Challenges in Pulmonary and Critical Care 2017
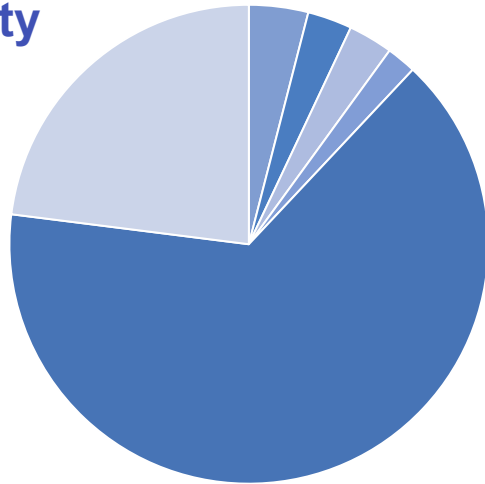
COPD – New Management

Outcome Report: Sunovion Grant Med Oncc 116

February 8, 2018

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Level 1 (Participation)

Practice specialty

- ● 48% PCPs
- ● 15% Hospitalist
- ● 6% Pulmonologist
- ● 5% Cardiologist
- ● 3% Emergency Medicine
- ● 23% Other or did not respond

448 total attendees

349 remote simulcast

99 on site

Professional Degree

- ● 26% MD
- ● 1% DO
- ● 60% NP
- ● 9% PA
- ● 4% RN or other

92% Provide direct patient care

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Key Findings

Knowledge/Competence

Improvement in all 4 of the questions addressing the diagnosis and management of COPD, 3 of which achieved statistical significance

Confidence

Percentage of learners that claimed be somewhat to very confident in their understanding of COPD increased from 35% to 93% four weeks after the program.

Practice

91% stated they would implement new strategies learned at this program and 56% stated 4 weeks after program that they had improved their screening protocols for patients with pulmonary disease

Change of Practice Behavior

After 4 weeks, participants reported the following improved skills regarding the treatment of patients with pulmonary disease: 70% disease state awareness, 61% pharmacotherapy, and 48% patient education.

4 Weeks Post N= 164

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Discussion and Implications

❖ Overall, the program improved understanding of the learners in diagnosis and management and pharmacotherapy of COPD

❖ Major improvement in understanding the disease and its importance

❖ Learners demonstrated persistent gaps in the several areas including:

   ❖ Selection of stage appropriate inhalers in COPD

   ❖ Complete understanding of trial design and efficacy of approved medications

   ❖ Understanding the phenotypes of COPD

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

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Commercial Support

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- Actelion Pharmaceuticals US, Inc.

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- CSL Behring

- Grifols

- Mallinckrodt Pharmaceuticals

- Shire

- Sunovion Pharmaceuticals Inc.

Learning Objectives

1. Describe strategies of care in COPD to improve diagnosis and ongoing symptom assessment.

2. Tailor COPD therapy to the individual patient following current therapeutic strategies accounting for unique patient needs and characteristics, including the appropriate use of inhaled therapeutic devices.

3. Discuss the role of evolving bronchoscopic techniques for lung volume reduction.

4. Collaborate with members of interprofessional health care team for to create an effective patient-centered, chronic disease management program.

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

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 7: Community Health

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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

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Attendee Learning Objectives Achievement

Upon completion of this activity, I can now:

- Describe strategies of care in COPD to improve diagnosis and ongoing symptom assessment.

- Tailor COPD therapy to the individual patient following current therapeutic strategies accounting for unique patient needs and characteristics, including the appropriate use of inhaled therapeutic devices.

- Discuss the role of evolving bronchoscopic techniques for lung volume reduction.

- Collaborate with members of interprofessional health care team for to create an effective patient-centered, chronic disease management program.
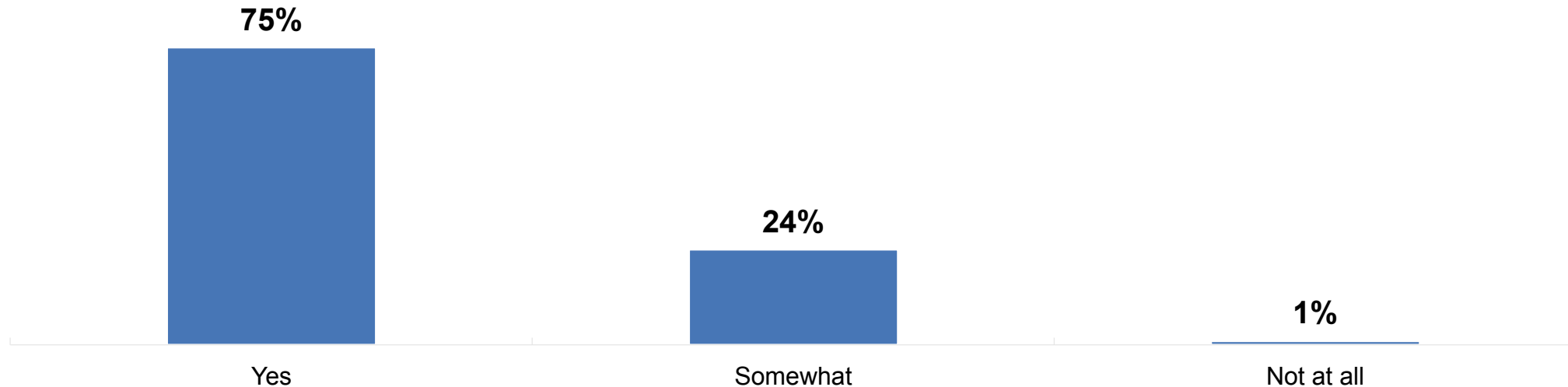
Sample Size: N = 395

Based on the 2017 update of GOLD guidelines, a patient with an FEV 1 of 70% predicted would be categorized in which GOLD group:
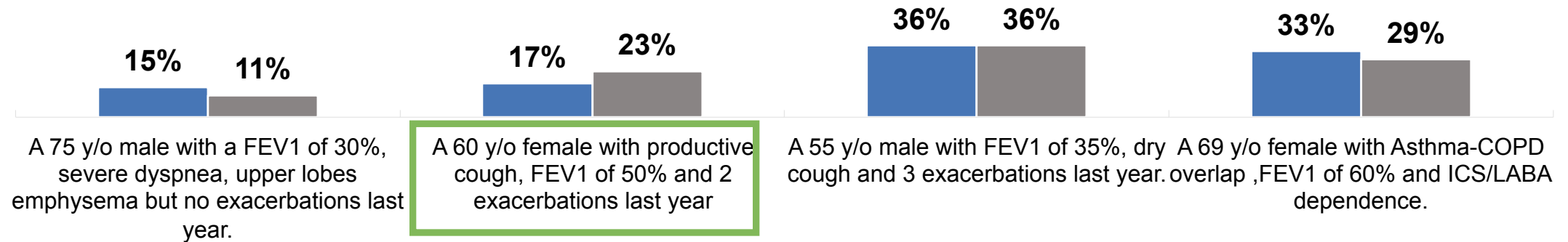**(Learning Objective 1)**

P Value: 0.001 – Significant
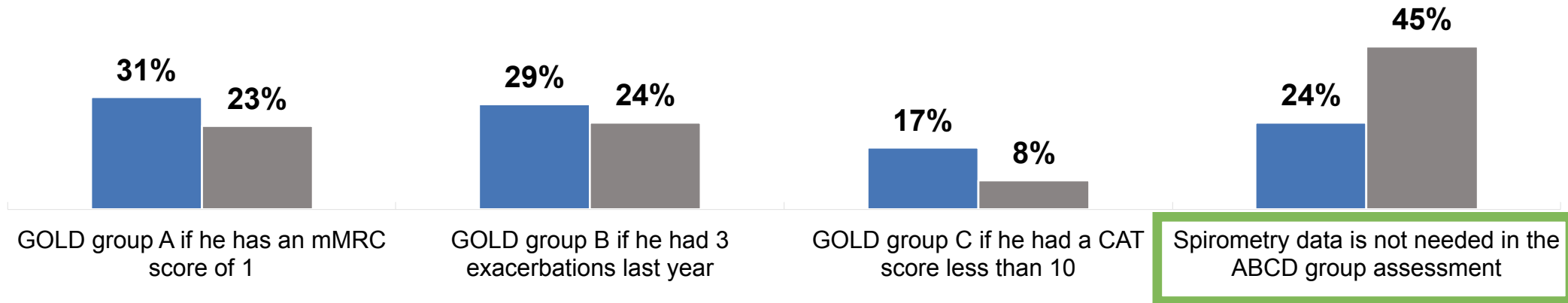
Pre N = 200   Post N = 181

What COPD phenotype will benefit the most from Phosphodiesterase-4 Inhibitors:
(Learning Objective 2)

P Value: 0.121 – Not Significant

15% 11%	17% 23%	36% 36%	33% 29%
A 75 y/o male with a FEV1 of 30%, severe dyspnea, upper lobes emphysema but no exacerbations last year.	A 60 y/o female with productive cough, FEV1 of 50% and 2 exacerbations last year	A 55 y/o male with FEV1 of 35%, dry cough and 3 exacerbations last year.	A 69 y/o female with Asthma-COPD overlap ,FEV1 of 60% and ICS/LABA dependence.

Pre N = 203   Post N = 187

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The Flame RCT was a "game changer" as it demonstrated that:
(Learning Objective 2)

P Value: 0.001 – Significant

34%	43%		17%	16%		20%	25%		28%	17%

Indacaterol-glycopyrronium was superior to salmeterol- fluticasone in preventing COPD exacerbations

Indacaterol-glycopyrronium was non-inferior to salmeterol-fluticasone in preventing COPD exacerbations

When combined with a LABA, moderate dose ICS are associated with an increased risk of pneumonia

Tiotropiumbromide-olodaterol was non-inferior to formeterol-budesonide in improving trough FEV1
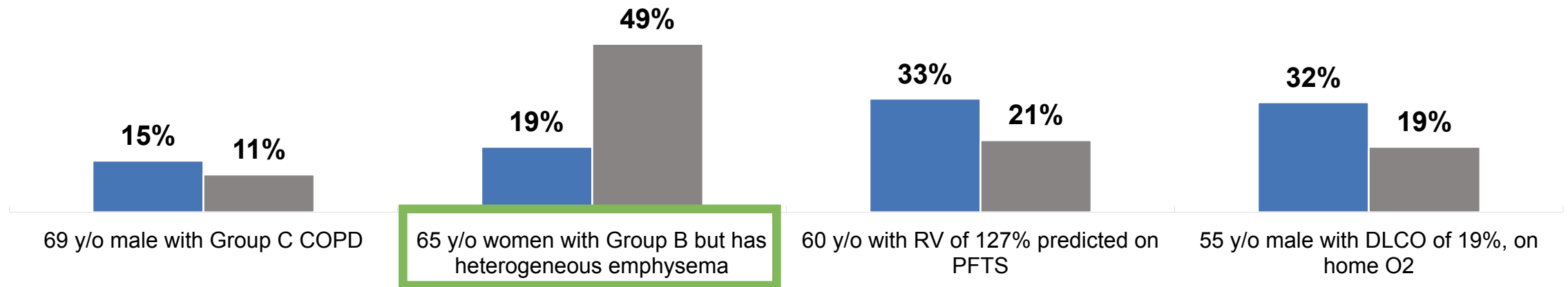
Pre N = 187   Post N = 190

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Which one of the following patients may benefit from referral to a site that is enrolling patients for bronchoscopy volume reduction trial:
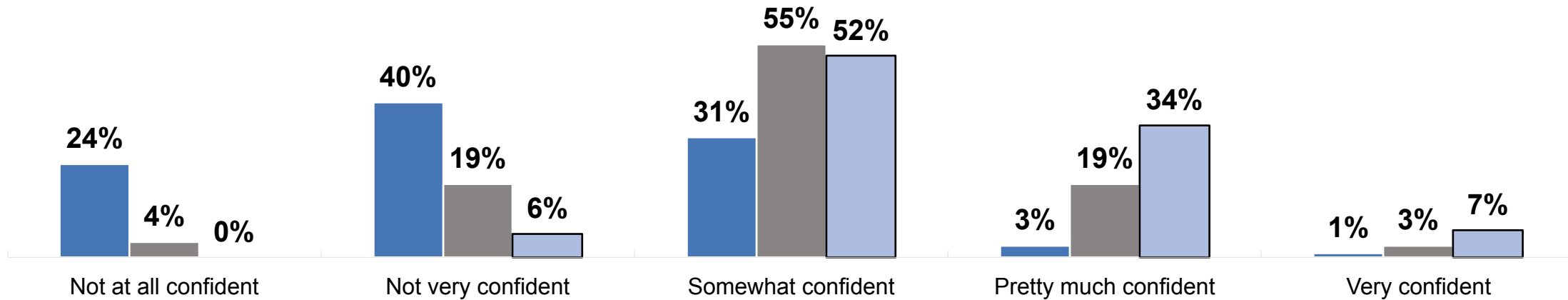## (Learning Objective 3)

P Value: 0.001 – Significant

69 y/o male with Group C COPD	65 y/o women with Group B but has heterogeneous emphysema	60 y/o with RV of 127% predicted on PFTS	55 y/o male with DLCO of 19%, on home O2
15% / 11%	19% / 49%	33% / 21%	32% / 19%

Pre N = 195   Post N = 194

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Confidence Assessment

Please rate your confidence in your ability to integrate current and emerging data into the care of your patients with COPD based on disease severity and patient characteristics:

Not at all confident: 24%, 4%, 0%

Not very confident: 40%, 19%, 6%

Somewhat confident: 31%, 55%, 52%

Pretty much confident: 3%, 19%, 34%

Very confident: 1%, 3%, 7%

Pre N = 210   Post N = 212   4 weeks N = 163

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Data Interpretation

More aware of GOLD staging and the importance of multidimensional assessment of COPD rather than relying on spirometry for classification

Improved recognition of COPD phenotype that would benefit from Phosphodiesterase-4 Inhibitor therapy
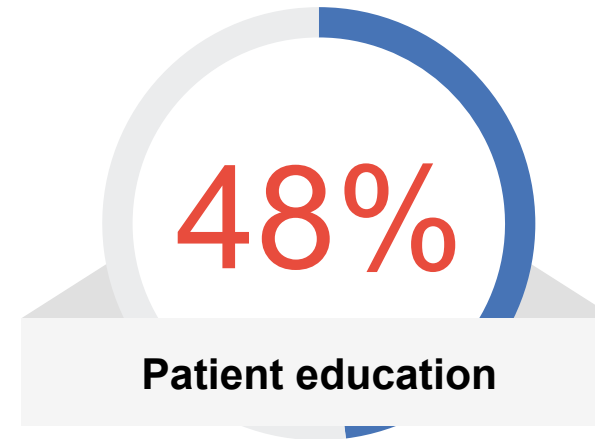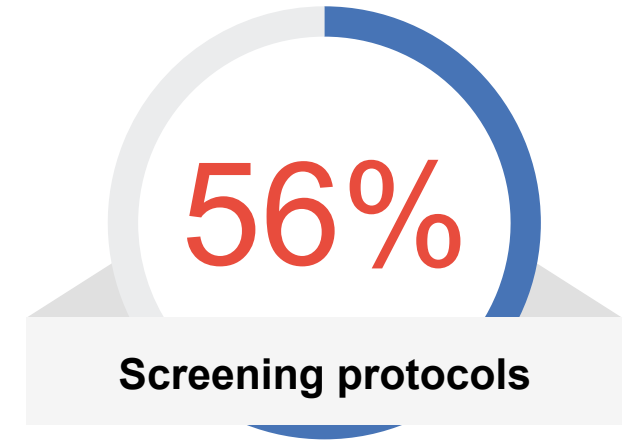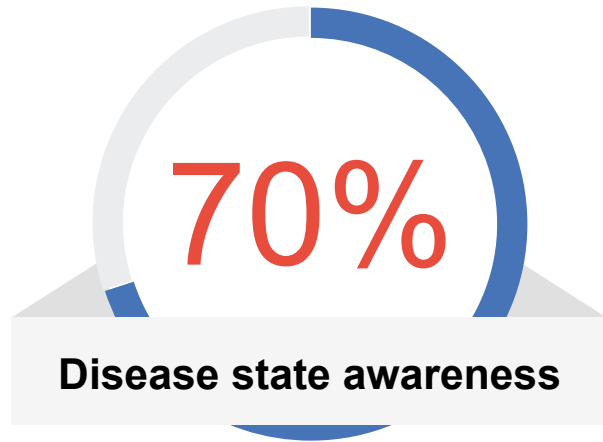
Participant Educational Gains

Are more aware of recent trial data demonstrating efficacy of various inhaler combinations

Recognize which patients with COPD are appropriate for lung volume reduction

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Please select the specific areas of skills, or practice behaviors, you have improved regarding the treatment of patients with pulmonary disease since this CME activity.
(Select all that apply.)

70%
Disease state awareness

61%
Pharmacotherapy

56%
Screening protocols

55%
Diagnostic evaluation

48%
Patient education

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What specific barriers have you encountered that may have prevented you from successfully implementing strategies for patients with pulmonary disease since this CME activity? (Select all that apply)

50%

Medication costs

49%

Insurance/financial issues

40%

Patient adherence/ compliance

27%

Formulary restrictions

24%

Time constraints

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