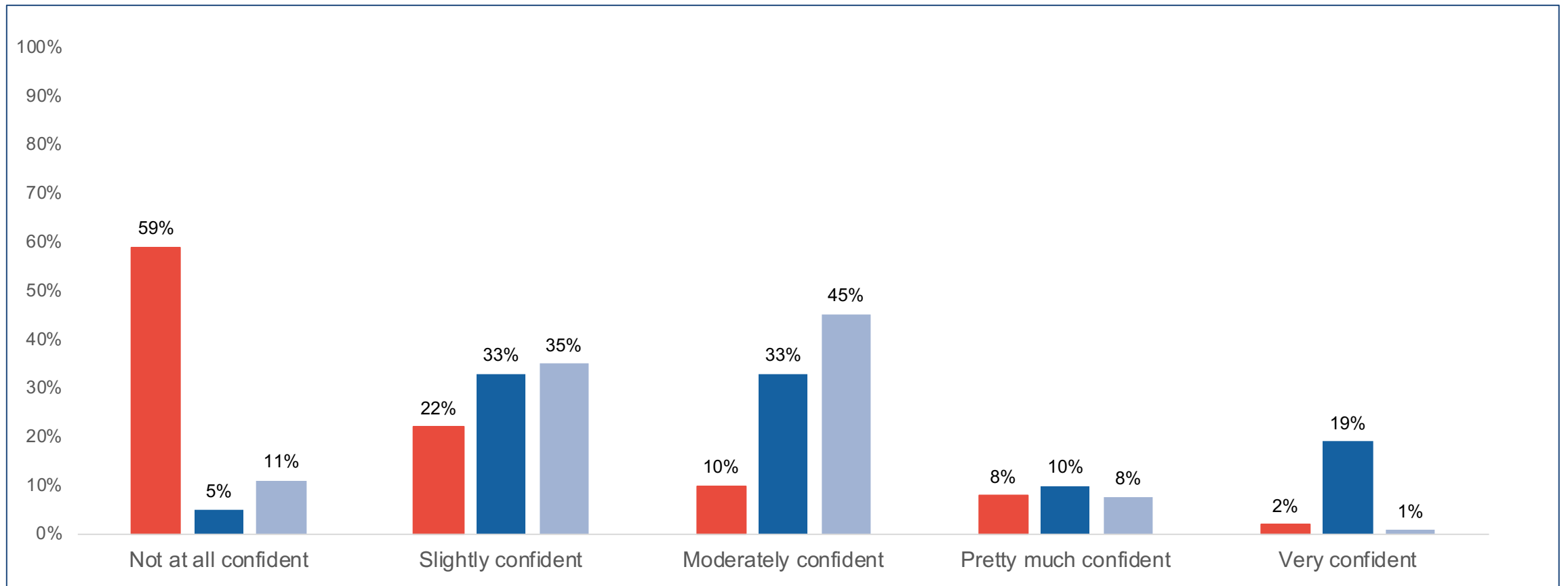


100% said the program was fair-balanced and unbiased

Confidence Assessment

Please rate your confidence in your ability to integrate the detection and treatment of AATD into your practice:

(Learning Objective 4)



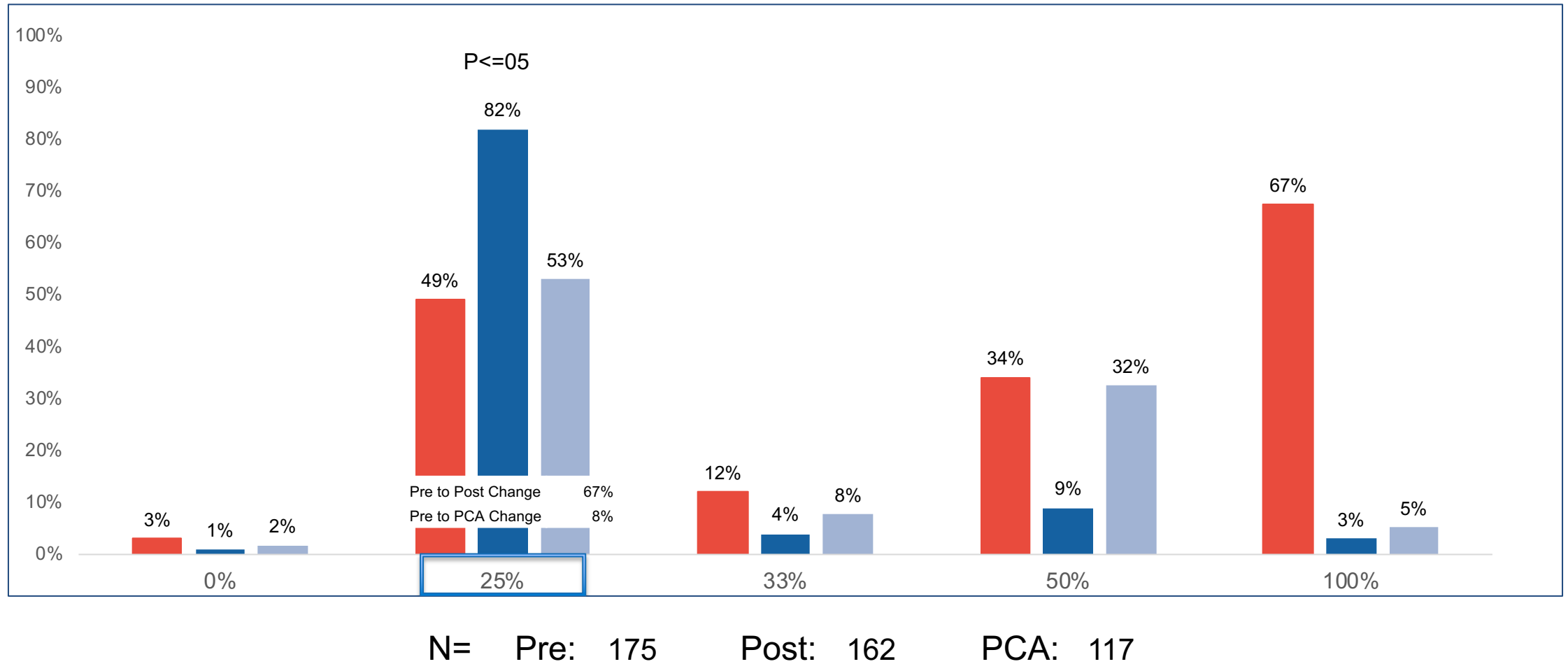
N= Pre: 175

Post: 162

PCA: 117

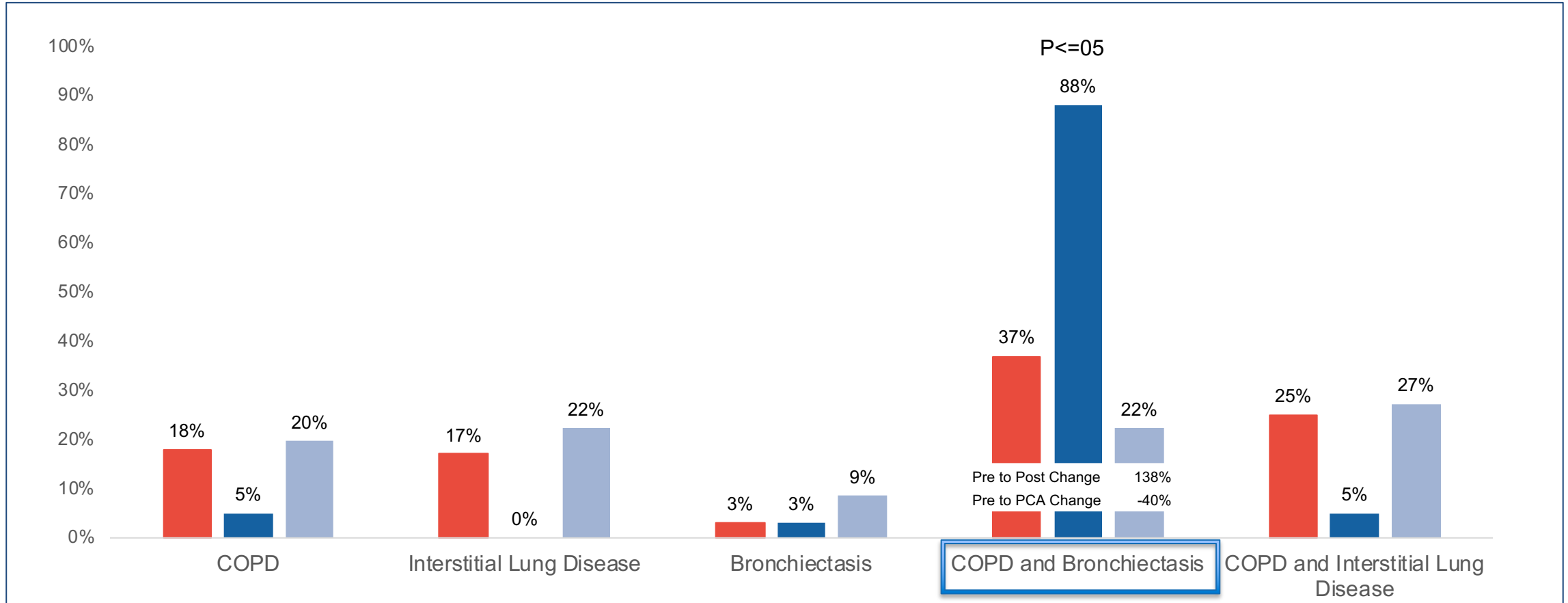
Two carriers of the alpha-antitrypsin gene have children. The statistical chance they will have a child with severe alpha-1 antitrypsin deficiency disease is:

(Learning Objective 2)



What lung conditions are clearly associated with alpha-1 antitrypsin deficiency?

(Learning Objective 1)



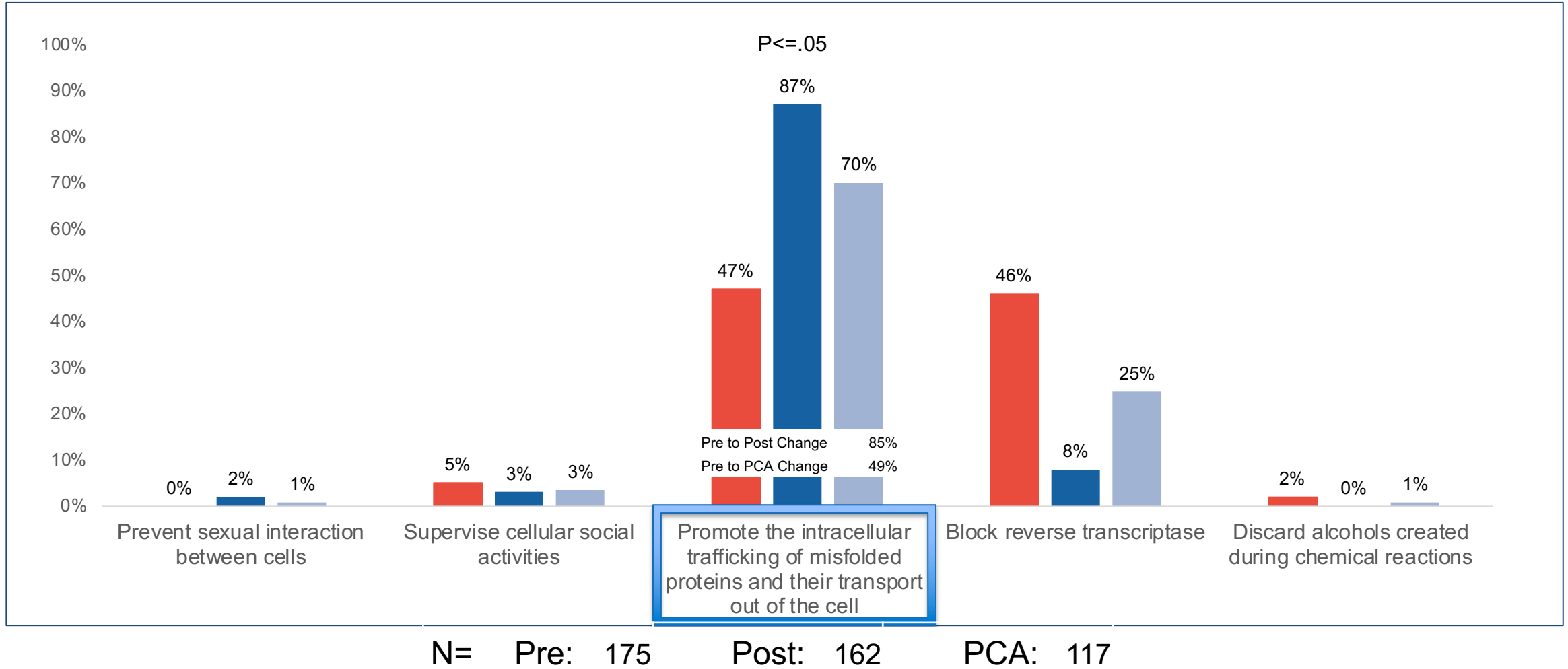
N= Pre: 175

Post: 162

PCA: 117

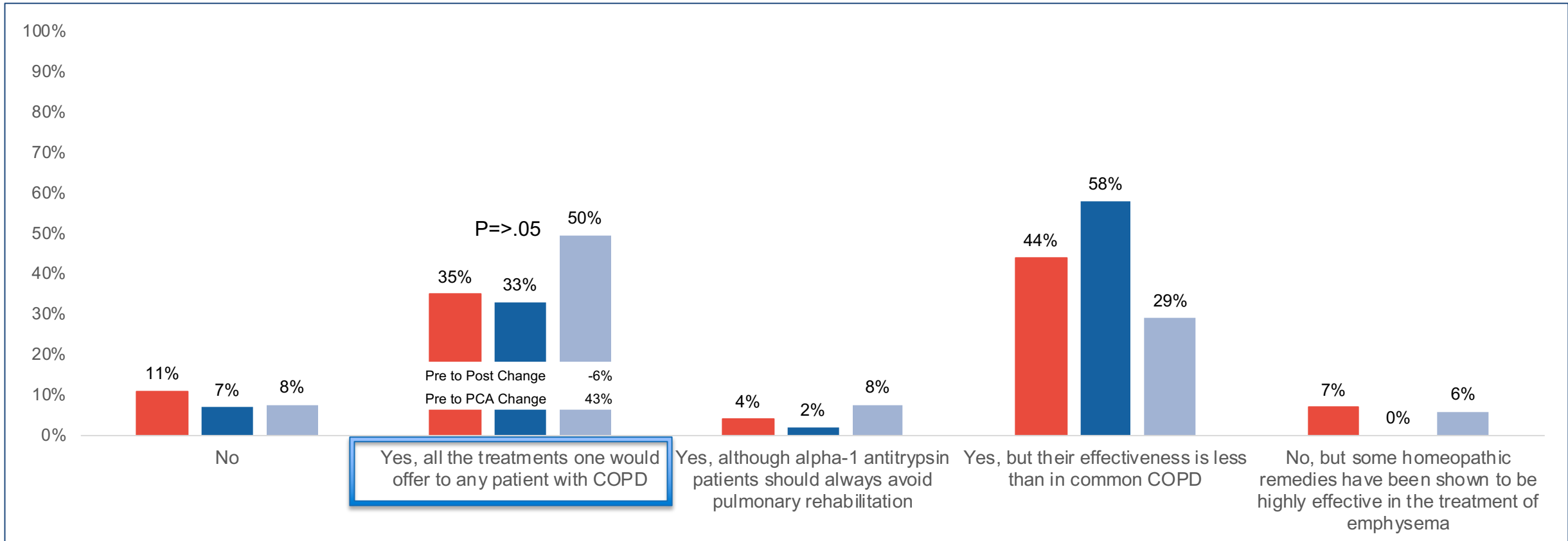
What are chemical chaperones thought to do in alpha-1 antitrypsin deficiency?

(Learning Objective 1)



Are there other treatments for lung disease due to alpha-1 antitrypsin deficiency, in addition to augmentation therapy?

(Learning Objective 3)

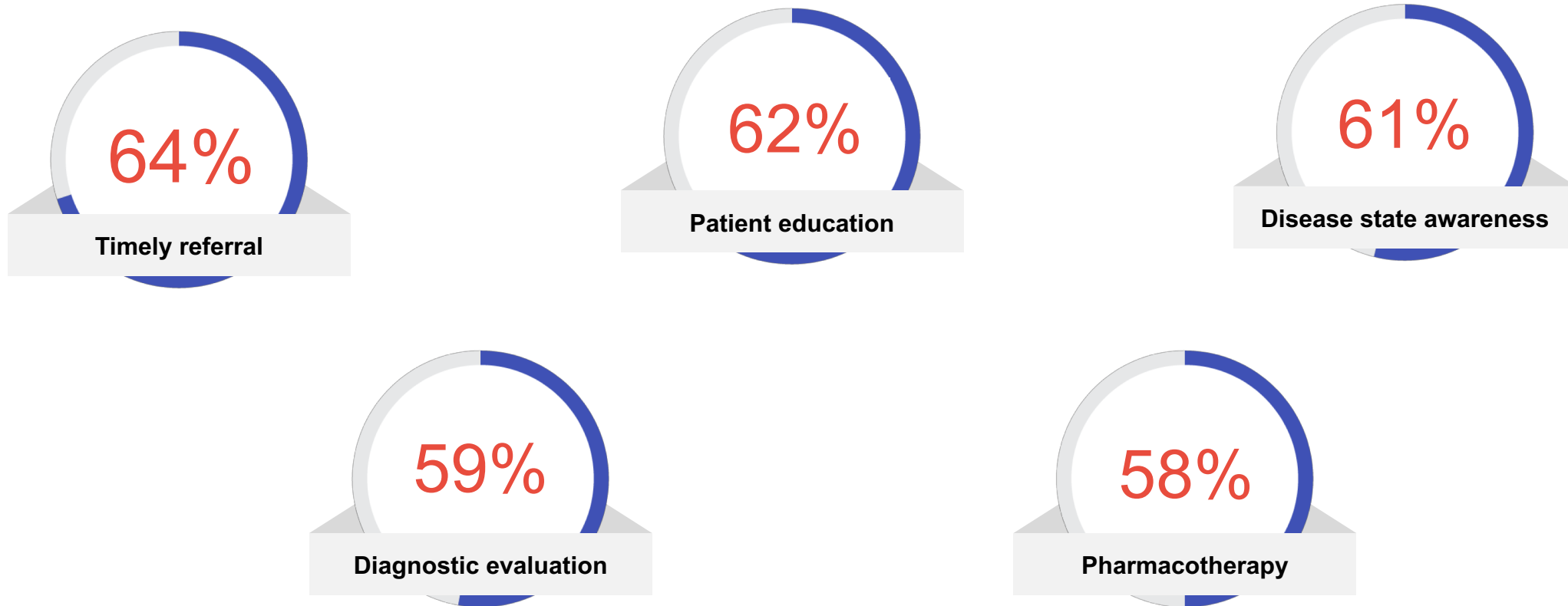


N= Pre: 175 Post: 162 PCA: 117

(4-week Post Assessment)

Please select the specific areas of *skills, or practice behaviors*, you have improved regarding the screening, diagnosis and treatment of Alpha-1 Antitrypsin Deficiency since this CME activity. (Select all that apply.)

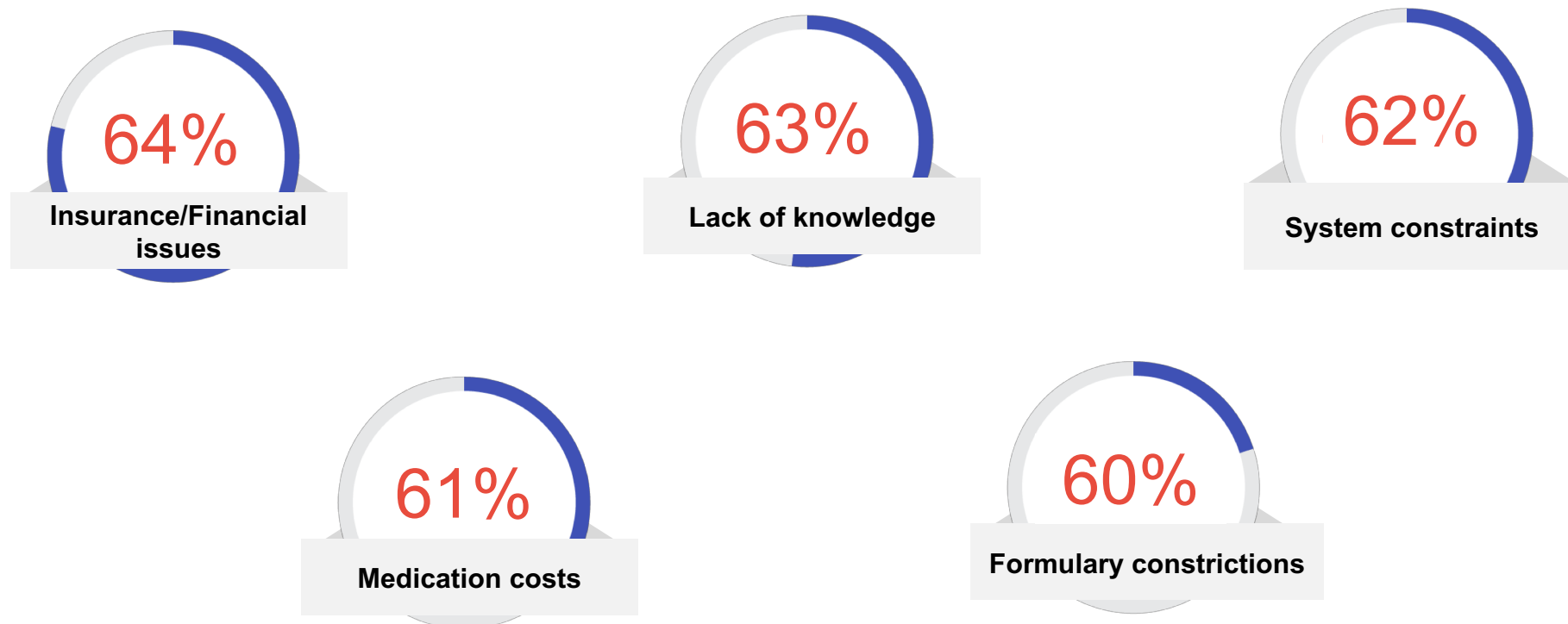
N=117



(4-week Post Assessment)

What specific *barriers* have you encountered that may have prevented you from successfully implementing screening, diagnosis and treatment of Alpha-1 Antitrypsin Deficiency since this CME activity? (Select all that apply)

N=117



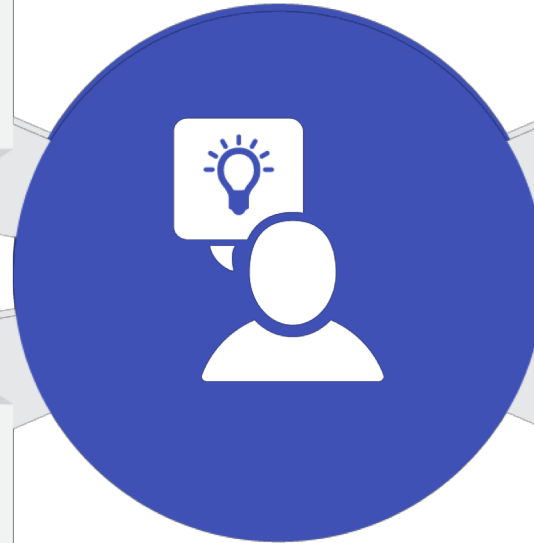
Participant Educational Gains

67% improvement in awareness of the laboratory testing and the genetic heritability of AATD

138% increased awareness of the impact of AATD on risk of COPD and other associated conditions

85% increase in recognition of the underlying pathophysiology of alpha-1 antitrypsin deficiency

43% increased recognition that in addition to AATD replacement therapy, incorporating all treatments for any patient with COPD is appropriate



Persistent Educational Gaps After 4 Weeks

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

Laboratory testing in AATD

Treatment strategies for patients with AATD and COPD

Comorbid conditions associated with AATD



Key Take-home Points

Significant increases in ability to integrate the detection and treatment of AATD into practice that persisted after 4 weeks

90% of participants provide direct patient care



After 4 weeks, the following improved skills were reported regarding the **screening, diagnosis and treatment of AATD** : 64% timely referral pharmacotherapy, 62% patient education and 61% disease state awareness

Despite gains seen in 4 out of 5 questions, score slippage after 4 weeks reinforces the need for continued education on the management of AATD.