

Challenges in Pulmonary and Critical Care



NACE

LIVE CME CONFERENCE



Pulmonary Hypertension: Risk Stratification, A Guiding Light

Final Live Outcome Report

Prepared For Actelion Pharmaceuticals US, Inc.: Grant ID 42656657

February 7, 2019

NACE

Executive Summary

- ❖ This curriculum focused on classifying and diagnosing PAH, using goal-oriented combination therapies and recognizing and managing adverse effects of medications that can impact patient adherence.
- ❖ 495 attendees in multiple professional specialties were reached via both live onsite and online formats
- ❖ Improvement across all learning domains was noted ranging from 14% to 54%
- ❖ Overall, the program improved the ability of learners to screen patients at risk for PAH, recommend appropriate treatment options and recognize common adverse effects of medications



Persistent Educational Gaps

- ❖ Though improvements were observed, learners demonstrated score slippage on the PCA indicating persistent gaps in the several areas including:
 - ❖ Strategies to diagnose pulmonary hypertension
 - ❖ Treatment algorithm for PAH
 - ❖ Adverse effects of PAH therapies

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 diagnosis and classification of pulmonary hypertension according to the World Health Organization (WHO) clinical classification system.
- 2 Outline an approach to rule out and appropriately manage chronic thromboembolic pulmonary hypertension (CTEPH), if present.
- 3 Recognize the role of upfront, early combination and goal-oriented therapy for pulmonary arterial hypertension (PAH) and Risk Stratification.
- 4 Describe the management of adverse events with PAH therapies and strategies to improve patient adherence.

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*Presented PAH lecture

Challenges in Pulmonary and Critical Care



LIVE CME CONFERENCE

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

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



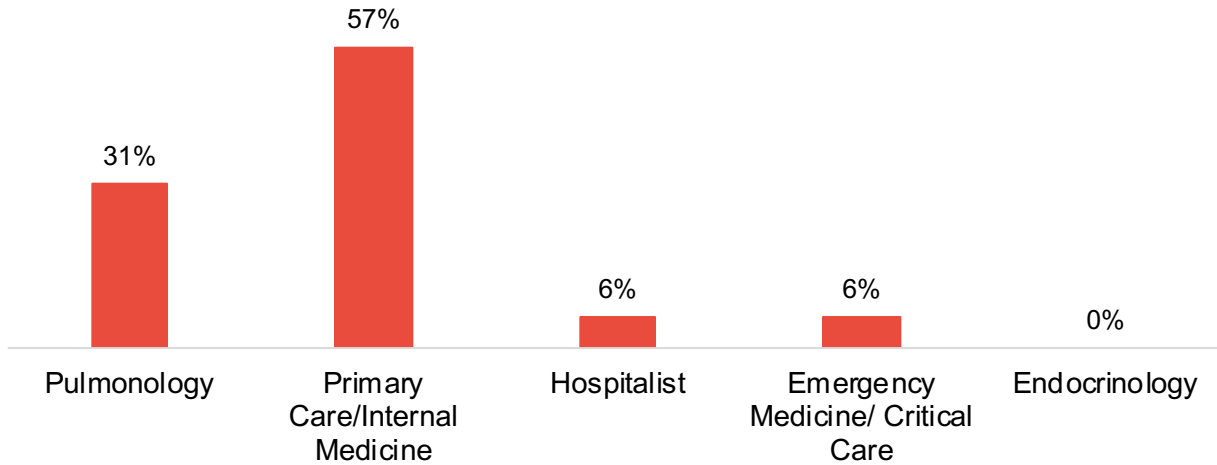
On site: **113** attendees



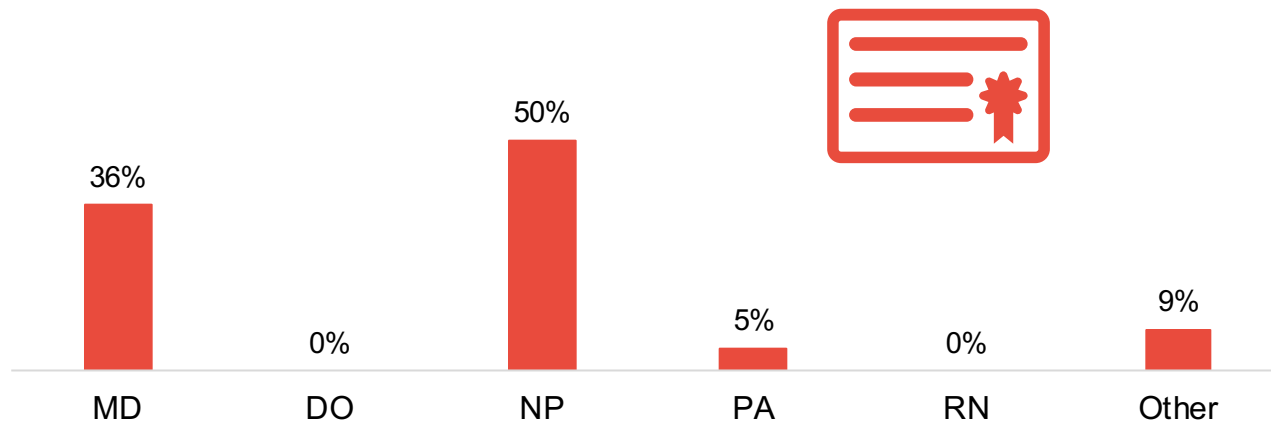
National online simulcast : **382** attendees

Level 1: Demographics and Patient Reach

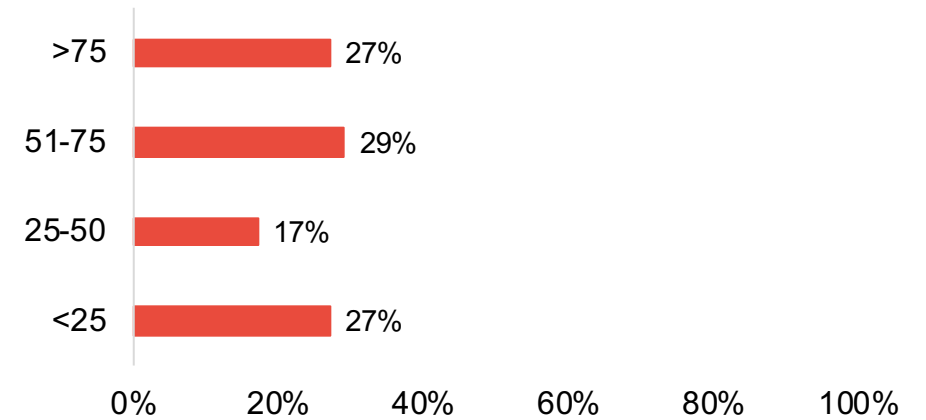
Specialty



Profession

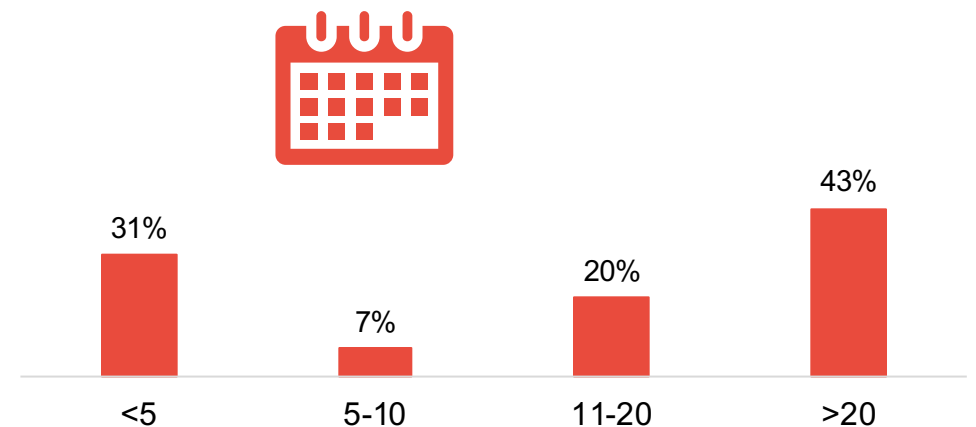


Patients seen each week, in any clinical setting:



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

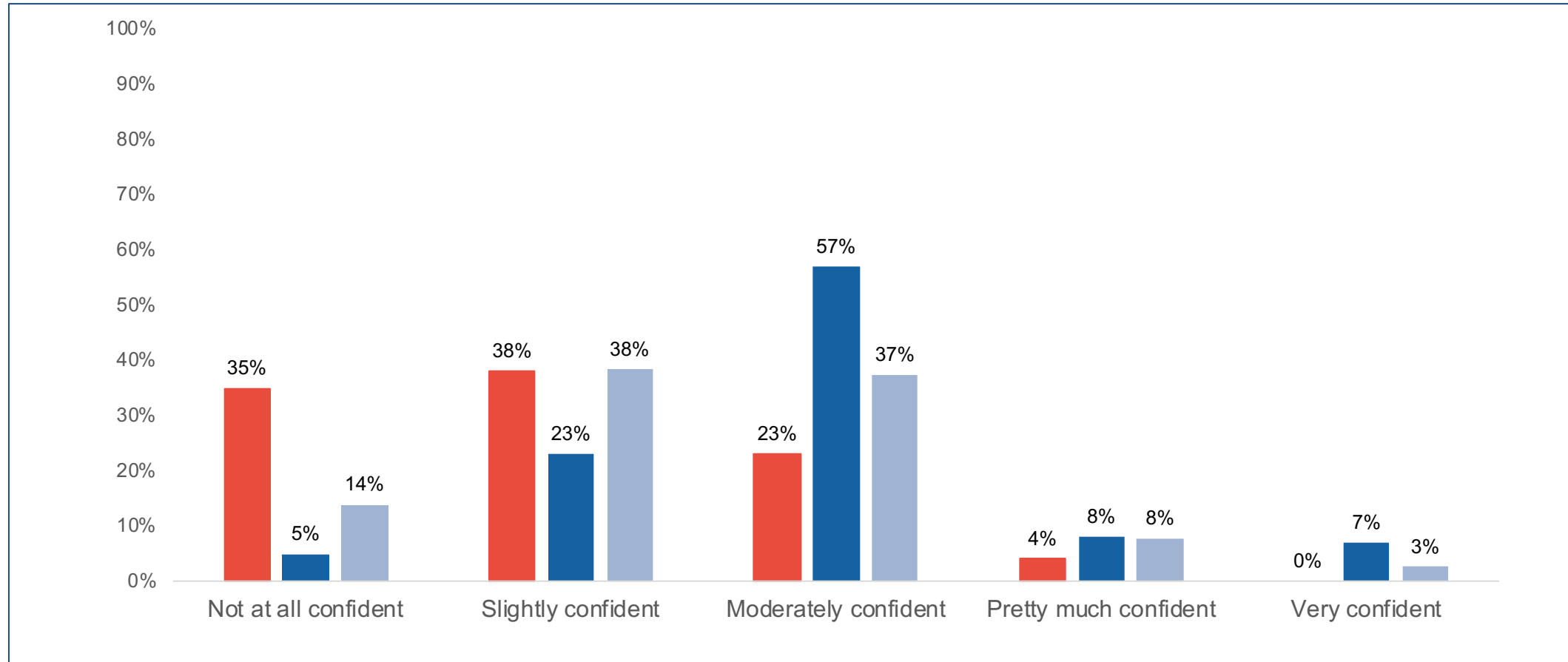


100% said the program was fair-balanced and unbiased

Confidence Assessment

Please rate your confidence in your ability to manage patients with PAH:

(Learning Objectives 2,3,4)



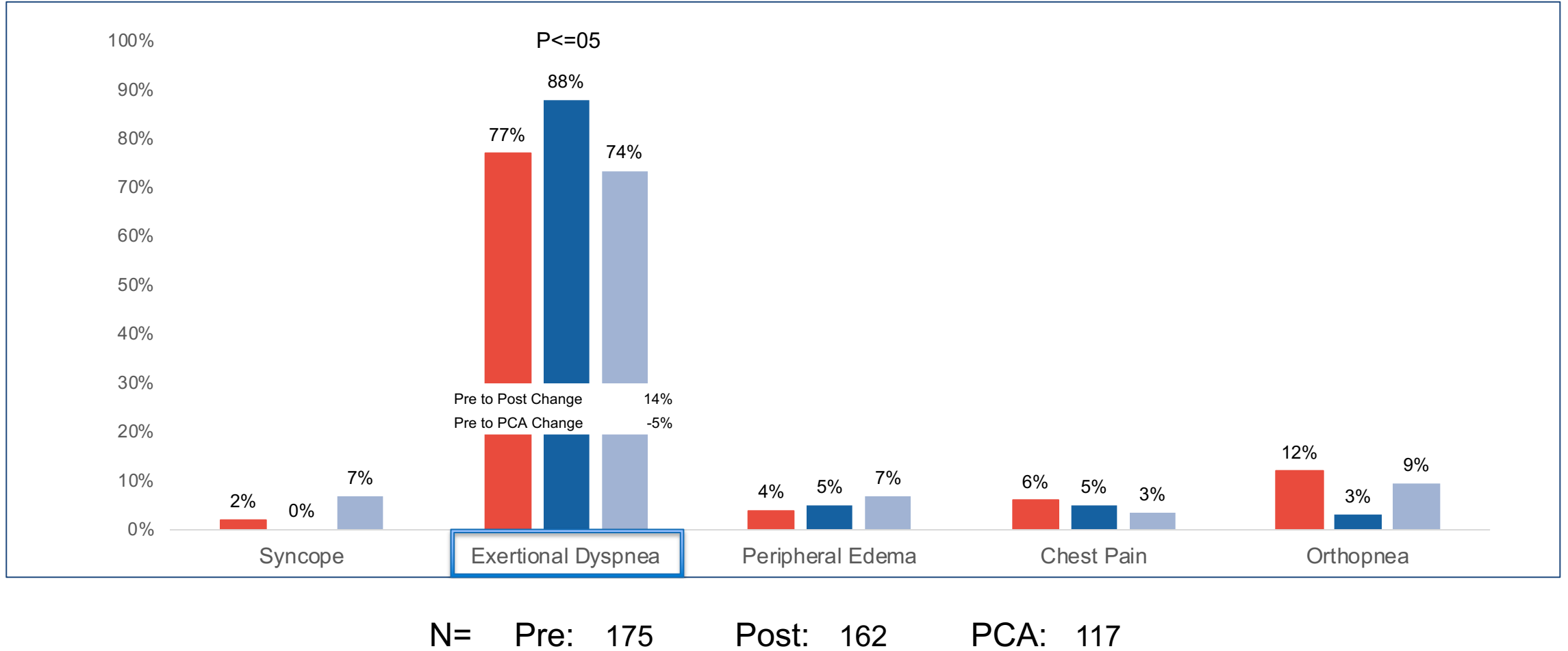
N= Pre: 175

Post: 162

PCA: 117

What is the most common presenting symptom in patients with pulmonary arterial hypertension?

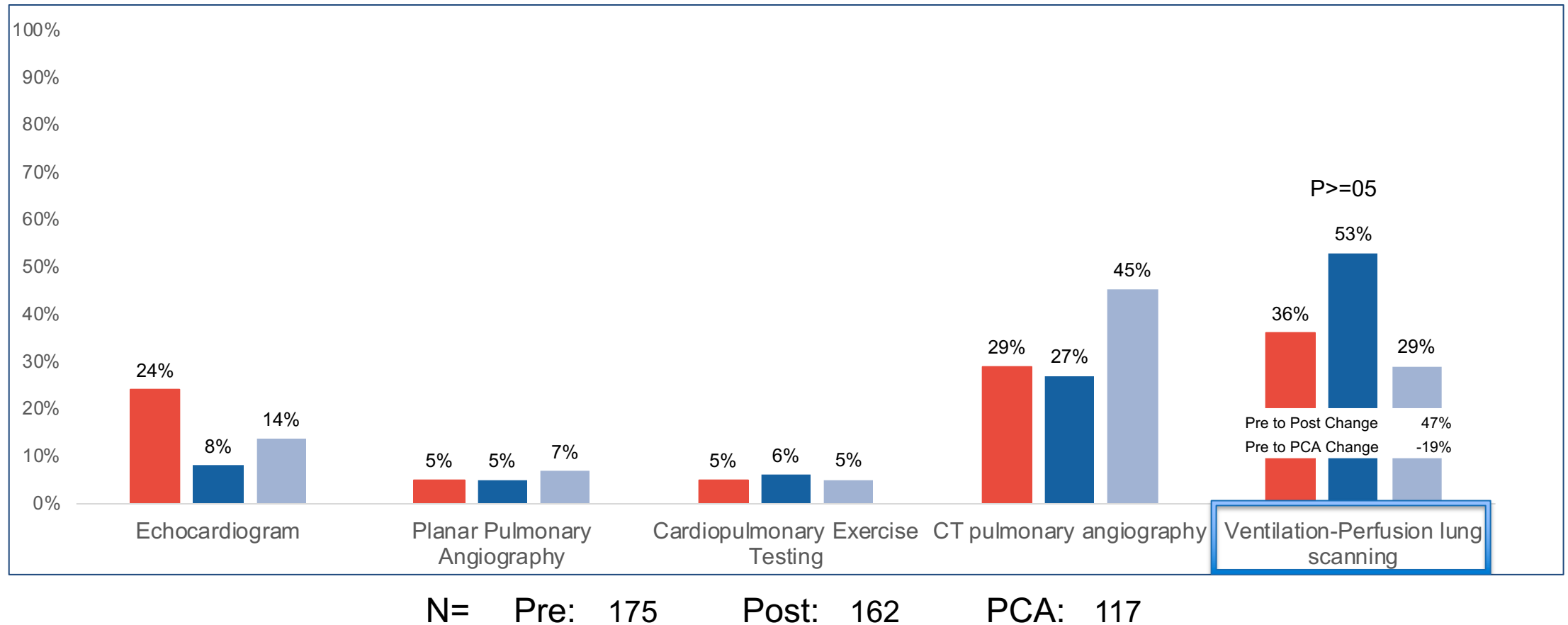
(Learning Objective 1)



Knowledge Assessment

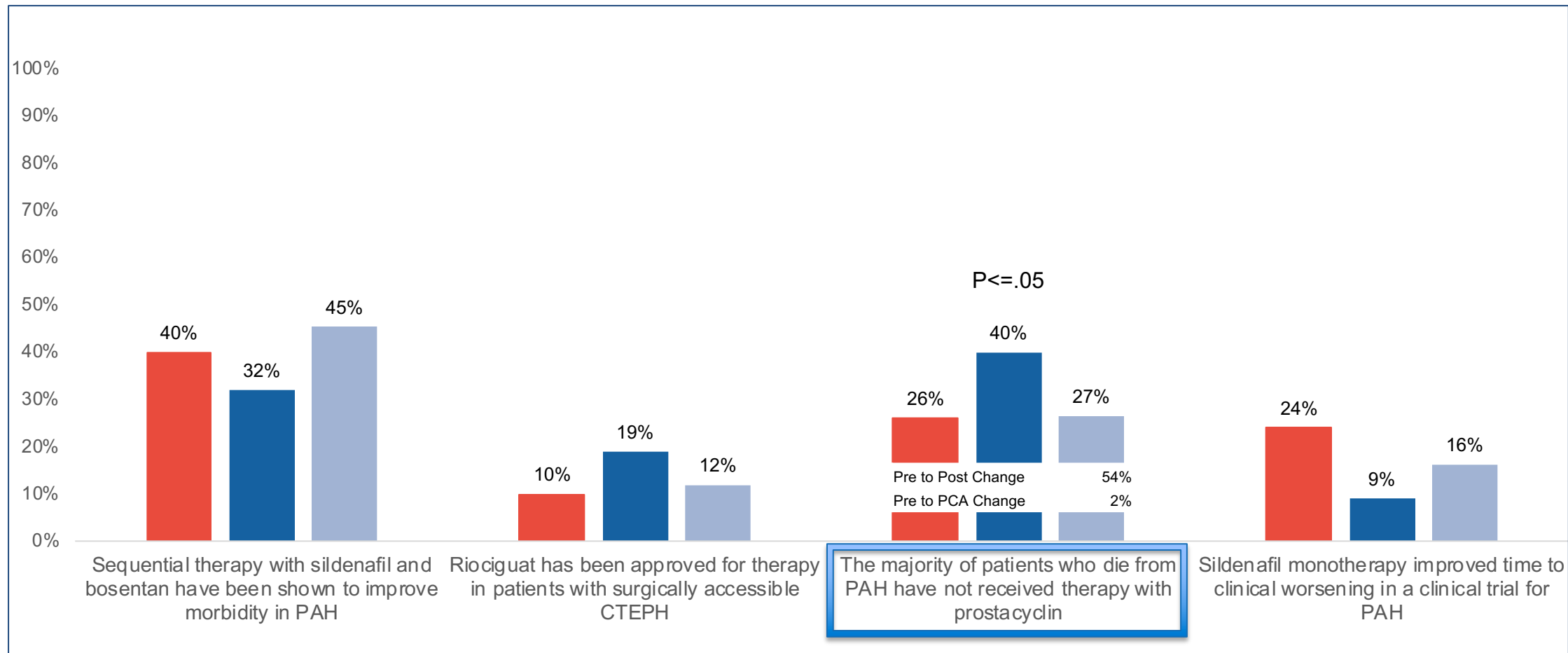
65 y/o female with ASCVD and history of DVT/PE 2 years prior, presents with increased shortness of breath, weakness and leg edema. Which test will you choose to best screen for chronic thromboembolic pulmonary hypertension?

(Learning Objective 2)



Which of the following is true of therapies in patients with pulmonary hypertension?

(Learning Objective 3)

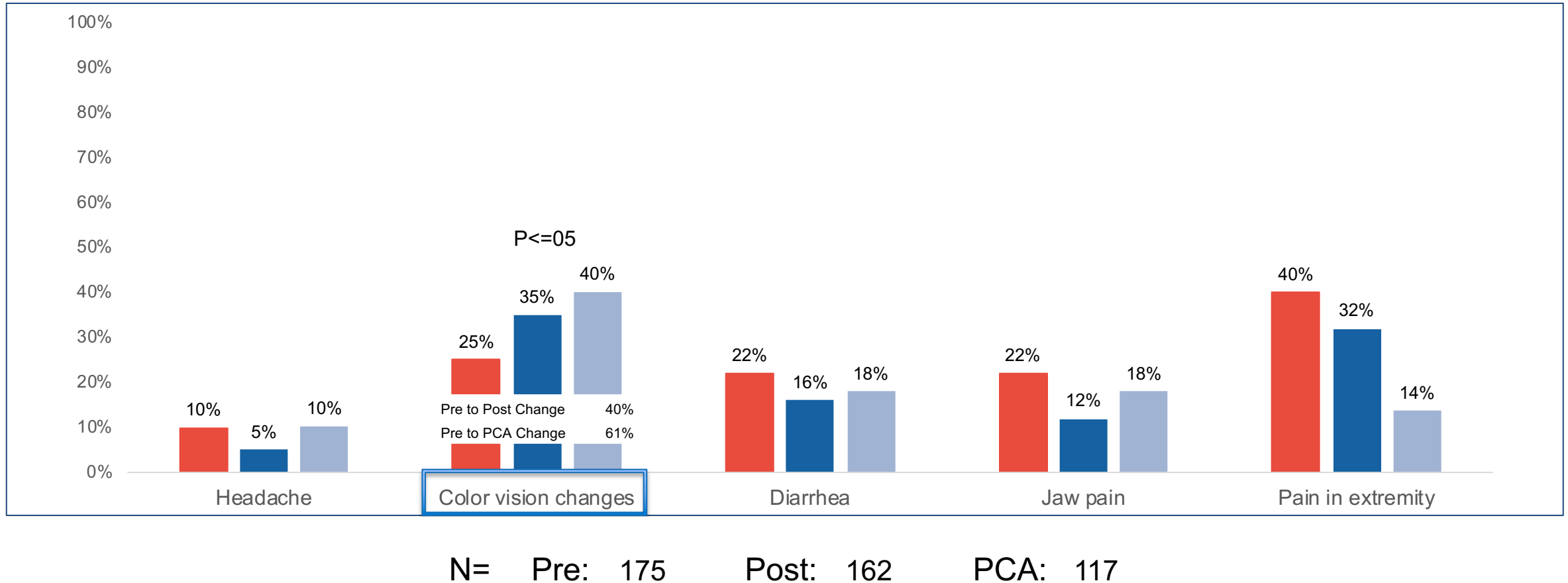


N= Pre: 175 Post: 162 PCA: 117

Knowledge Assessment

Peter is a 60 y/o obese male with newly diagnosed Group I PAH who presents to discuss treatment options. You advise him that all of the following are common adverse effects of prostacyclin therapy except:

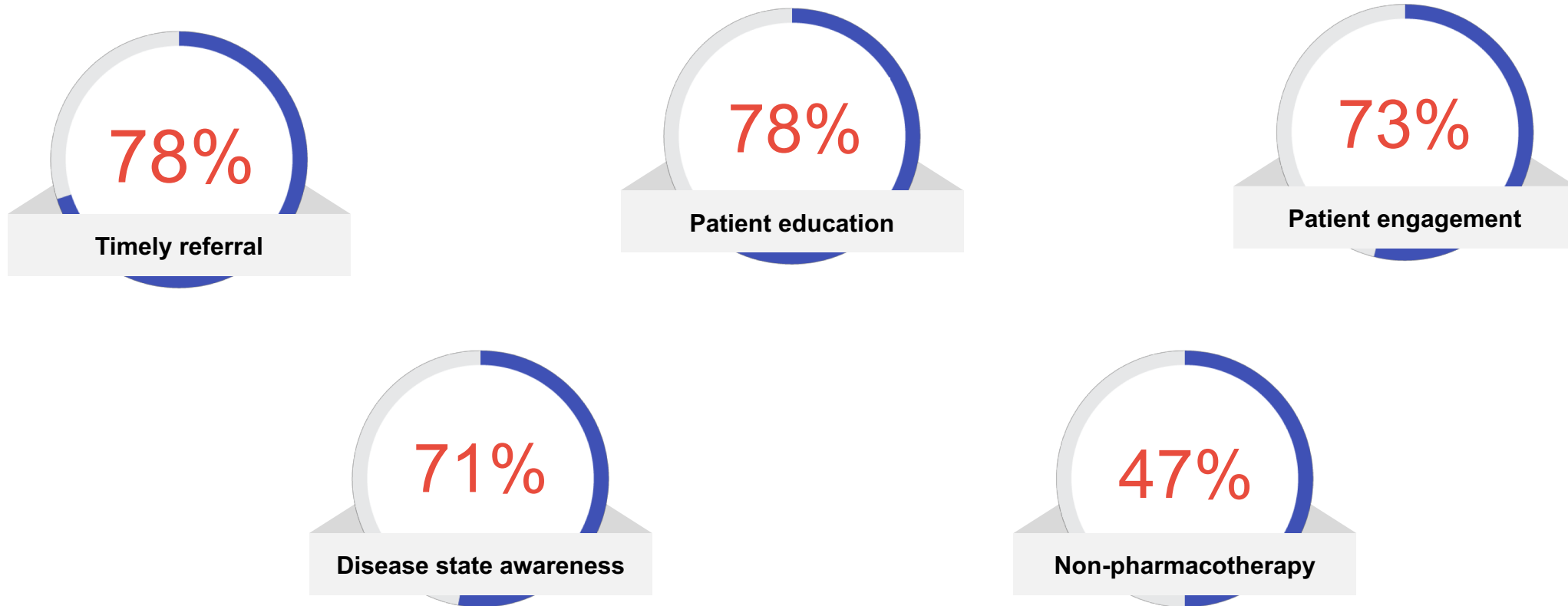
(Learning Objective 4)



(4-week Post Assessment)

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

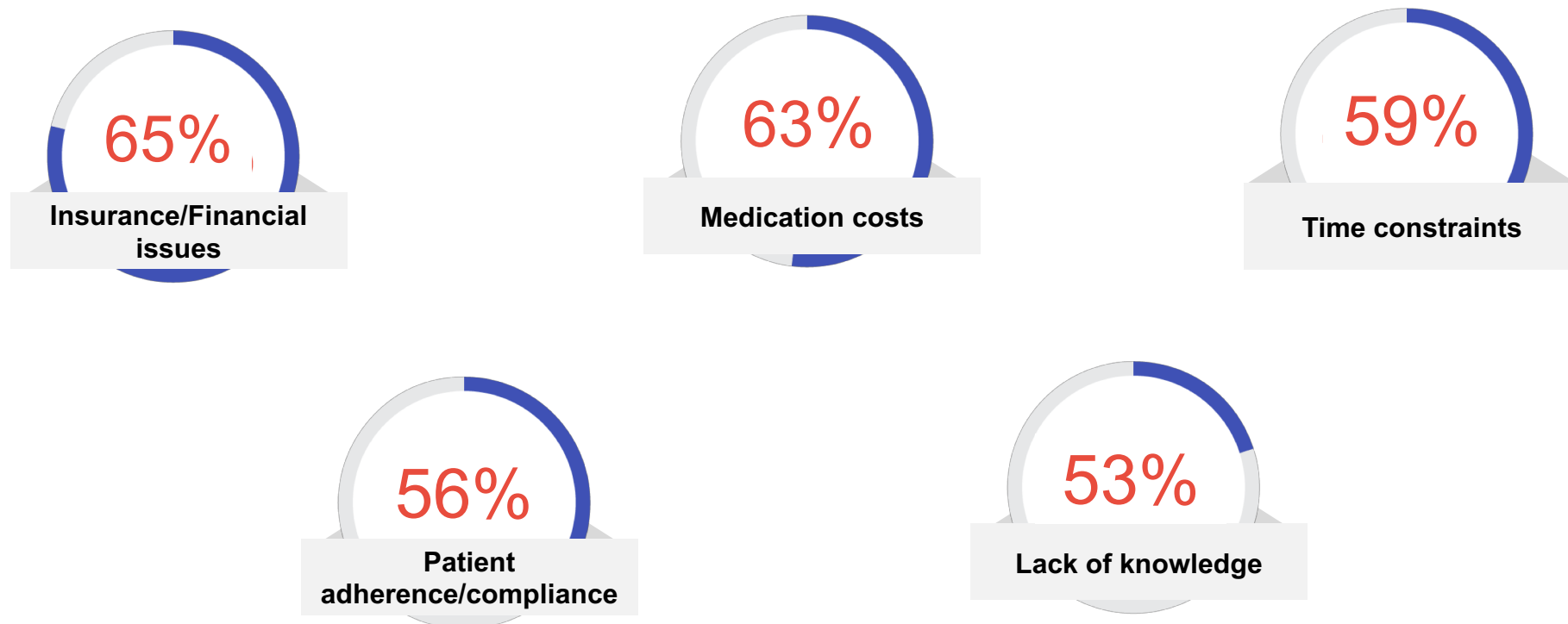
N=117



(4-week Post Assessment)

What specific *barriers* have you encountered that may have prevented you from successfully implementing screening, diagnosis and treatment of Pulmonary Arterial Hypertension since this CME activity? (Select all that apply)

N=117



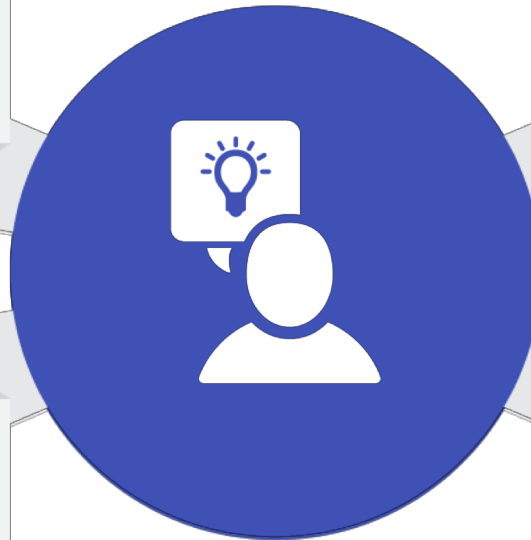
Participant Educational Gains

14% improved recognition that exertional dyspnea is the most common presenting symptom of pulmonary arterial hypertension

54% improvement in awareness of treatment strategies to optimize outcomes in PAH

47% increased awareness that ventilation perfusion scan is the best test to screen for chronic thromboembolic pulmonary hypertension

40% increase in awareness of adverse effects of prostacyclin therapy



Persistent Educational Gaps After 4 Weeks

Strategies to diagnose pulmonary hypertension

Treatment algorithm for PAH

Adverse effects of PAH therapies

Perceived lack of confidence in managing PAH



Key Take-home Points

Improved confidence in ability to manage patients with PAH

90% of participants are actively engaged in patient care



After 4 weeks, the following improved skills were reported regarding the **screening, diagnosis and treatment of PAH** : 78% timely referral, 78% patient education and 73% patient engagement

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