

Challenges in Pulmonary and Critical Care: 2020

Final Live Outcome Report



Pulmonary Hypertension: New Drive for Appropriate Treatment

Actelion Pharmaceuticals US, Inc. Grant ID : 63456989

February 9, 2021

NACE

Executive Summary

This activity focused on improving recognition of patients with pulmonary arterial hypertension (PAH), incorporating risk stratification into the selection and escalation of therapies for these patients; use of new and emerging treatment approaches, and evaluation of the data on the use of treatment for PAH in the setting of group III pulmonary hypertension (PH).



548 total attendees



1 Live Virtual Broadcast

- 548 attendees in multiple professional specialties were reached in this program.
- Improvement across all learning domains was noted ranging from 34% to an impressive 158%.

Overall, the program improved the ability of learners to recognize the mandatory importance of a ventilation perfusion scan for the evaluation of PH; recognize the use of oral combination therapy as initial treatment for intermediate risk patients, and recognize the efficacy of inhaled treprostinil in studies in patients with interstitial lung disease and PH with pulmonary vascular resistance > 3 Woods Units (PVR>3 WU).

Persistent Educational Gaps

Despite educational gains, PCA scores demonstrate some loss of these educational gains over time:

- ❖ Recognition of the most appropriate study, symptom, or disease setting associated with the evaluation of PH
- ❖ Identification of oral combination therapies as recommended for initial treatment for intermediate risk patients
- ❖ The appropriate management of group III PH.

Significant baseline educational gaps in pre-activity learners were noted:

- ❖ Only 19% identified the ventilation perfusion scan as the mandatory study needed to evaluate PH, while 60% incorrectly chose right heart catheterization as the study that confirms PH
- ❖ Learners were not skilled in recognizing the appropriate management of Group III PH, with pre-test choices distributed across all of the distractors by 46% of learners.

Of great significance, 76% pre-activity learners were not at all or only slightly confident in their ability to evaluate and treat patients with suspected PH. These findings represent clear gap in knowledge and an unmet need among clinicians, underscoring that this topic continues to be an important area for future educational programs.

Learning Objectives

- Utilize updated definitions and diagnostic evaluations to recognize patients with pulmonary arterial hypertension (PAH)
- Incorporate risk stratification for selecting and escalating therapy in patients with PAH, including the use of new and emerging treatment approaches
- Discuss evolving data on the use of treatments for PAH in the setting of group III pulmonary hypertension (PH)

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Commercial Support

The Challenges in Pulmonary and Critical Care 2020 CME activity was supported through educational grants or donations from the following companies:

- Actelion Pharmaceuticals US, Inc.
- AstraZeneca Pharmaceuticals
- Bayer HealthCare Pharmaceuticals Inc.
- Grifols
- Jazz Pharmaceuticals, Inc.
- ST Shared Services 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

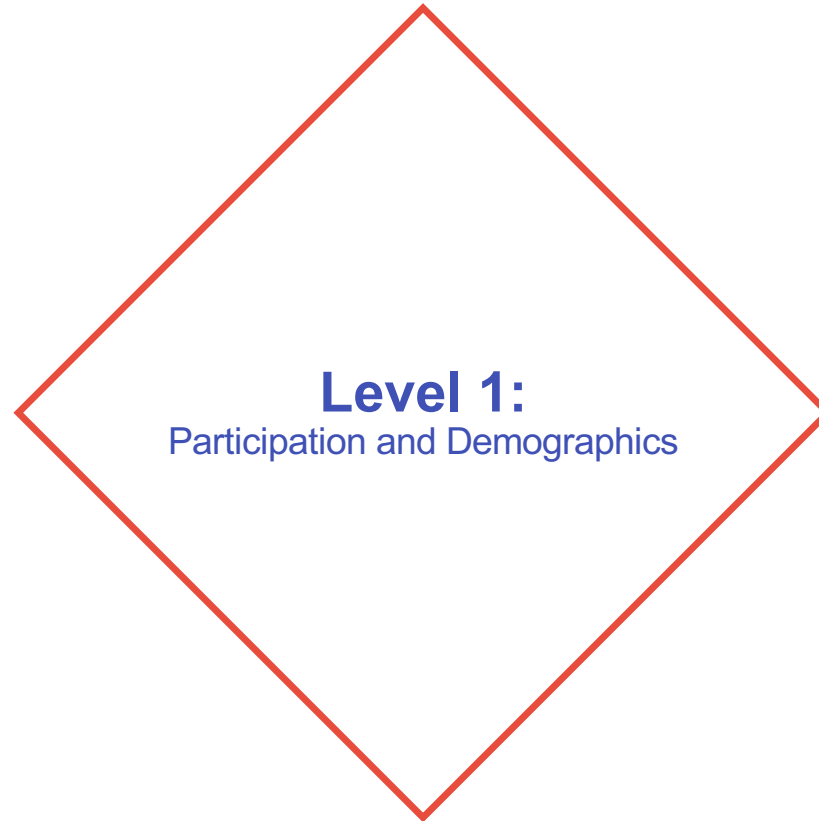
Level 4: Competence

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



548 total attendees



1 Live Virtual Broadcast



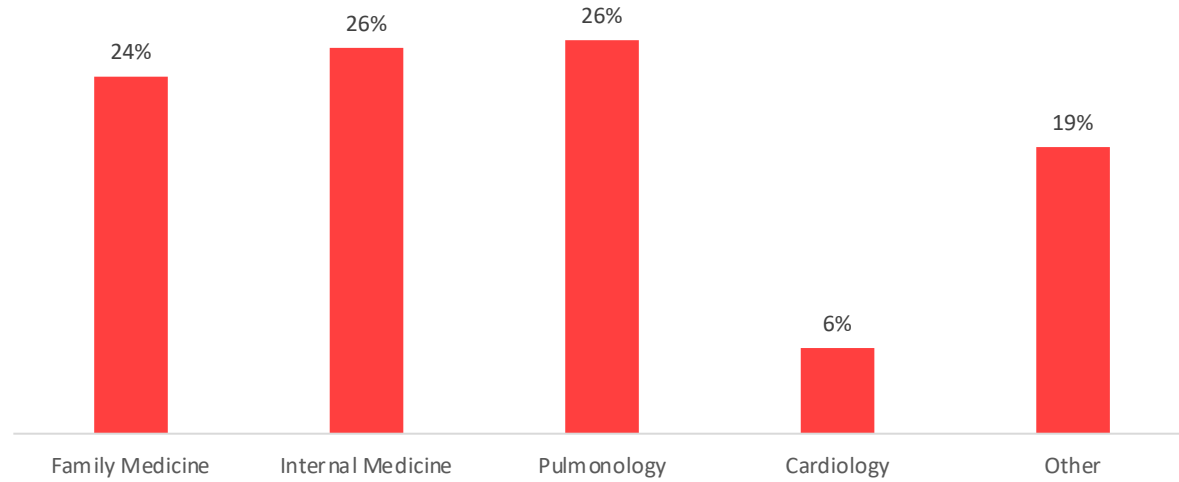
95%

Provide direct patient care

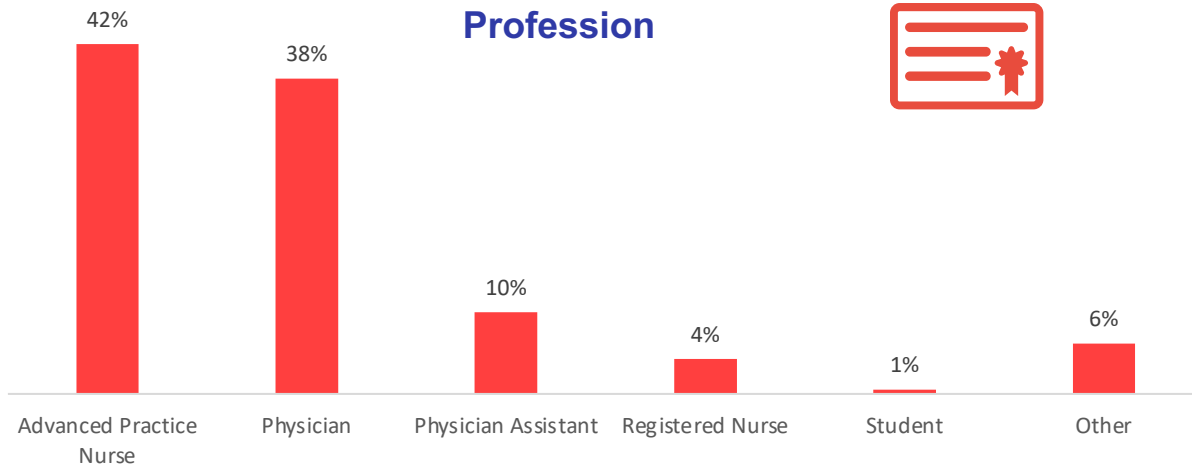
| Activity | Date | Attendees |
|---|------------|------------|
| Challenges in Pulmonary and Critical Care | 12/12/2020 | 548 |
| Total | | 548 |

Level 1: Demographics and Patient Reach

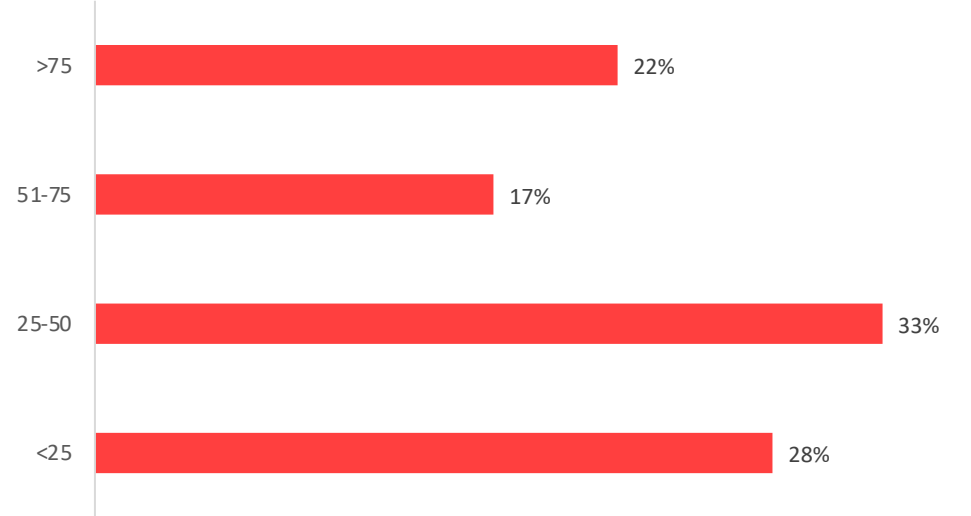
Specialty



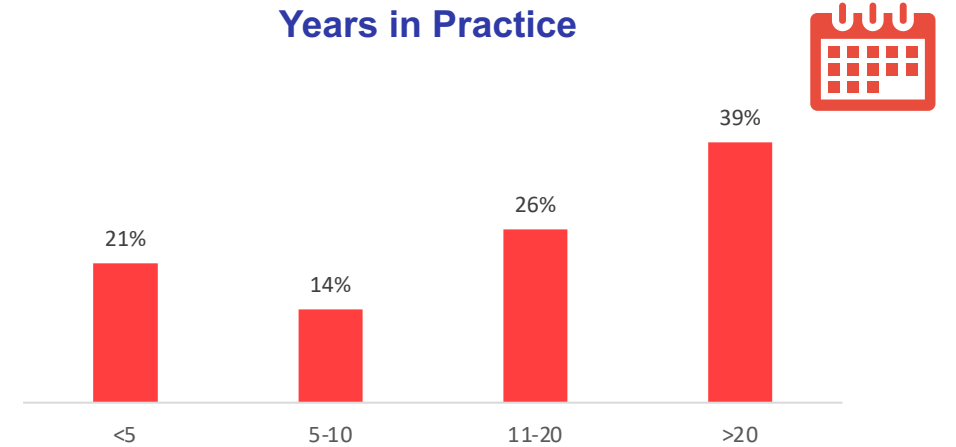
Profession



Patients seen each week, in any clinical setting:



Years in Practice





Level 2-5:
Outcomes Metrics

Level 2: Satisfaction



97% rated the activity as excellent



98% indicated the activity improved their knowledge



95% stated that they learned new and useful strategies for patient care

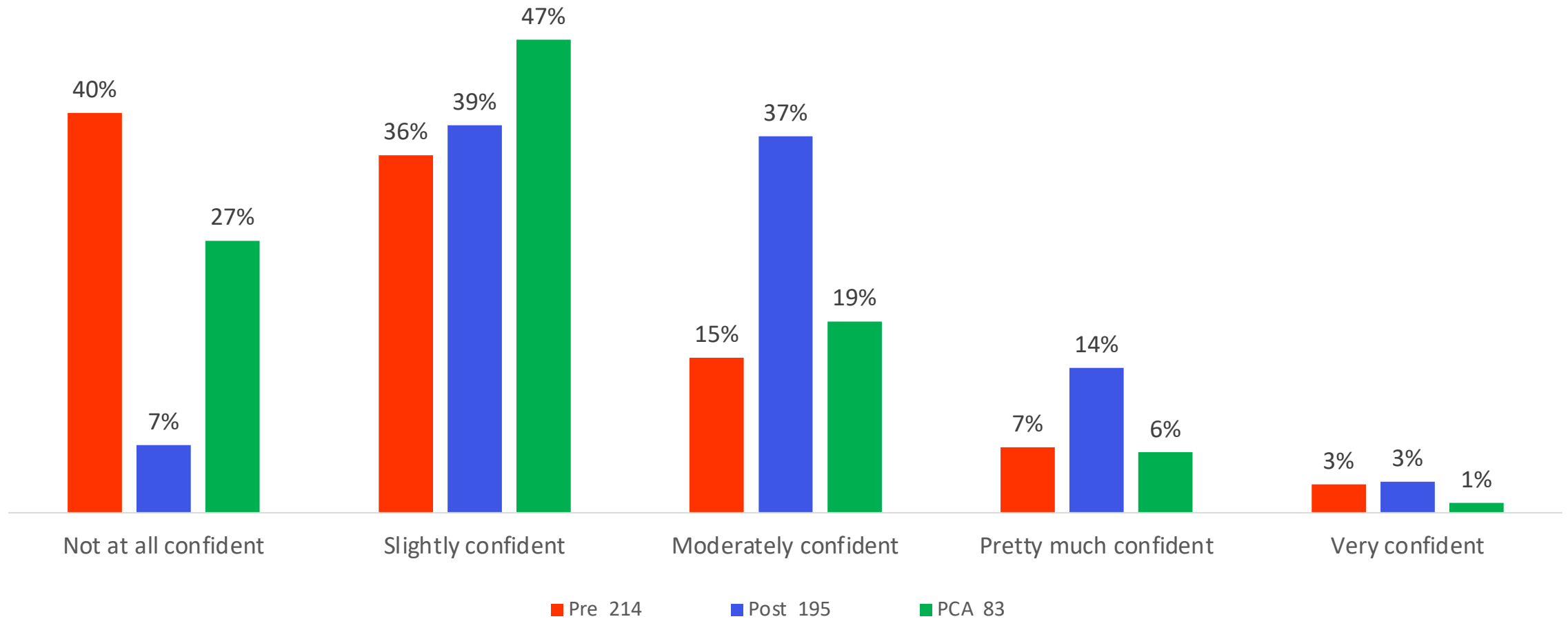


86% said they would implement new strategies that they learned



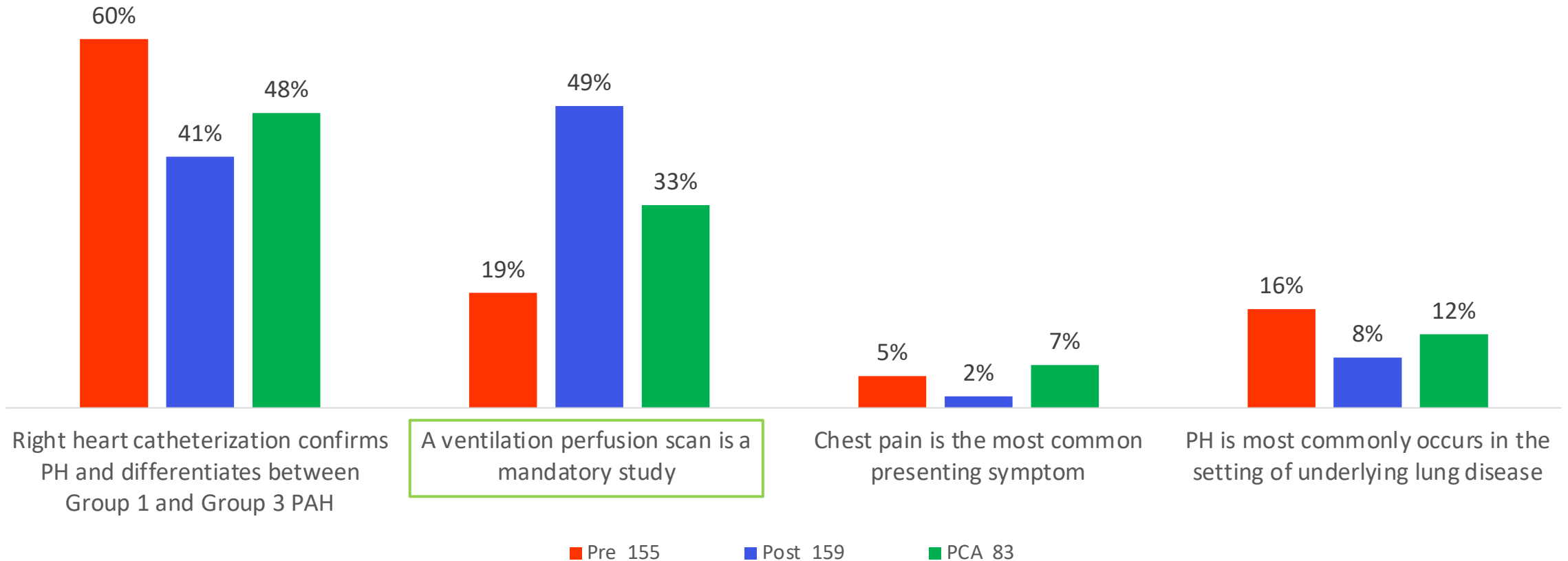
97% said the program was fair-balanced and unbiased

How confident are you in your ability to evaluate and treat a patient with suspected PH?



Which of the following is true regarding the evaluation of PH?

P Value: <0.05

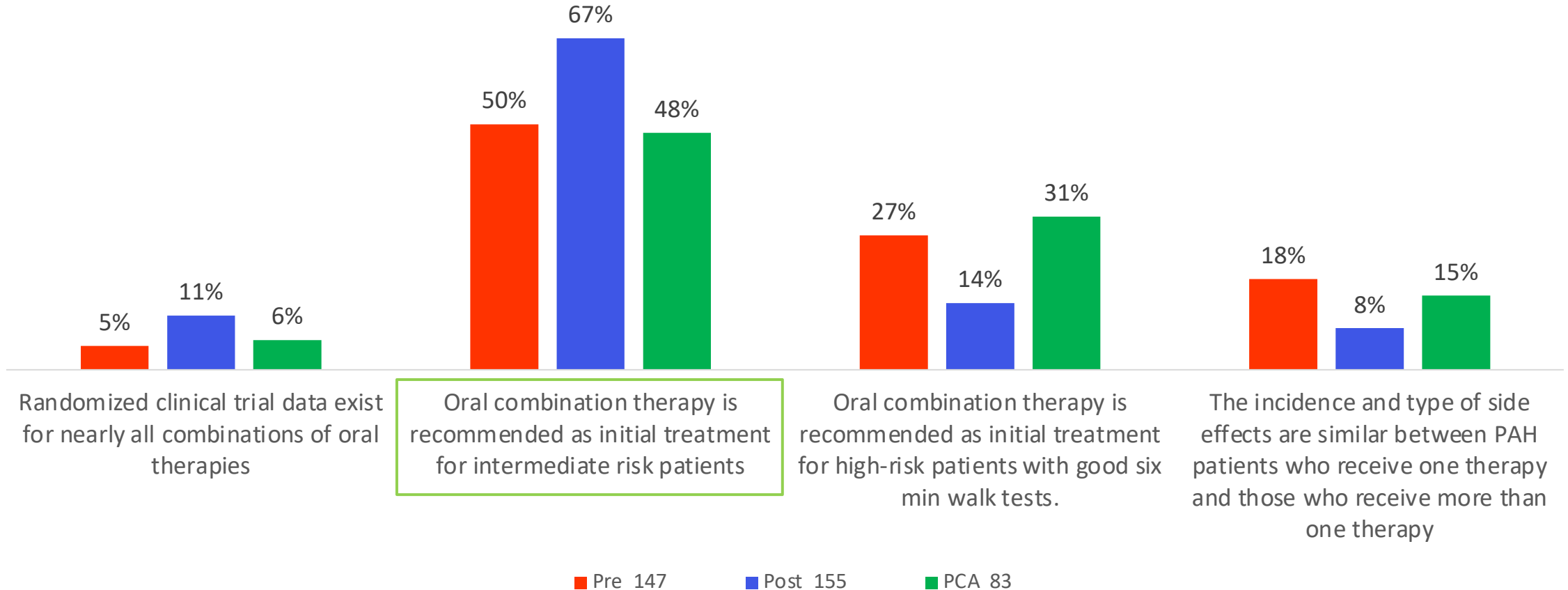


A ventilation perfusion scan is a mandatory study

| | |
|-----------------|------|
| Pre-Post Change | 158% |
| Pre-PCA Change | 74% |

Which of the following regarding combination of oral therapies for PAH is true?

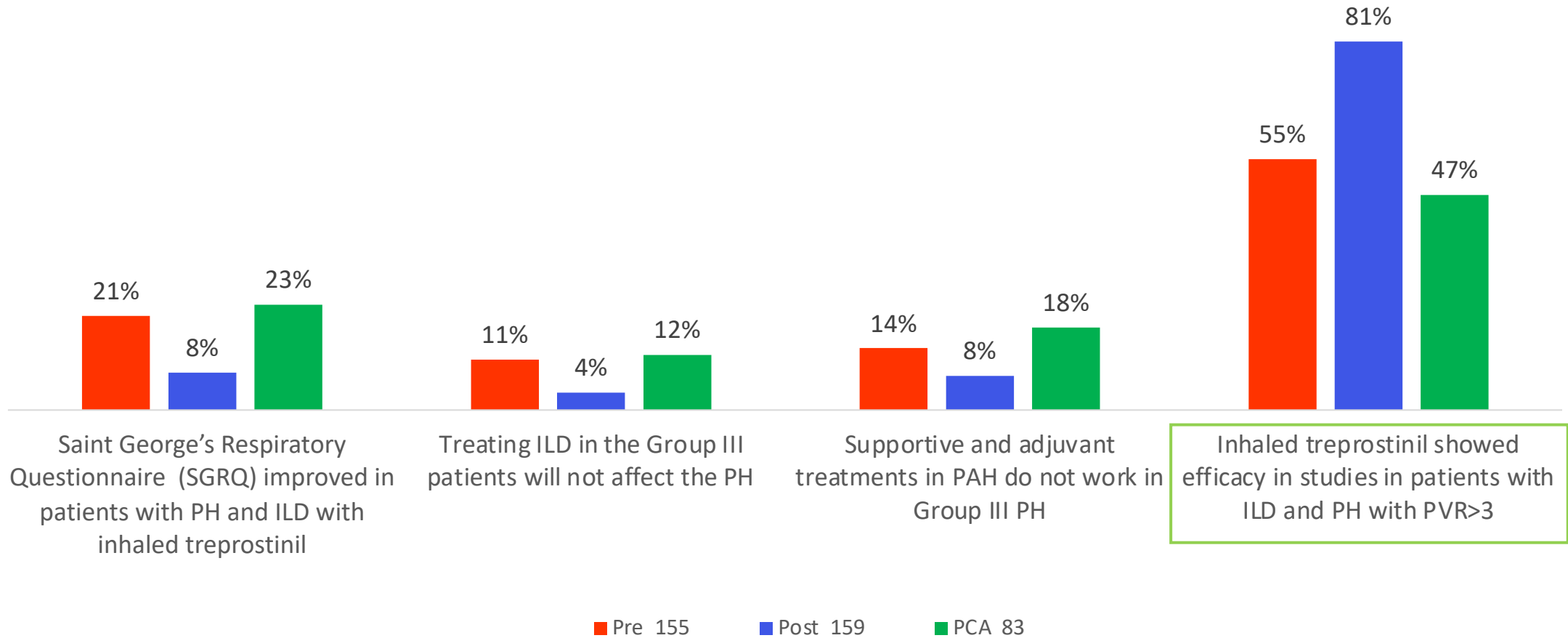
P Value: <0.05



| | |
|-----------------|-----|
| Pre-Post Change | 34% |
| Pre-PCA Change | -4% |

Which of the following is true regarding management of Group III PH?

P Value: <0.05



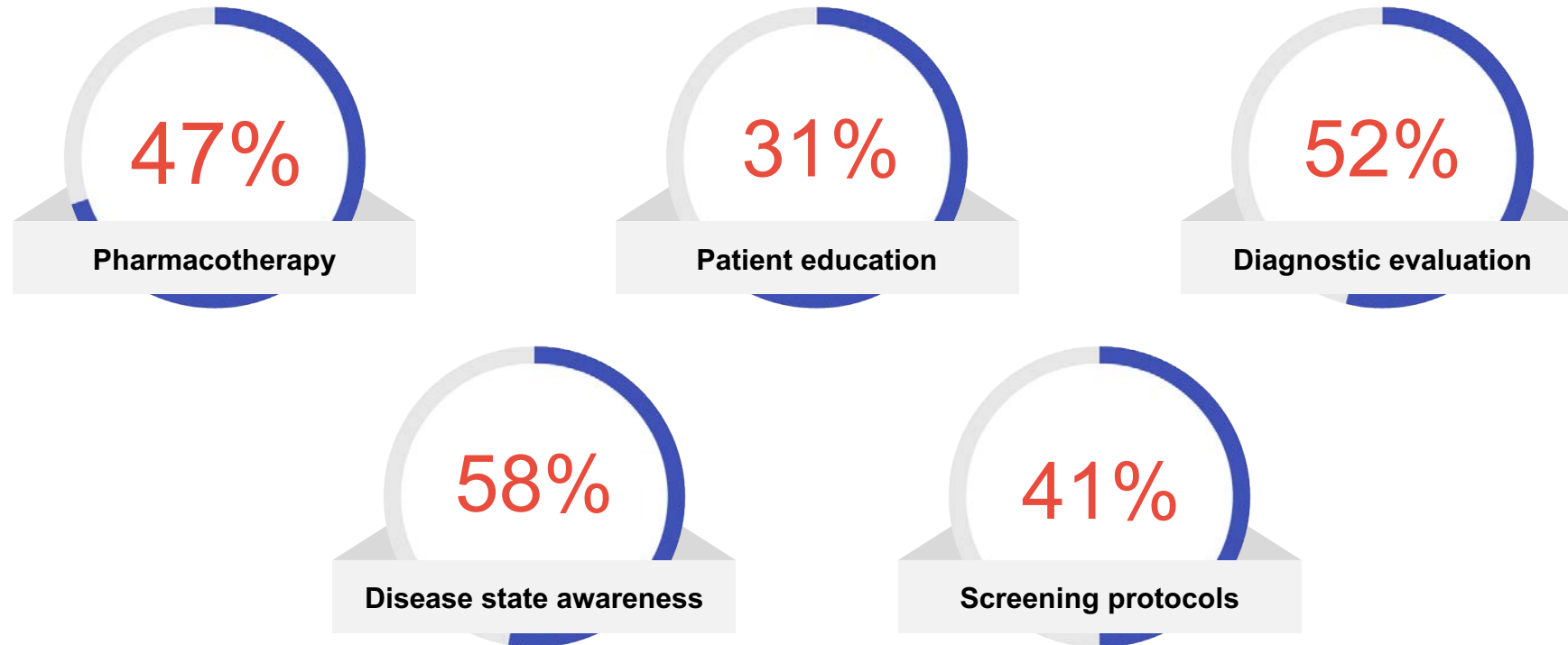
Inhaled treprostinil showed efficacy in studies in patients with ILD and PH with PVR>3

| | |
|-----------------|------|
| Pre-Post Change | 47% |
| Pre-PCA Change | -15% |

(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 Hypertension since this CME activity. (Select all that apply.)

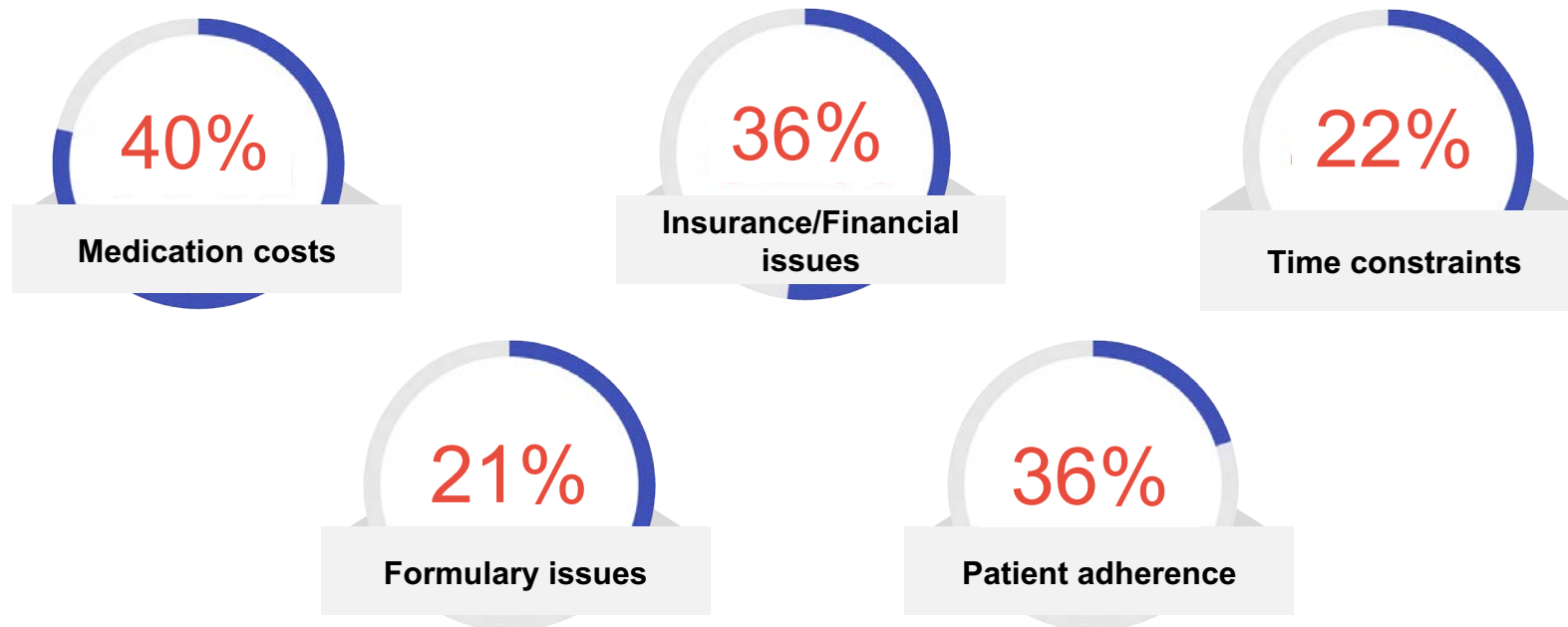
N=81



(4-week Post Assessment)

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

N=81



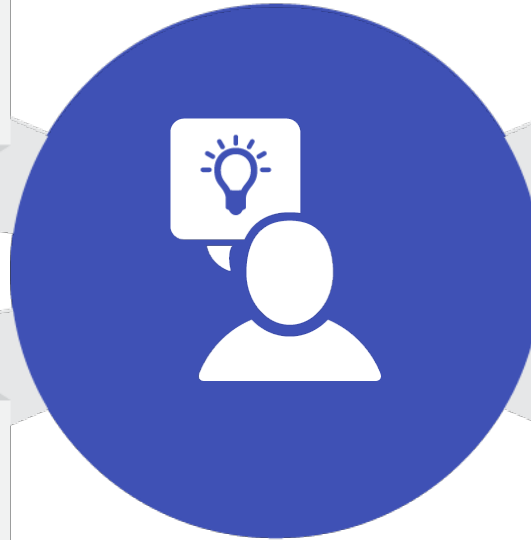
Participant Educational Gains

158% improvement gained in the identification of the appropriate and mandatory use of a ventilation perfusion scan for the evaluation of PH

47% improvement in knowledge regarding the appropriate management of Group III PH to include the efficacy studies using inhaled treprostinil in patients with interstitial lung disease and PH with PVR>3 WU.

Improvement in knowledge by 34% regarding appropriate use of oral combination therapy for initial treatment for intermediate risk patients

58% of participants report improved skills or practice behaviors associated with disease state awareness



Persistent Educational Gaps After 4 Weeks

After an initial improvement in recognition of appropriate evaluation studies for PH, 48% of learners persisted in choosing right heart catheterization as confirmatory for PH, rather than the mandatory ventilation perfusion scan

Learners became confused regarding which subset of patients were most appropriate for oral combination therapy as initial treatment

The strong scores for identification of management strategies for Group III PH in the initial post test slipped significantly, with PCA scores again distributed across all distractors.



Key Take-home Points

95% of learners work in direct patient care, and 95% of learners indicated that they gained new and useful strategies for patient care

Although initial gains were significant across all measures, learner retention declined in every knowledge assessment, indicating that retention of knowledge gained after 4 weeks did not consistently occur

98% of learners indicated that they gained new knowledge, identifying disease state awareness, diagnostic evaluation, and pharmacotherapy as skills that they have specifically improved

Despite some initial improvements in confidence immediately following the presentation, 74% of learners remain "not at all" or "slightly" confident, indicating a need for further education on this topic.

