Challenging Cases in COPD:

Early Diagnosis, Management, and Exacerbation Prevention

Respiratory Institute®

National Jewish Health®

Mount Sinai

Jefferson Health®

Online Enduring and Live Virtual Webinar Series
Final Outcomes Summary
AstraZeneca Grant 57508597

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Final Outcomes]

Program Overview

The goal of this case-based, multimedia program is to improve the knowledge and competence of pulmonologists, primary care physicians and advanced practice providers in the diagnosis, management (including mitigation of exacerbation risk), and treatment of COPD. The four live webinars and chapterized online activity included interactive video cases, a patient perspective video clip, ARS polling with immediate feedback, and a clinical reference aid to help attendees convert information into practice. Topics included early COPD diagnosis and management, prevention of exacerbations, treatment selection, and strategies to effectively communicate with patients. Innovations for this program include 4 engaging case-based videos for the online and live webinars that visually highlight key issues related to early diagnosis, exacerbation prevention, treatment of COPD, and patient-centered strategies for communication and personalized treatment selection.

Learning Objectives

- Discuss best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations.
- Review current and emerging therapeutics in the treatment of COPD.
- Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence.

Co-Chairs/Presenting Faculty

Russell P. Bowler, MD, PhD

Sidney S. Braman, MD, FCCP

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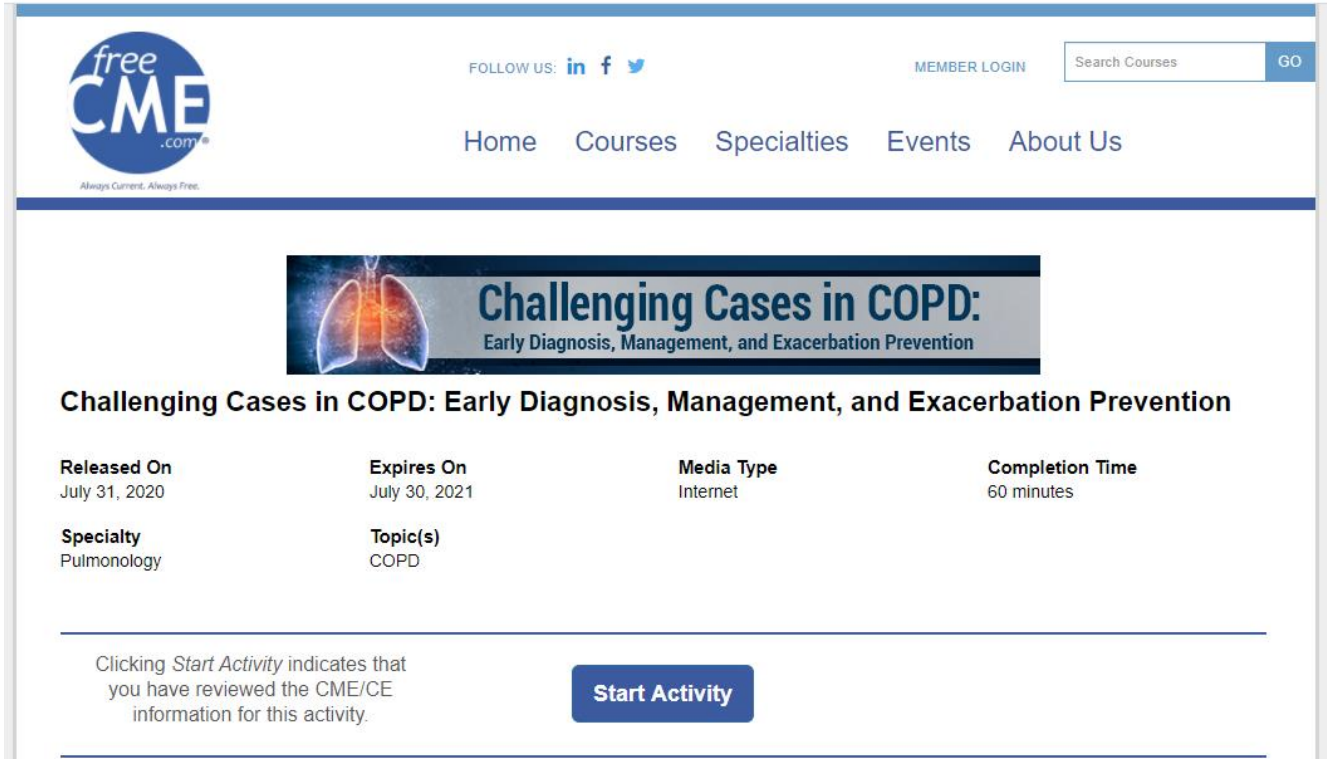
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Online Enduring Program: Launched on FreeCME 7/31/2020

https://learning.freecme.com/a/35167PAeEdoo



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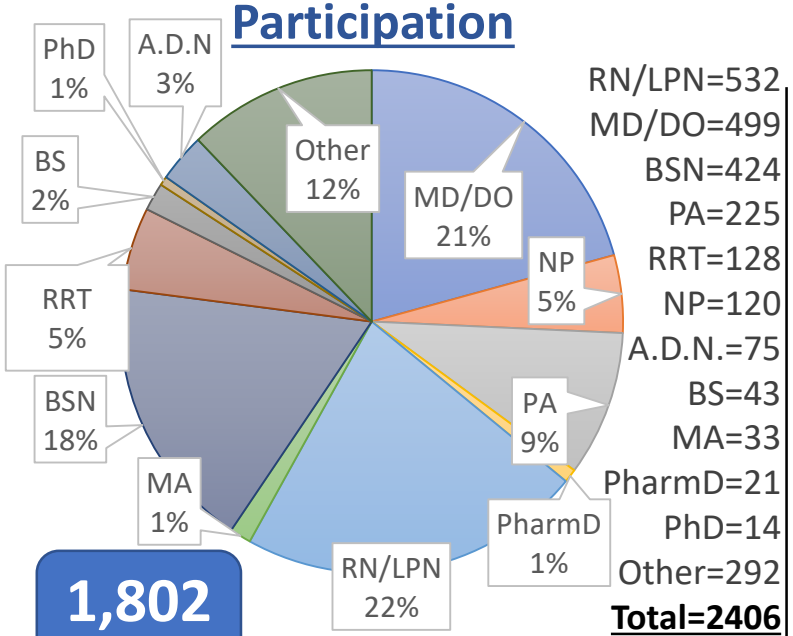
[Online Final Outcomes]

Participation



RN/LPN=532
MD/DO=499
BSN=424
PA=225
RRT=128
NP=120
A.D.N.=75
BS=43
MA=33
PharmD=21
PhD=14
Other=292
Total=2406

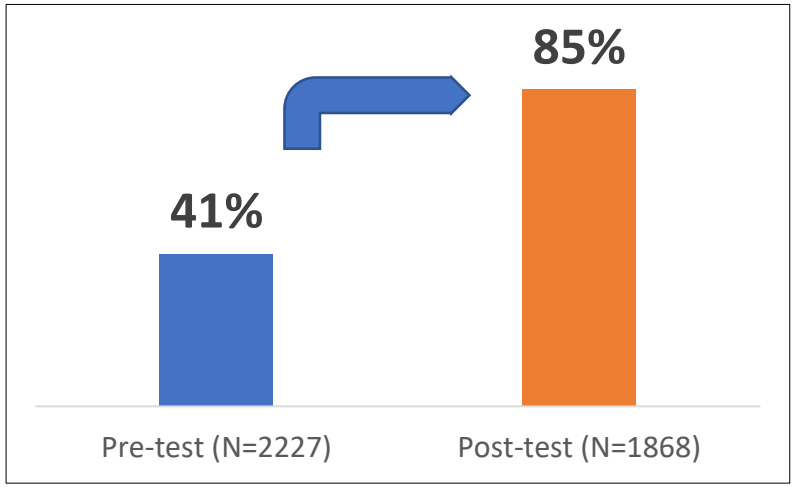
1,802
Completers

Online Participation: 2,406 Learners

Exceeded projected learner reach by 20% and completer reach by 80%

Potential Impact to 601,952 patient visits this year

Overall Knowledge Gain



44%
absolute gain in knowledge

107%
relative gain in knowledge

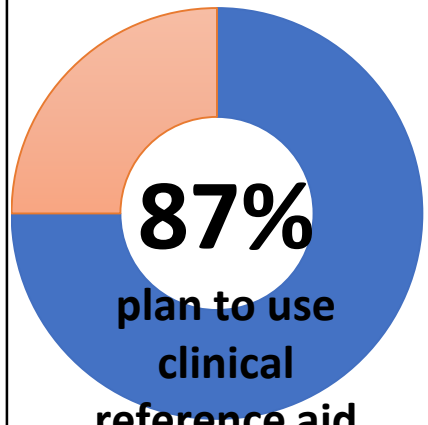
82%
relative gain in confidence

27%
absolute gain in confidence

Top 3 Practice Changes

87% (N=1,780) reported they intend to make changes to their practice

- ✓ Proper diagnosis, management & treatment
- ✓ Patient education
- ✓ Utilize pulmonary rehabilitation



plan to use clinical reference aid in practice

"Good reinforcement of medical & patient information."
- Online enduring program attendee -

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[Online Final Outcomes]

Qualitative Educational Impact Summary: Online Enduring

Participants	Educational Impact	Practice Change
2,406 Total Learners	**121%** relative knowledge gain seen from learners regarding best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations. [N=1,868]	**92%** of evaluation respondents reported the activity improved their ability to treat/manage patients [N=1,780]
Who see **11,576** COPD Patients Weekly	**105%** relative knowledge gain seen from learners with regard to reviewing current and emerging therapeutics in the treatment of COPD [N=1,868]	**64%** of learners indicated the activity addressed strategies for overcoming barriers to optimal patient care [N=1,780]
Which translates to **601,952** Potential patient Visits Annually	**75%** relative knowledge gain seen from learners in describing patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence [N=1,868]	

"Great presentation of relevant materials." – Online enduring program attendee

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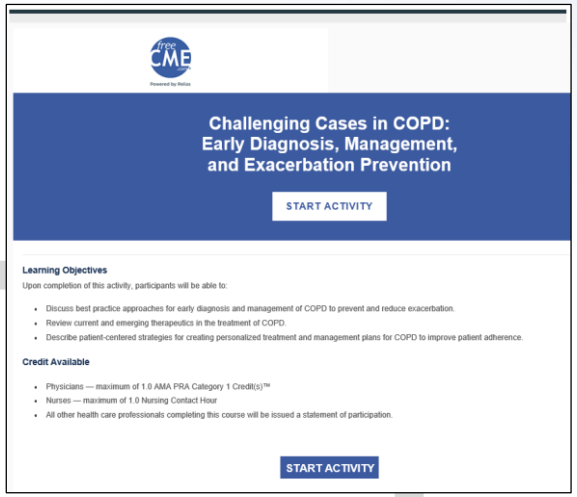
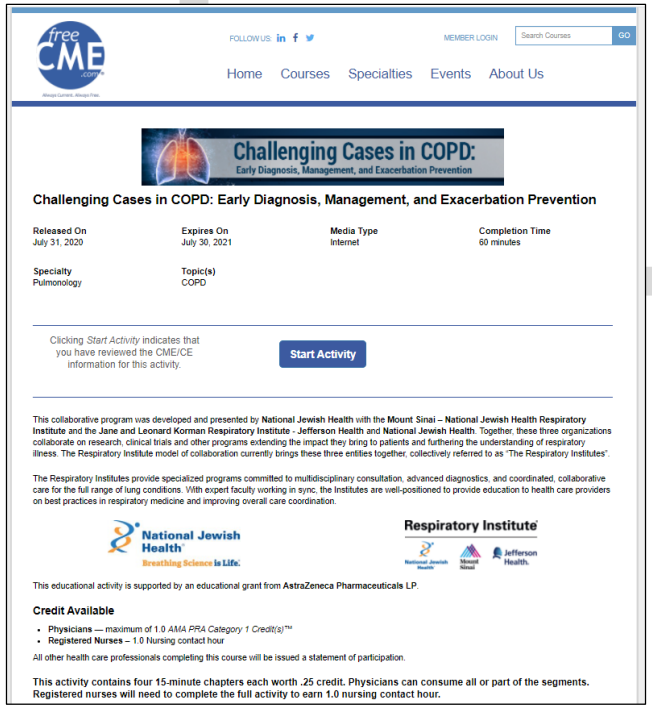
[Online Final Outcomes]

Marketing Strategies – Distribution Partner Marketing

Distribution Platform partner

Personalized emails and e-newsletters





Personalized + Customized Intelligent Marketing Platform

Banner placement

Social media ads and posts

Search engine optimization

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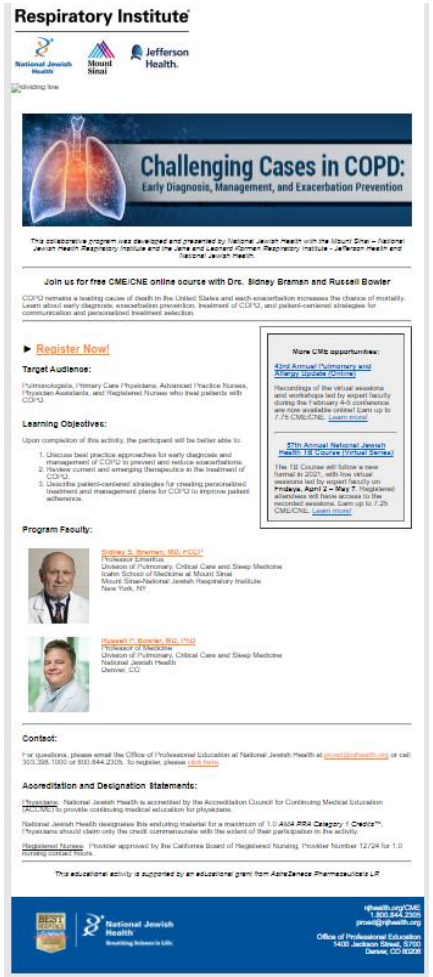
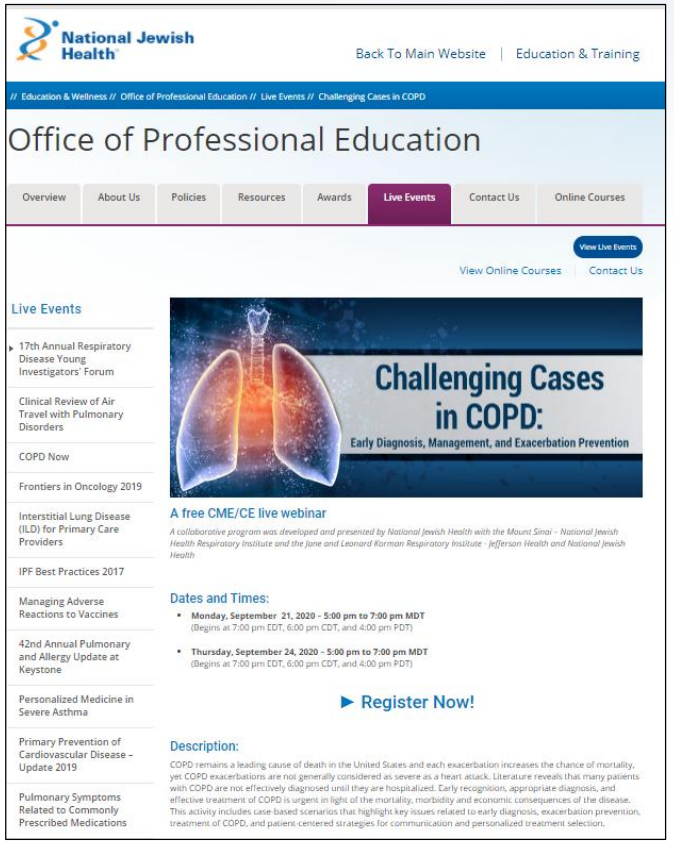
Marketing Strategies – NJH Marketing



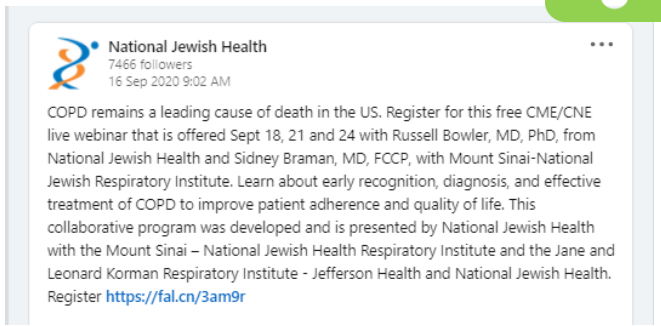
Targeted Emails to NJH Database & AMA list

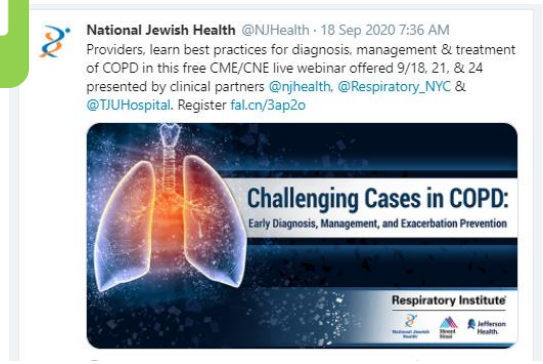
NJH Website



Digital Ads

Social Media





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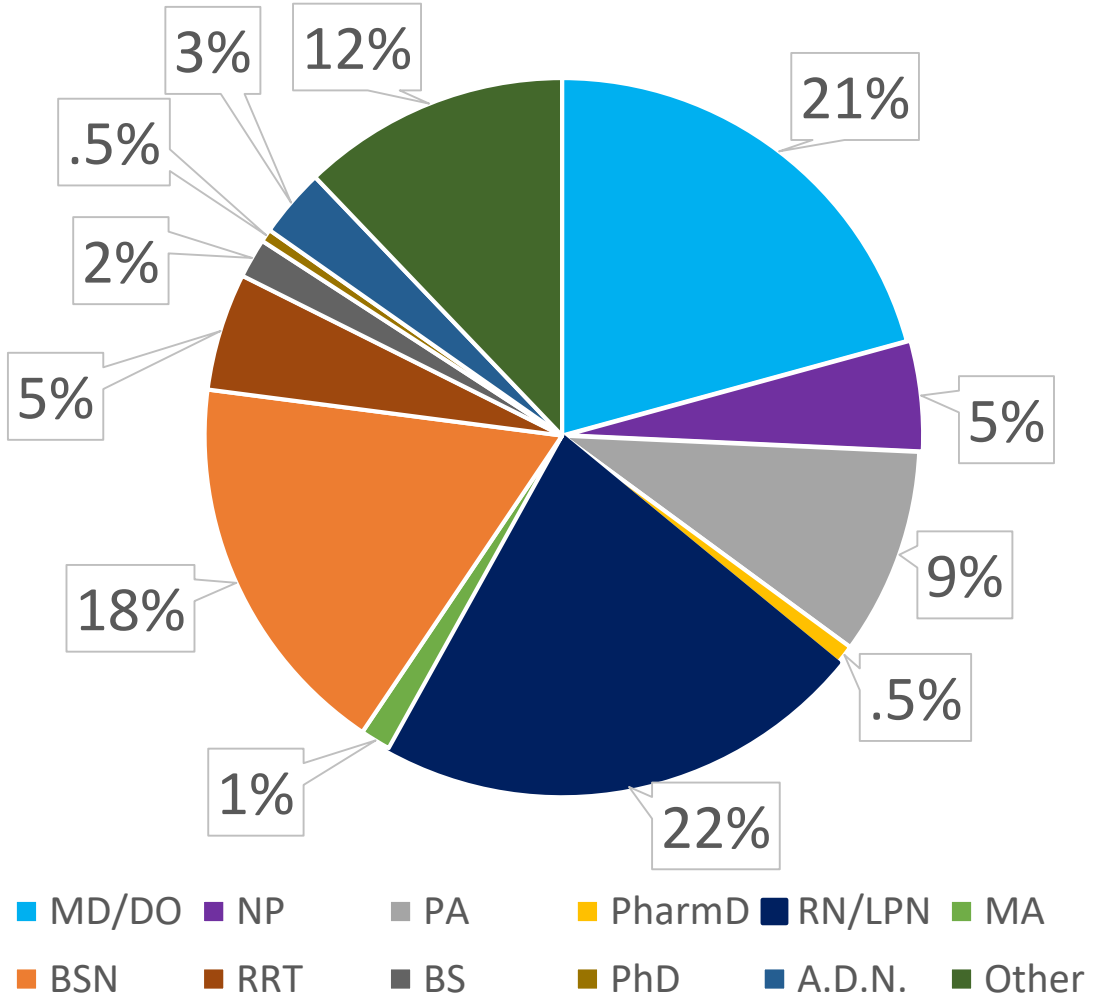
Level 1 Outcomes: Online Enduring: Participation by Degree



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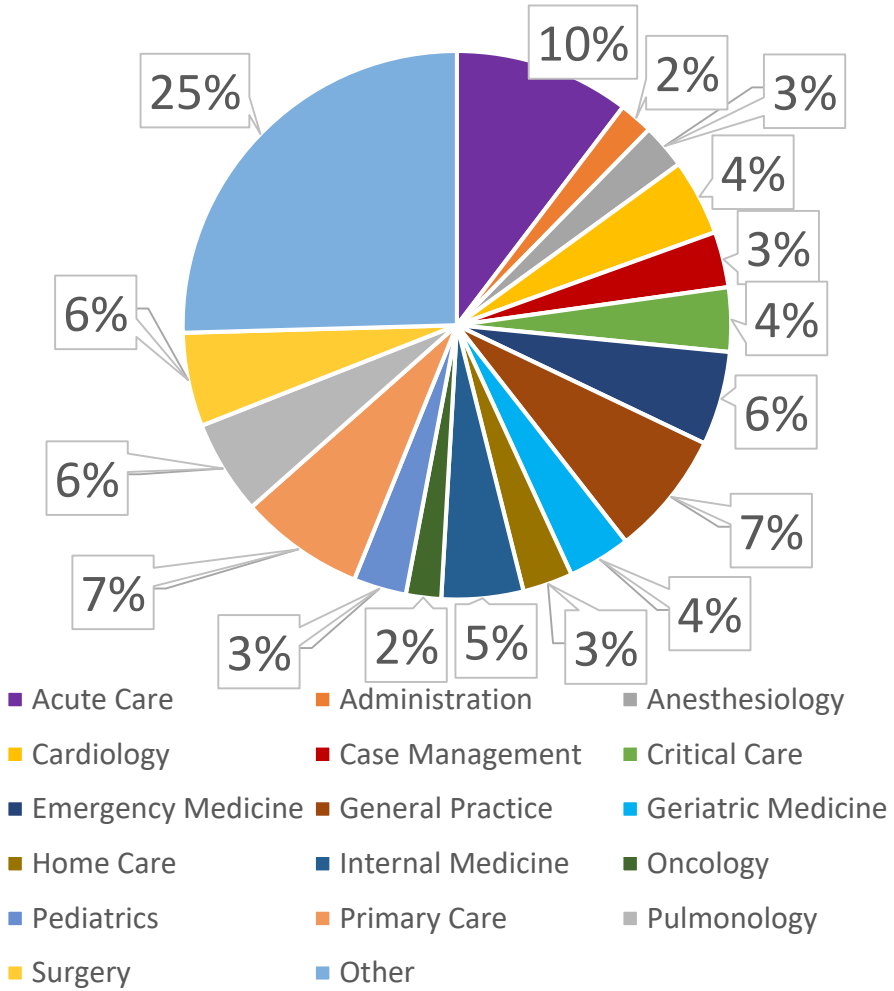
PharmD	21
PhD	14
Other	292
	2,406

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

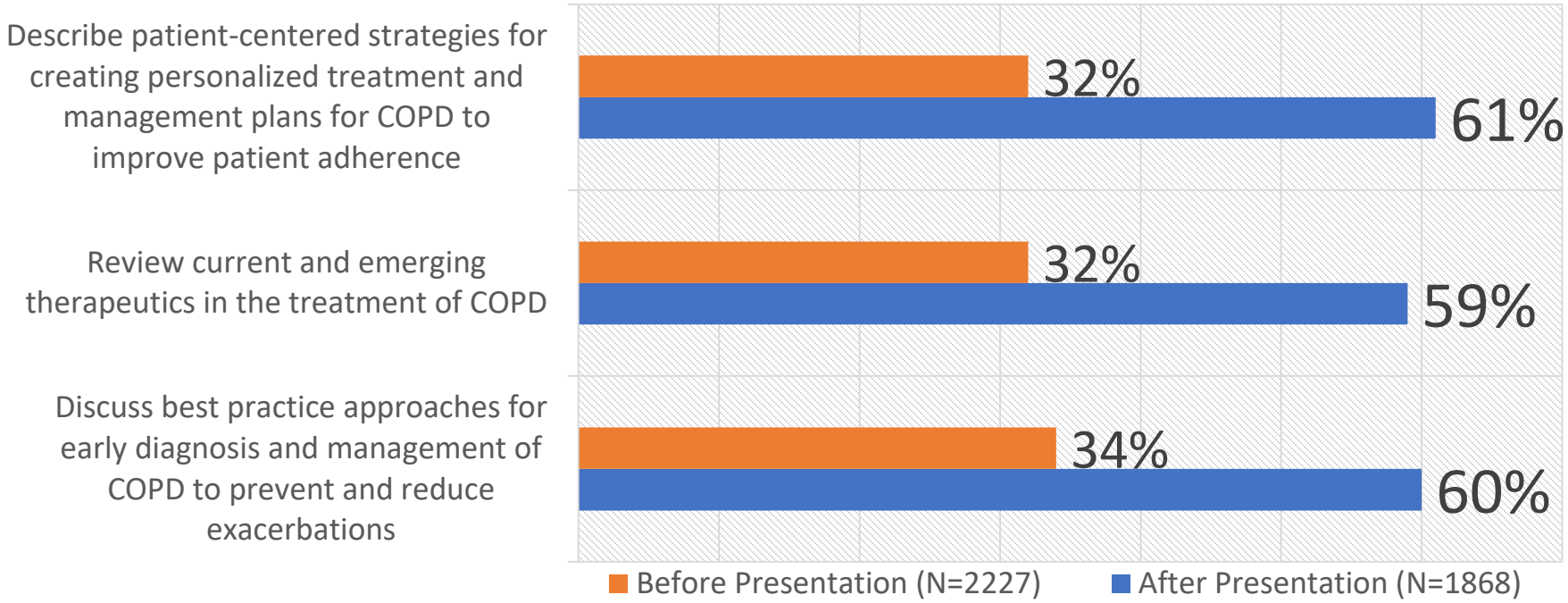
Level 1 Outcomes: Online Enduring: Participation by Specialty



Specialty	Total
Acute Care	249
Primary Care	177
General Practice	177
Pulmonology	134
Surgery	133
Emergency Medicine	133
Internal Medicine	116
Cardiology	108
Critical Care	91
Geriatric Medicine	89
Case Management	79
Pediatrics	75
Home Care	71
Anesthesiology	64
Oncology	50
Administration	48
Other *(radiology, infectious disease, gastroenterology, nephrology, psychiatry, pharmacy, allergy and immunology)*	612
	2,406

Level 2&3 Outcomes: Learning & Satisfaction – Online Enduring

Learners reported their confidence on the learning objectives before and after the presentation (somewhat confident – very confident)



Relative Gain in Confidence: 82%

Absolute Gain in Confidence: 27%

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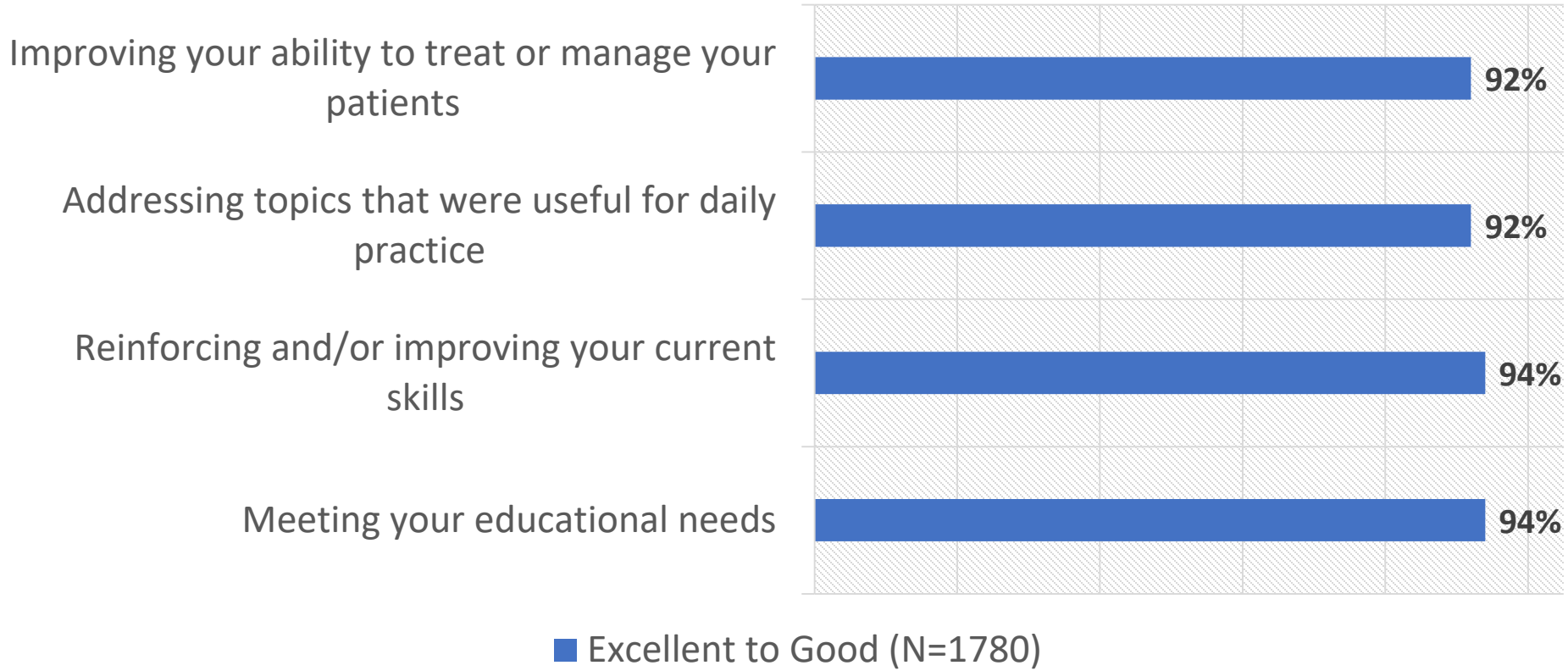
Level 2&3 Outcomes: Learning & Satisfaction – Online Enduring

Analysis of participant responses related to educational needs

Participants reported the activity was "Excellent" to "Good" at:



Learners reported high levels of satisfaction related to the ability of the activity to impact practical applications

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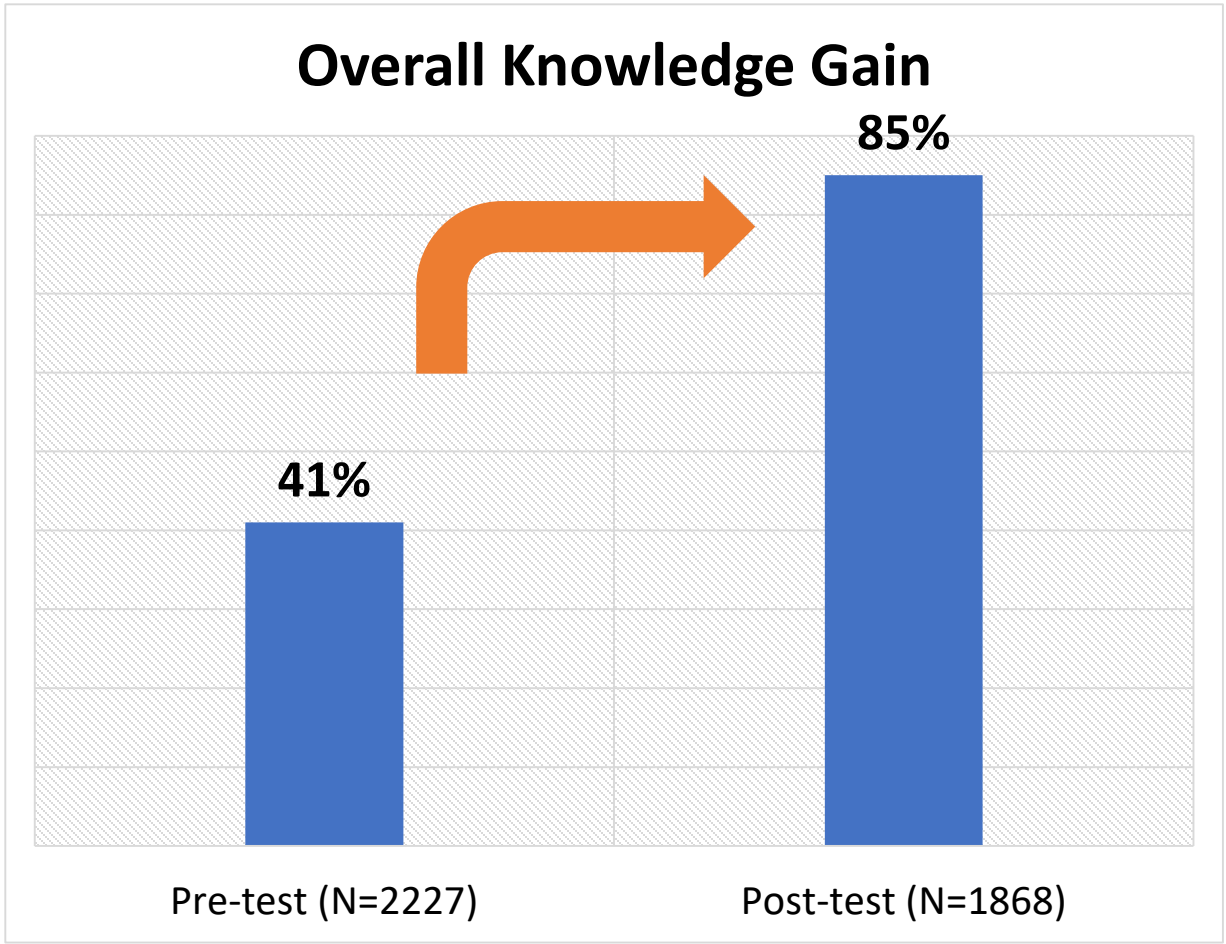
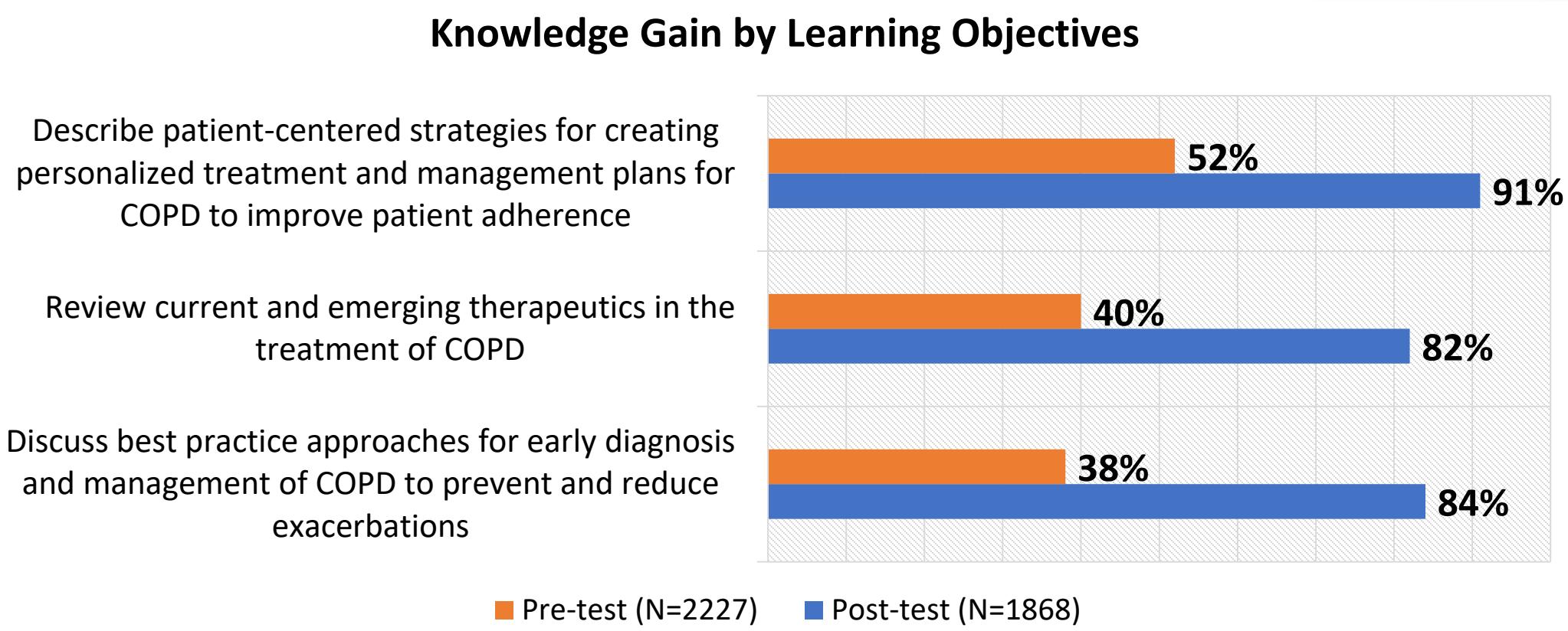
Level 3 Outcomes (Knowledge): Online Enduring: Overall Knowledge Gain



107% Relative Knowledge Gain

44% Absolute Knowledge Gain

Level 3 Outcomes (Knowledge) – Online Enduring By Learning Objective



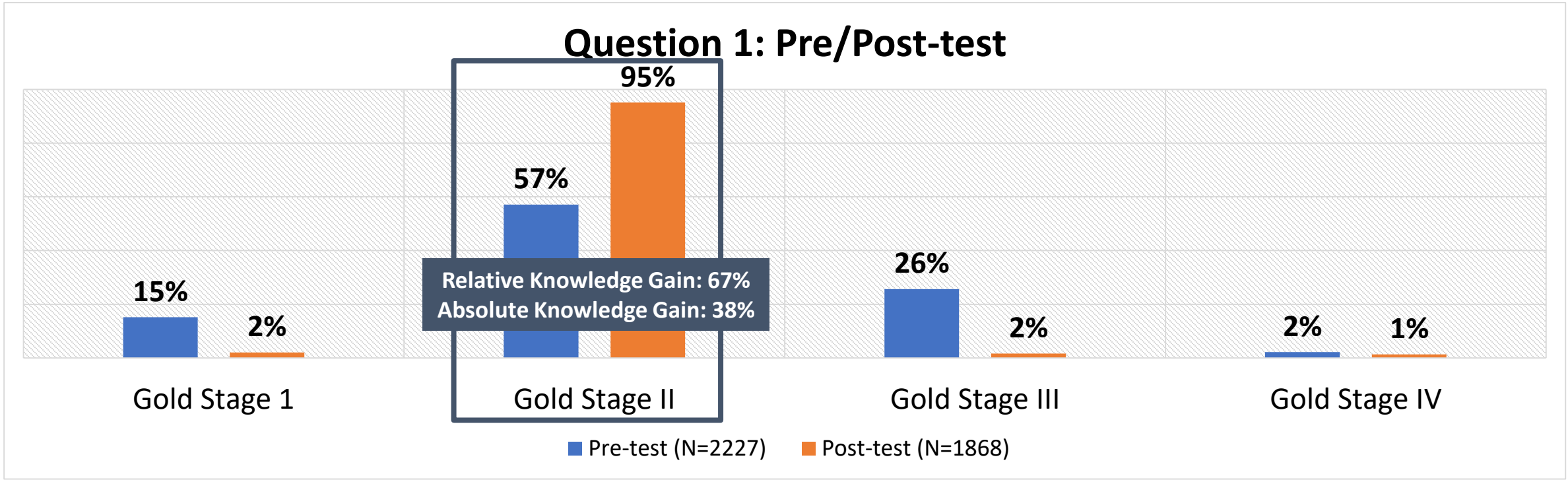
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: Question 1

Learning Objective: ***Discuss best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

Question 1: A 60-year-old smoker presented with shortness of breath on exertion. His spirometry findings were pre-bronchodilator 1.23 L (67% predicted) with FEV1/FVC of 59% and post-bronchodilator 1.37 L (75% predicted) with FEV1/FVC of 66%. Using the GOLD criteria for staging COPD, he would be:



Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

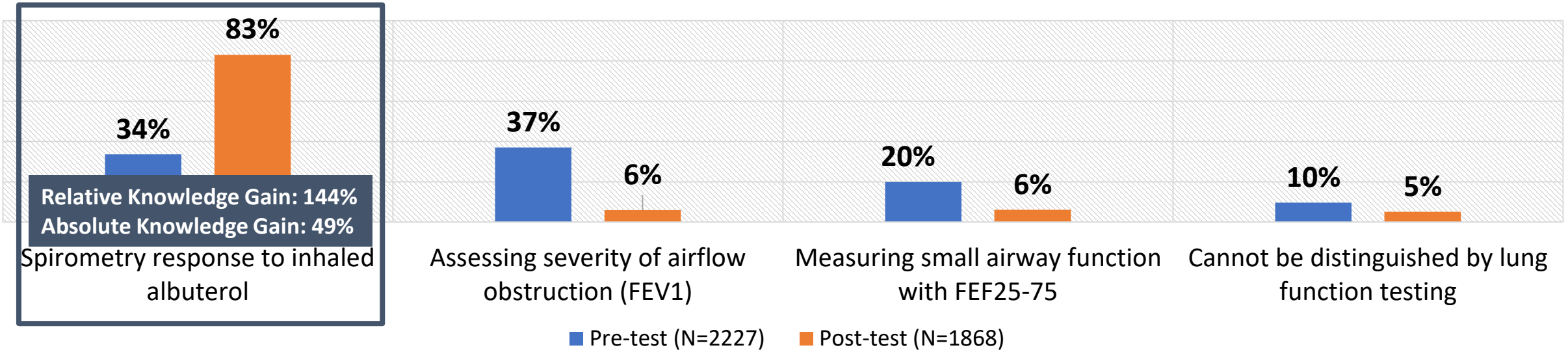
[Online Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: Question 2

Learning Objective: ***Discuss best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

Question 2: A 55-year-old former heavy smoker presents with a history of shortness of breath and intermittent wheezing that responds to 2 inhalations of albuterol using a MDI device. Using pulmonary function testing, which of the following can be the most helpful in distinguishing whether he has asthma or COPD?

Question 2: Pre/Post-test



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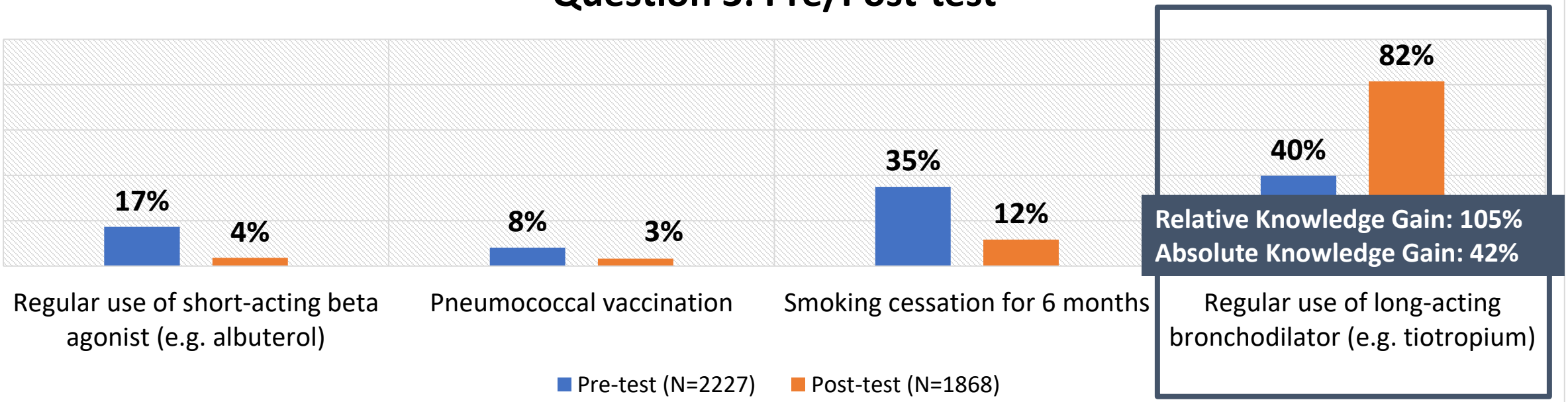
Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: Question 3

Learning Objective: ***Review current and emerging therapeutics in the treatment of COPD***

Question 3: Which of these has been proven to reduce exacerbations of COPD?

Question 3: Pre/Post-test



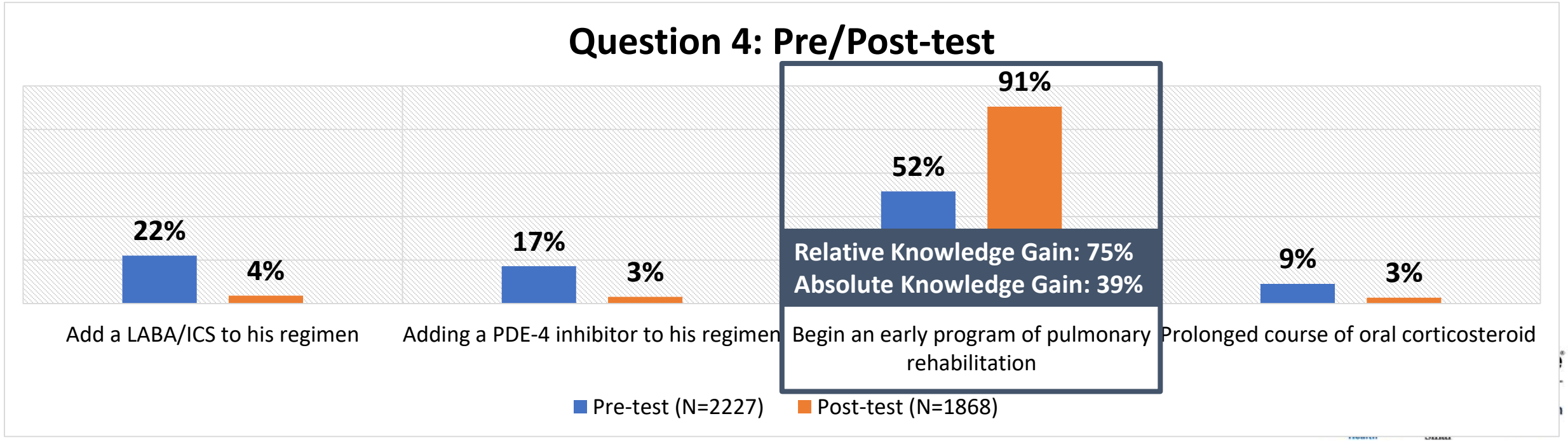
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: Question 4

Learning Objective: ***Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence***

Question 4: A 60-year-old man has been admitted to the hospital for a COPD exacerbation. Following discharge, which of the following measures has been shown to improve his survival (mortality)?



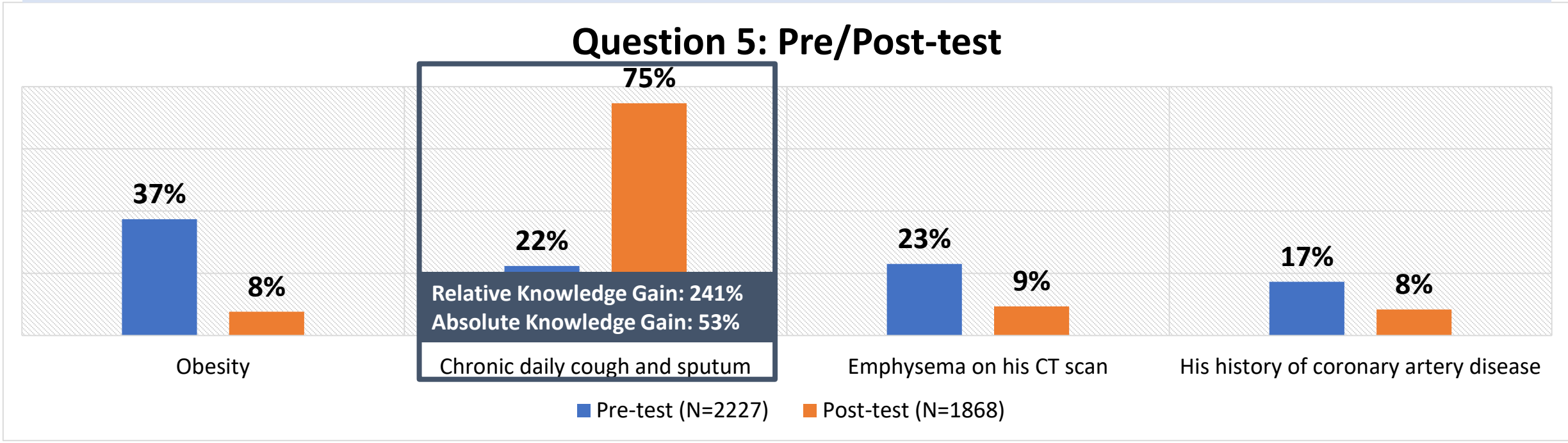
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: Question 5

Learning Objective: ***Discuss best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

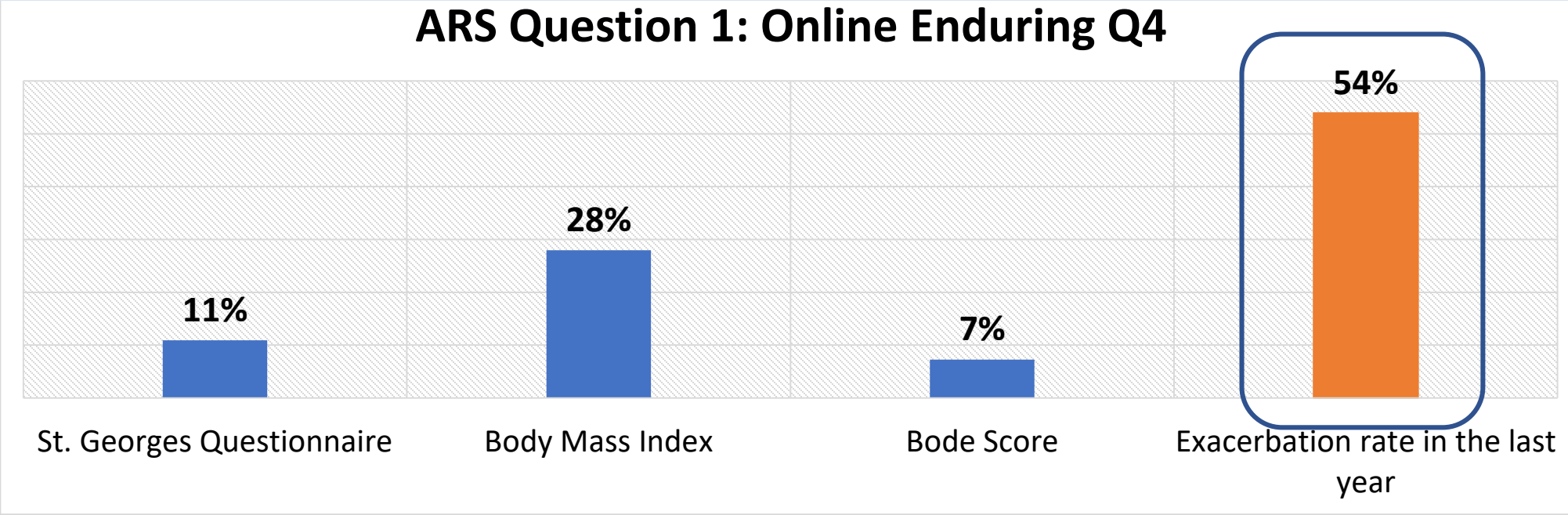
Question 5: A 55 year old obese man (BMI 35 kg/m2) is smoking 1 pack of cigarettes a day. He admits to chronic daily cough and sputum production. He is GOLD stage II COPD and has previous myocardial infarction. Which of the following puts the patient at most risk for recurrent exacerbations?



Level 3 Outcomes (Knowledge): Online Enduring: ARS Question 1

Learning Objective: ***Discuss best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

ARS Question 1: For many years, staging COPD severity relied on lung function measurements such as the FEV1. A new GOLD COPD staging assessment added exercise capacity using the modified Medical Research Council score or COPD assessment test (CAT score) to the assessment. What additional measure is needed to stage COPD using new GOLD criteria?



N=716

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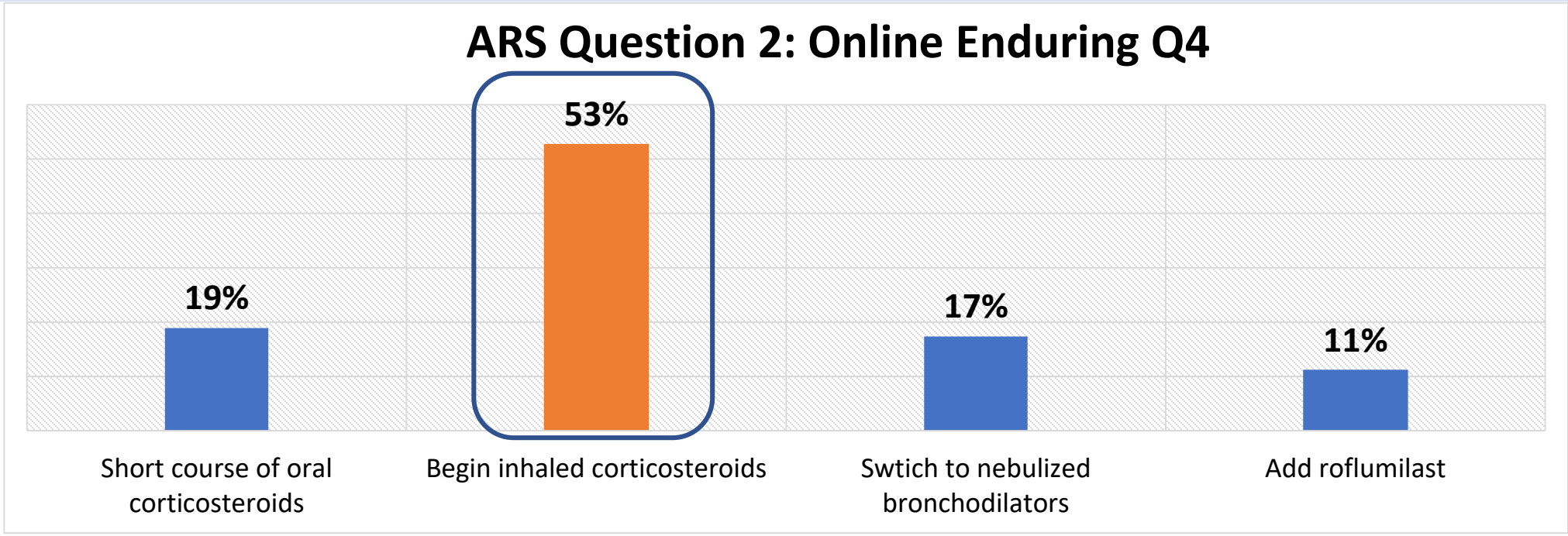
[Online Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: ARS Question 2

Learning Objective: ***Discuss best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

ARS Question 2: A 60-year-old female executive has been having increasing difficulty with her symptoms of COPD and has an increased frequency of exacerbations (2 exacerbations within the past 6 months). She has advanced COPD and has been using a LABA/LAMA. What additional therapy is suggested in the GOLD Guidelines for this patient?



N=640

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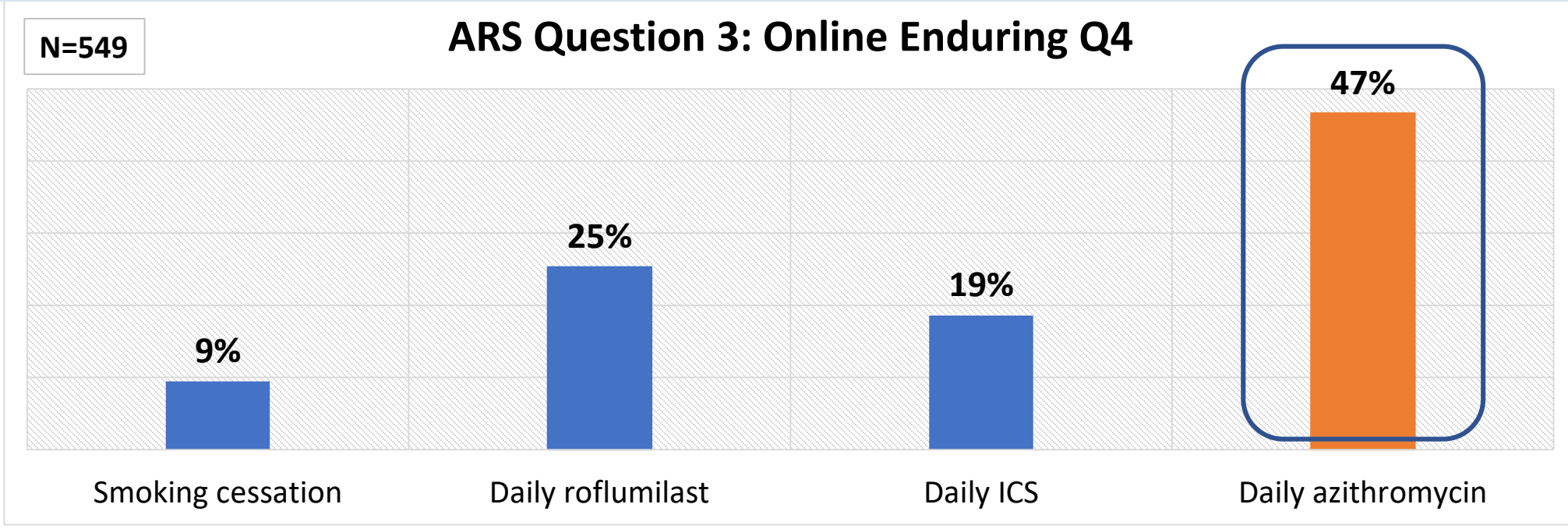
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Online Enduring: ARS Question 3

Learning Objective: ***Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence***

ARS Question 3: 65 year old man from East Texas with multiple visits to physician for flare ups of breathing problems including frequent prednisone and antibiotics about every 2 months. He continues to smoke 1 ppd and coughs up several tablespoons of sputum every day. He has been taking LAMA/LABA for more than a year. His FEV1 is 43%. His eosinophil count off prednisone is 400 cells/µl. Which of the following is NOT indicated?



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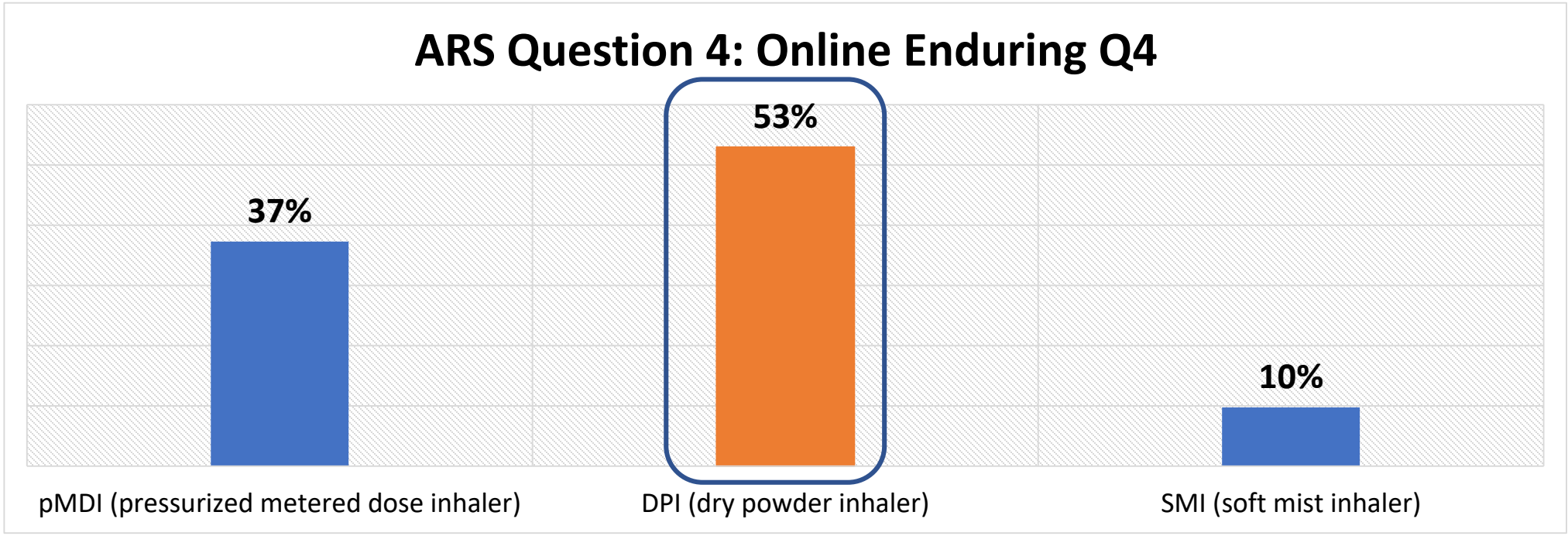
Level 3 Outcomes (Knowledge): Online Enduring: ARS Question 4

Learning Objective: ***Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence***

ARS Question 4: Which of the following inhaler types has the most inspiratory flow resistance?



N=523

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Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Level 4 Outcomes (Competence): Online Enduring

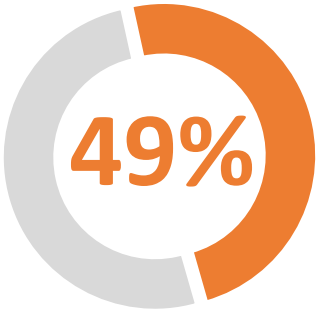
An analysis of open-ended comments demonstrates the following changes learners intend to make:

87%

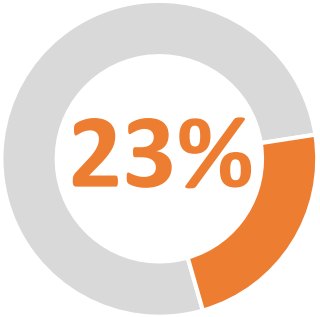
N=1780

Learners intend to make changes in practice as a result of the activity

N=1,091



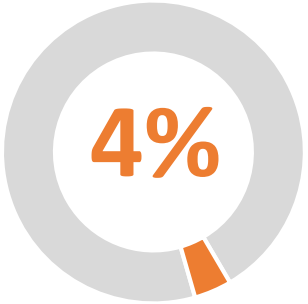
Improve diagnosis, treatment and management of COPD and exacerbations



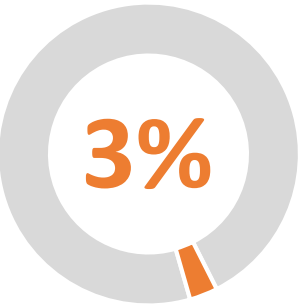
Patient education including inhaler technique and smoking cessation

Encourage pulmonary rehabilitation

Proper use of medications



Refer to pulmonologist



Application of current GOLD guidelines for the treatment of COPD

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Program Evaluation: Online Enduring

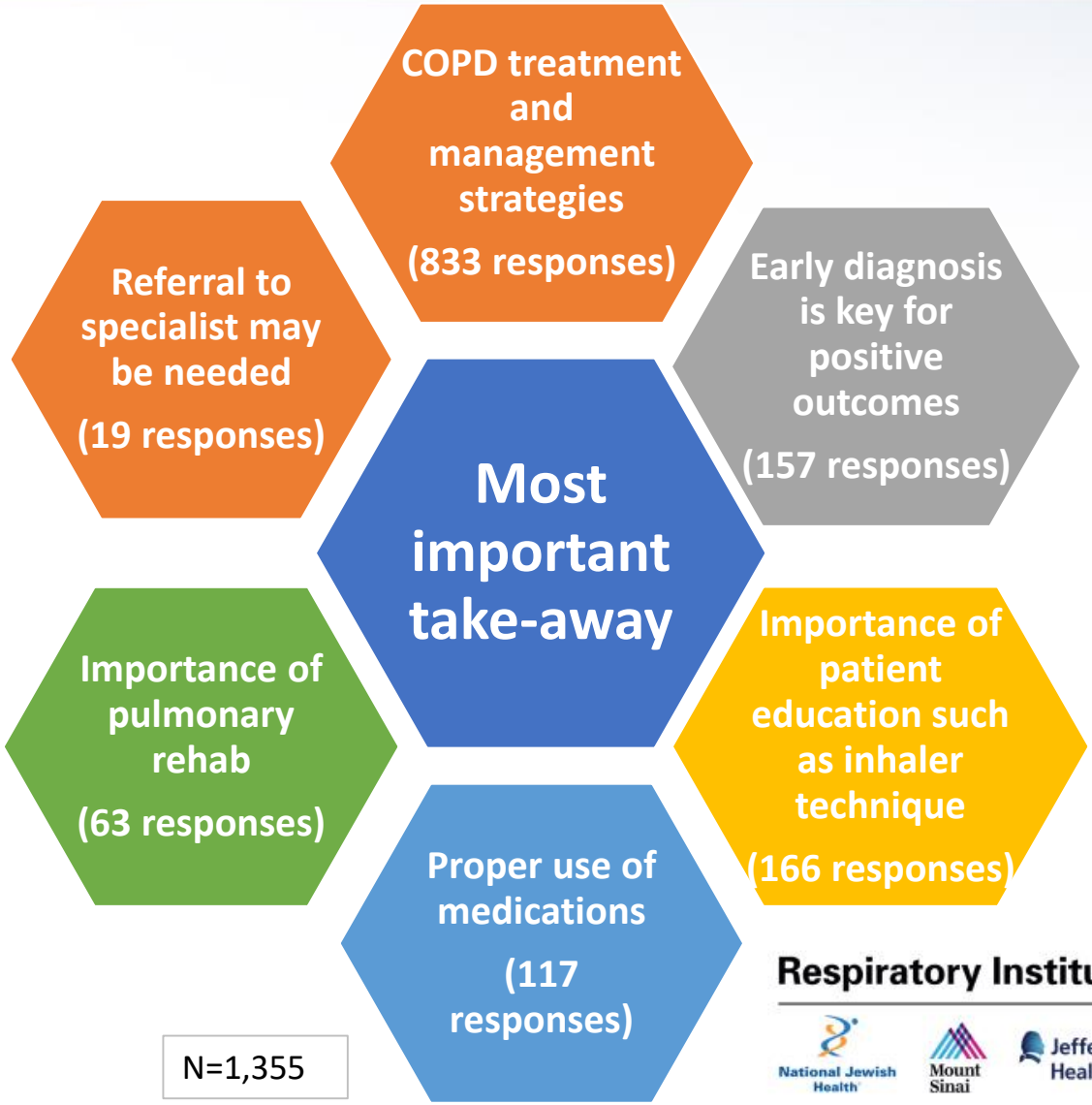
98%

- Material presented in an objective manner and free of commercial bias

99%

- Content presented was evidence-based and clinically relevant

N=1,780



N=1,355

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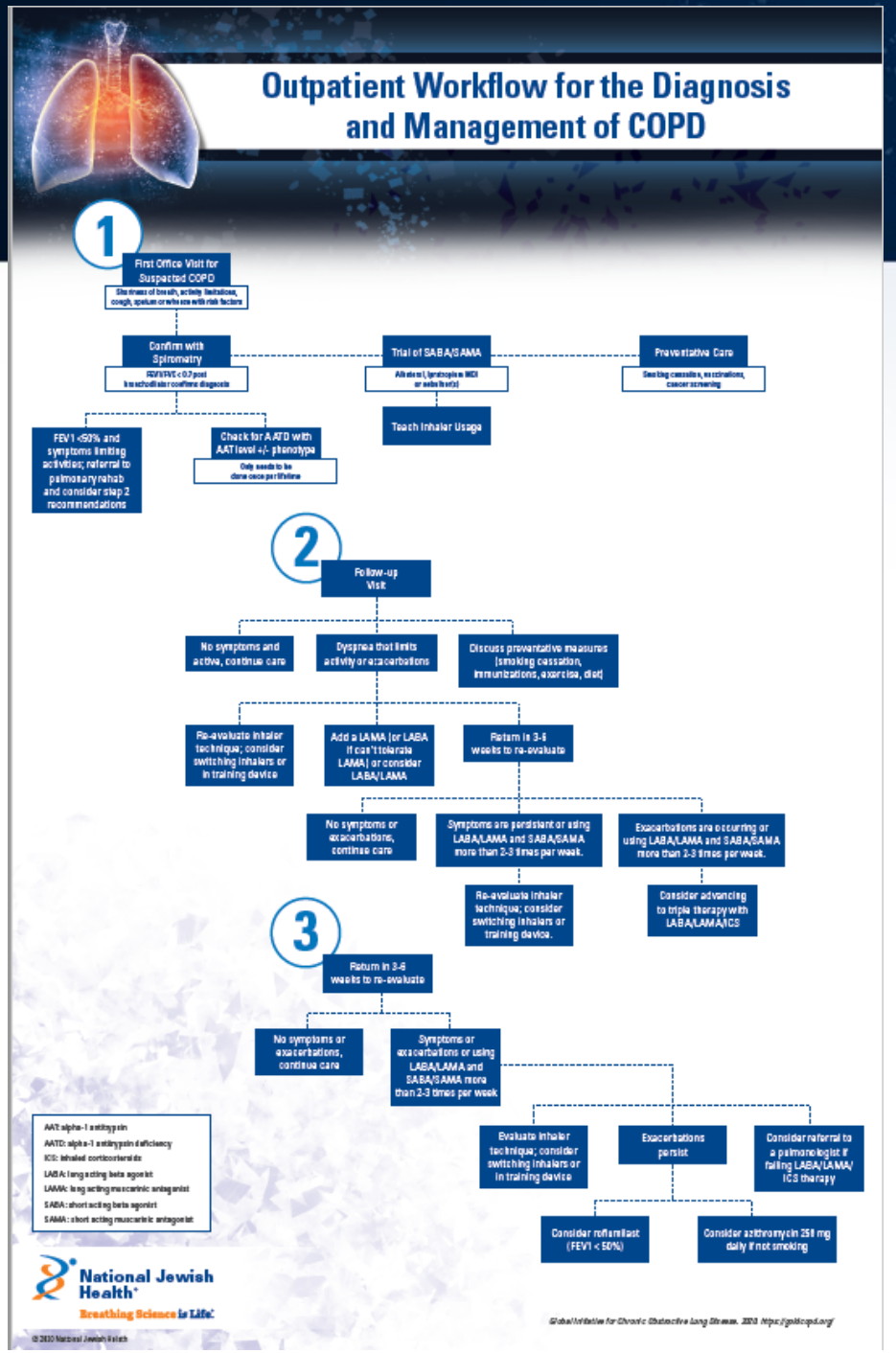
87% of learners indicated they plan to use the clinical reference aid in practice.

N=1693



Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Program Evaluation: Online Enduring

What do you think is the primary reason why making a diagnosis of COPD is so difficult?	
Difficult to diagnose early as it is found more when in advanced stage	Presents like other diseases
Lack of effective diagnostic tools	Lack of ability to perform spirometry and PFT
Patient adherence and cooperation	Performing spirometry correctly
Accurate medications and history from patients	Existing comorbidities limit accuracy of lung function tests
Lack of pulmonologists in the area	Lack of testing available
Resembles asthma	Lack of awareness of disease
People having coughs but not addressing them	Lack of interprofessional team support
Time constraints	Barriers to resources
COVID-19 pandemic	Fragmented healthcare

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Program Evaluation: Online Enduring Strategies for Overcoming Barriers

- Patient compliance
- Smoking cessation
- Inhaler technique
- Access to care
- Proper nursing assessment
- Consistency of practicing GOLD guidelines
- Recognition and treatment of COPD
- Education material to provide to patients
- Improving patient quality of life
- Communication with patients

64%

N=1780

Learners indicated the activity addressed strategies for overcoming barriers to optimal patient care

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Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Online Final Outcomes]

Program Evaluation: Online Enduring

What topics would you like more information about in future educational activities?	
Eosinophilia	Early treatment of COPD
Emphysema	Differences between asthma and COPD
Geriatric care	When to initiate pulmonary rehab
Tuberculosis	Asthma
Bronchiectasis	Pulmonary rehab
Upper respiratory tract infection	Interstitial lung disease
More in-depth inhaler therapies	Further information on prevention of COPD
More on triple therapy and use of nebulizers	Spirometry interpretation

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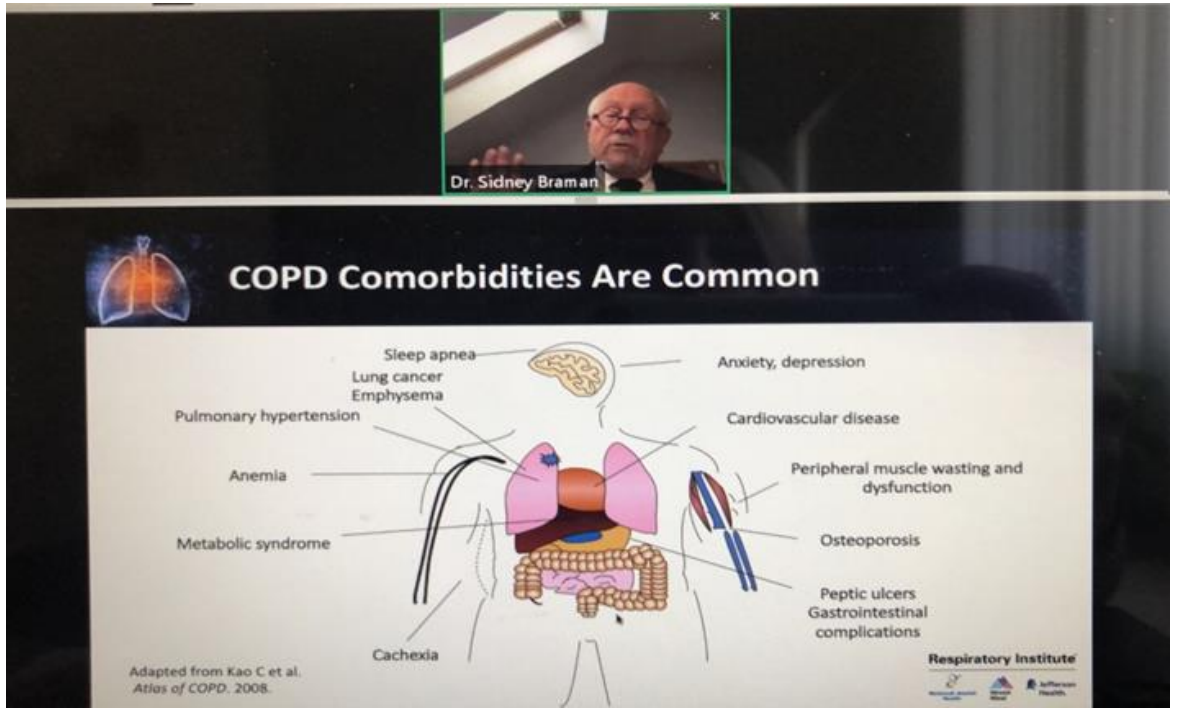
Live Webinar Series

8/31/2020-9/24/2020



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Live Webinar Sessions

[Live Final Outcomes]

Faculty Presenters

(4) Live Activities

Russell P. Bowler, MD, PhD
Professor of Medicine
Division of Pulmonary, Critical Care and Sleep Medicine
National Jewish Health
Denver, CO

Sidney S. Braman, MD, FCCP
Professor Emeritus
Division of Pulmonary, Critical Care and Sleep Medicine
Icahn School of Medicine at Mount Sinai
Mount Sinai-National Jewish
Respiratory Institute
New York, NY

Live Webinar Series

Webinar (1) – targeted to Denver, CO (8/31/2020): **56 Learners**

Webinar (2) – targeted to Philadelphia, PA (9/18/2020): **103 Learners**

Webinar (3) – targeted to New York, NY (9/21/2020): **41 Learners**

Webinar (4) – targeted nationally (9/24/2020): **77 Learners**

Total: 277 Learners

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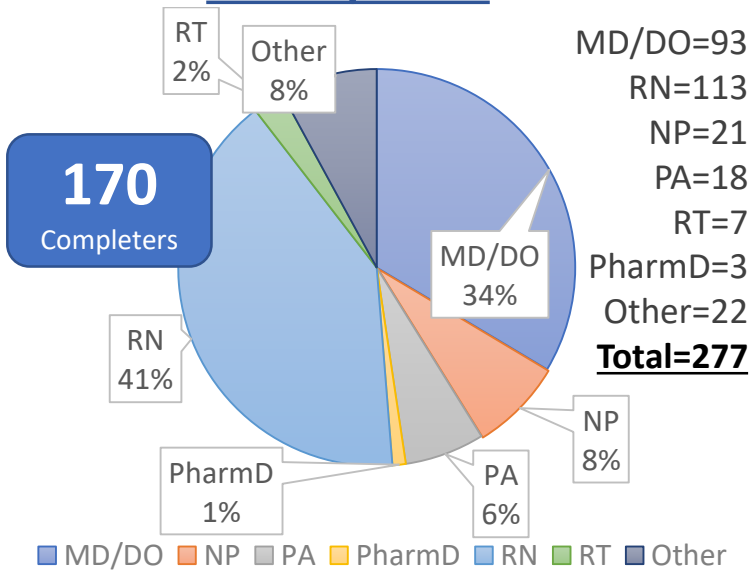
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Participation



170
Completers

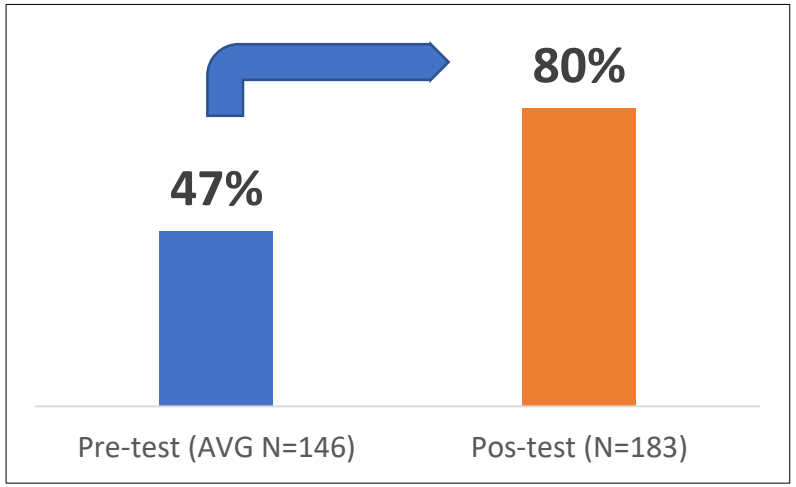
MD/DO=93
RN=113
NP=21
PA=18
RT=7
PharmD=3
Other=22
Total=277

Live Participation: 277 Learners

Exceeded projections by 137 learners

Potential Impact to **53,768** patient visits this year

Overall Knowledge Gain



33%
absolute gain in knowledge

70%
relative gain in knowledge

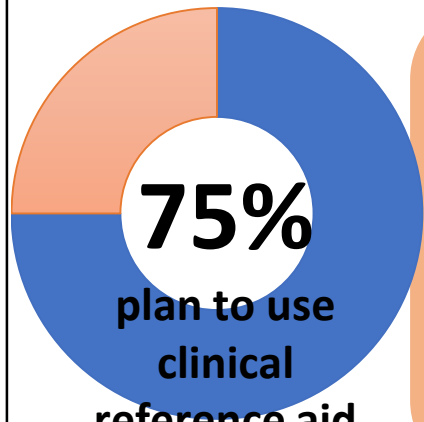
167%
relative gain in confidence

40%
absolute gain in confidence

Top 3 Practice Changes

92% (N=177) reported they intend to make changes to their practice

- ✓ Increased use of spirometry in diagnosis
- ✓ Application of current guidelines for COPD
- ✓ Patient education



plan to use clinical reference aid in practice

"The delivery method was excellent and felt so involved like I was in an in-person setting."
- Live virtual session attendee -

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Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

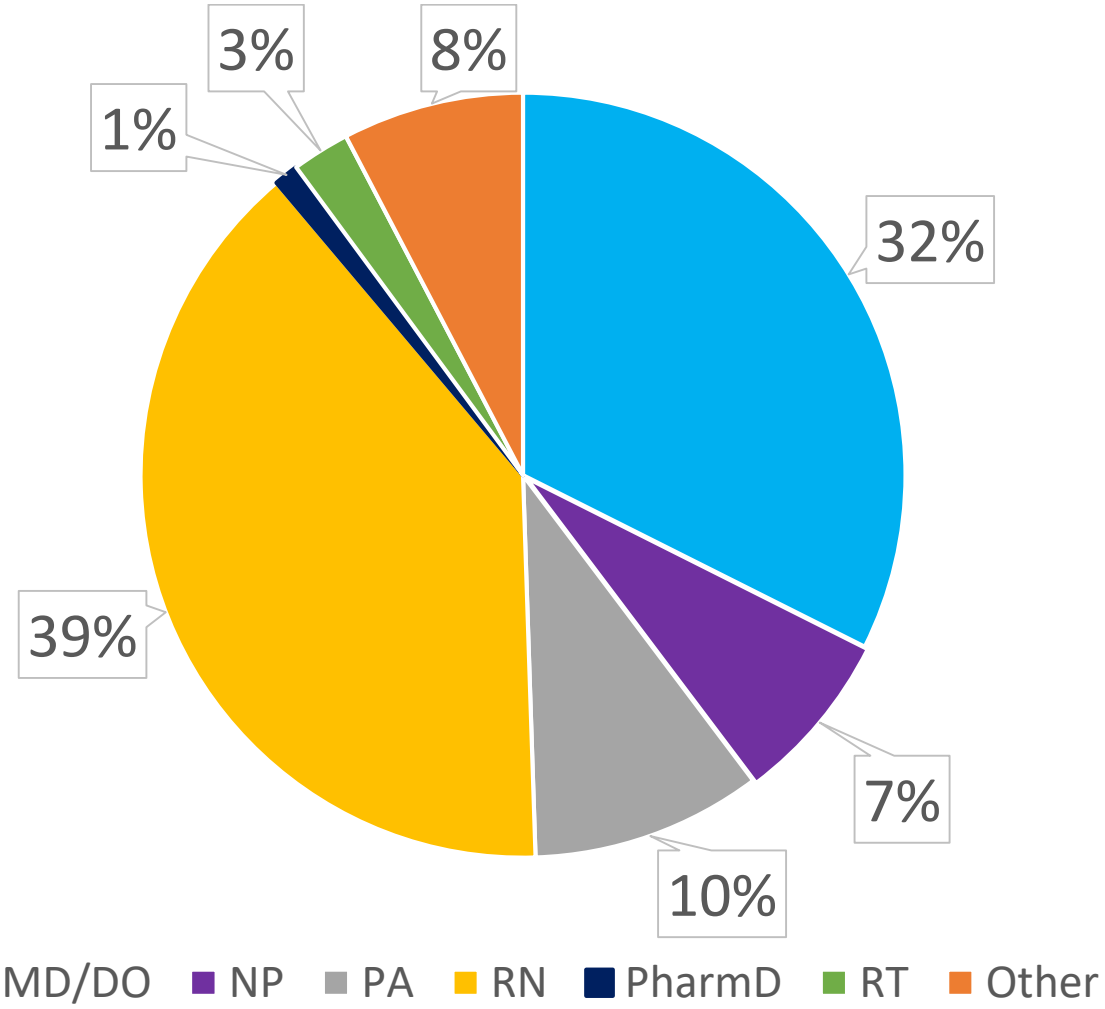
Qualitative Educational Impact Summary: Live Webinar Sessions

Participants	Educational Impact	Practice Change
277 Total Learners	**86%** relative knowledge gain seen from learners regarding discussing best practice approaches for early diagnosis and management of COPD to prevent and reduce exacerbations. [N=183]	**92%** of evaluation respondents reported they intended to make changes to their practice as a result of the educational activity [N=177]
Who see **1,034** COPD Patients Weekly	**44%** relative knowledge gain seen from learners in regards to reviewing current and emerging therapeutics in the treatment of COPD [N=183]	**69%** of learners indicated the activity addressed strategies for overcoming barriers to optimal patient care [N=177]
Which translates to **53,768** Potential patient Visits Annually	**53%** relative knowledge gain seen from learners in describing patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence [N=183]	*"Enjoyed the lecture and the doctors were very knowledgeable and clear to understand."* – Live virtual session attendee

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 1 Outcomes: Live Webinar Sessions: Participation by Degree

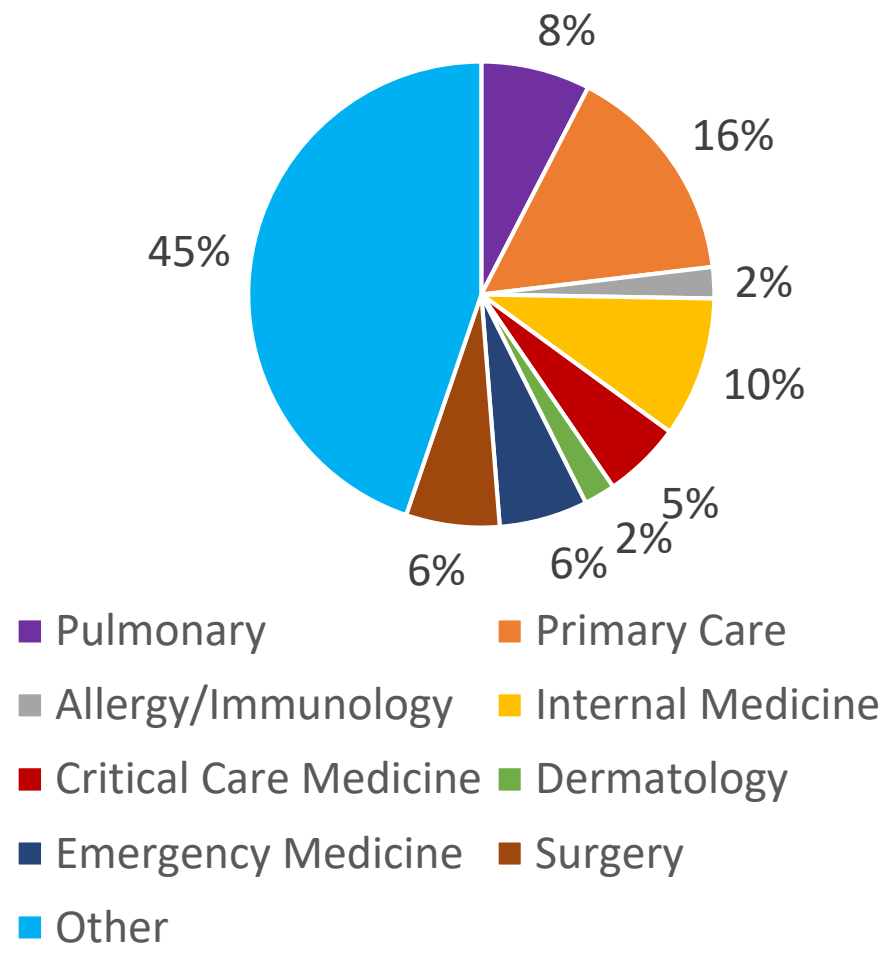


Degree	Total
MD/DO	93
RN	113
NP	21
PA	18
RT	7
PharmD	3
Other	22
	277

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 1 Outcomes: Live Webinar Sessions: Participation by Specialty

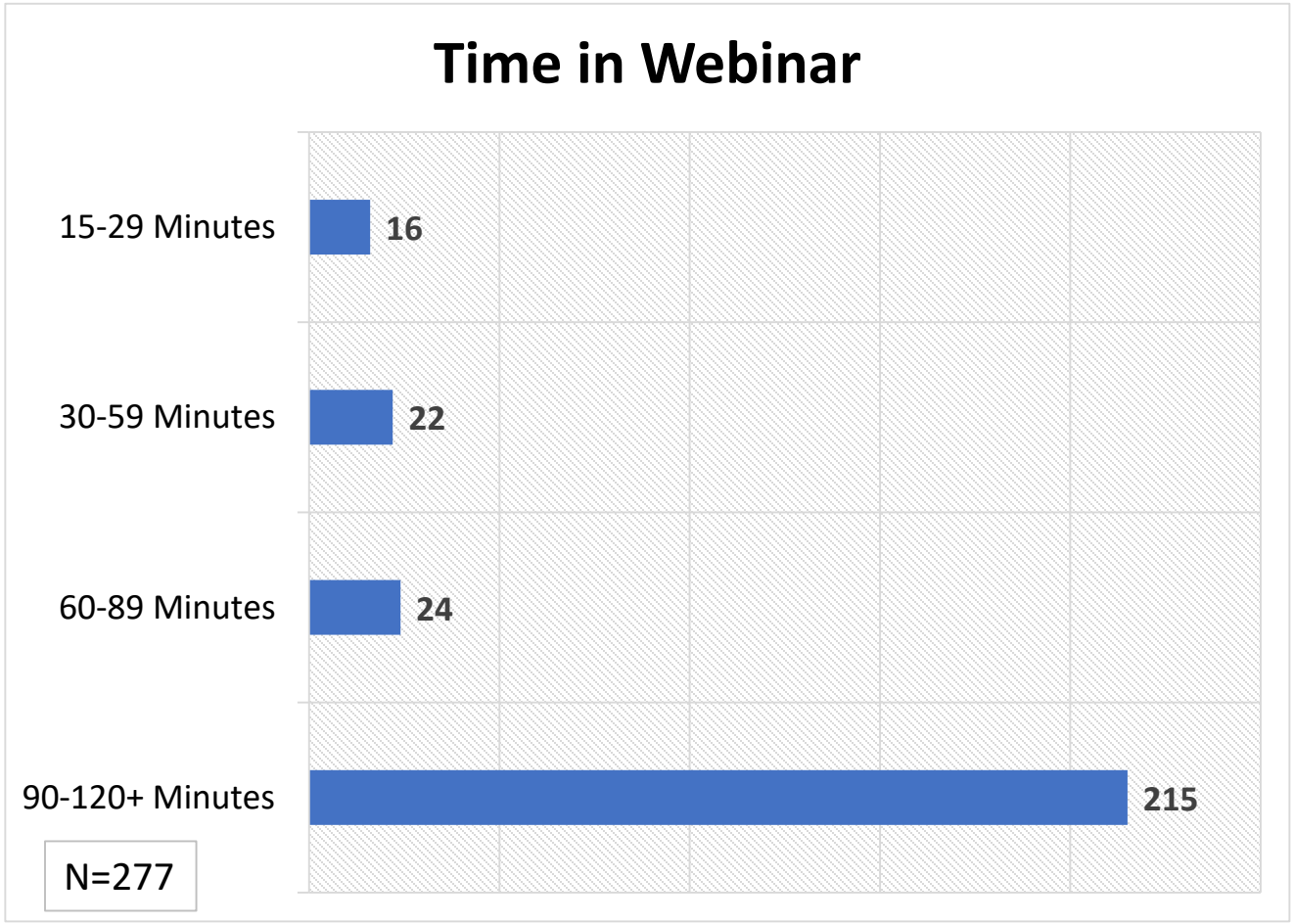


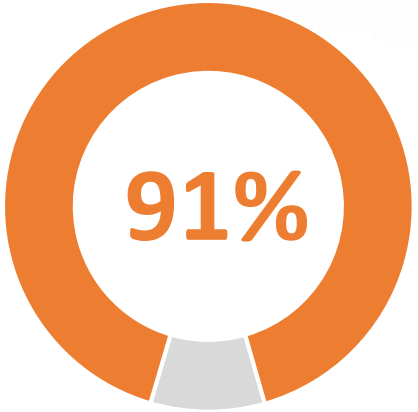
Specialty	Total
Primary Care	43
Internal Medicine	27
Pulmonary	21
Surgery	18
Emergency Medicine	17
Critical Care Medicine	15
Allergy/Immunology	6
Dermatology	6
Other	124
	277

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 1 Outcomes: Live Webinar Sessions: Participation by Engagement





Interest rating - the percentage of time the GoToWebinar player was the primary tab open on the participant's screen

170 out of 277 learners completed the full two hour webinar

77% of Learners stayed on at least 90 minutes

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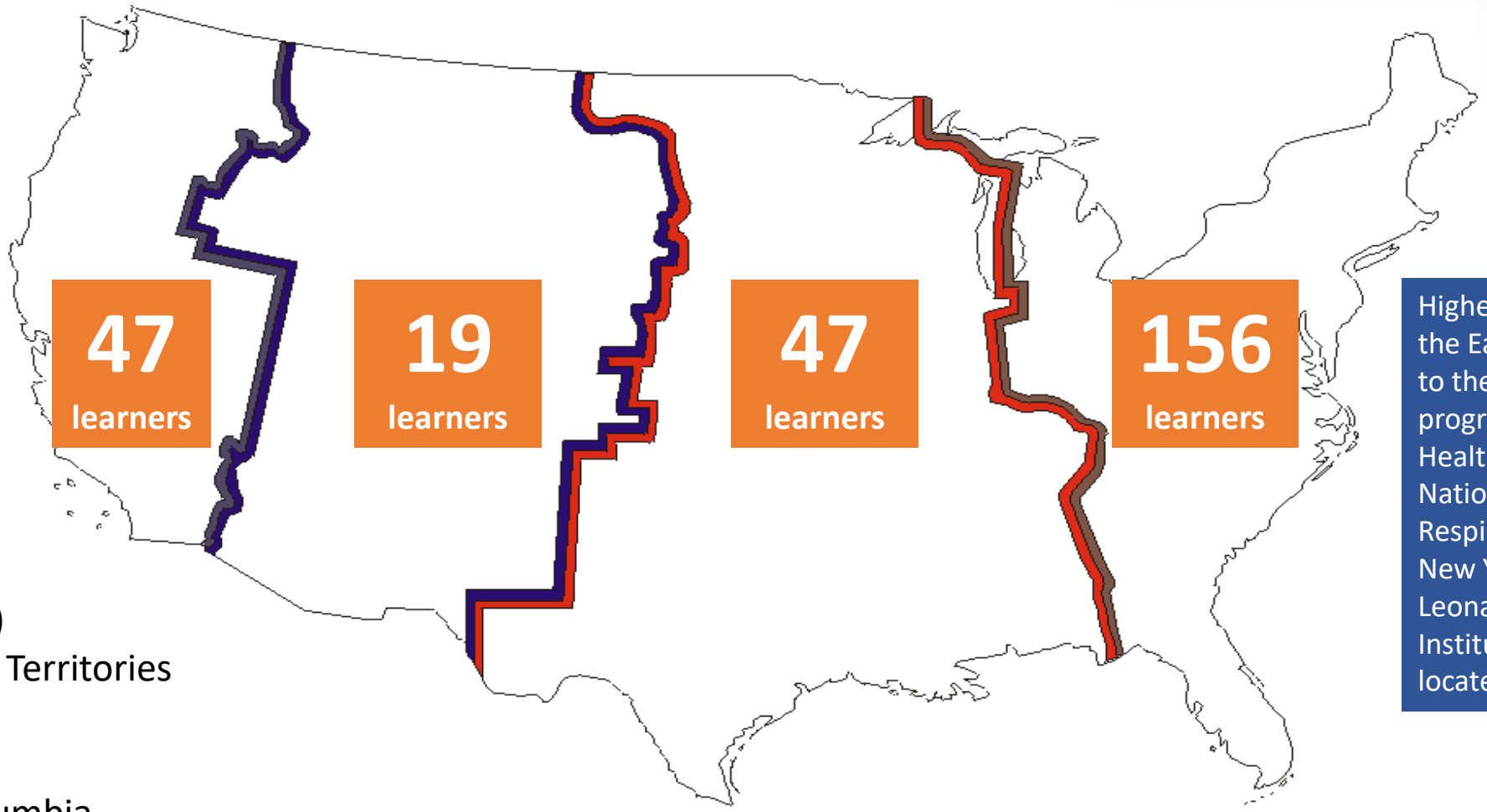
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 1 Outcomes: Live Webinar Sessions: Participation by Region

N=277



Higher participation numbers on the East Coast can be attributed to the collaboration on this program with National Jewish Health and the Mount Sinai – National Jewish Health Respiratory Institute, located in New York, and the Jane and Leonard Korman Respiratory Institute - Jefferson Health, located in Philadelphia.

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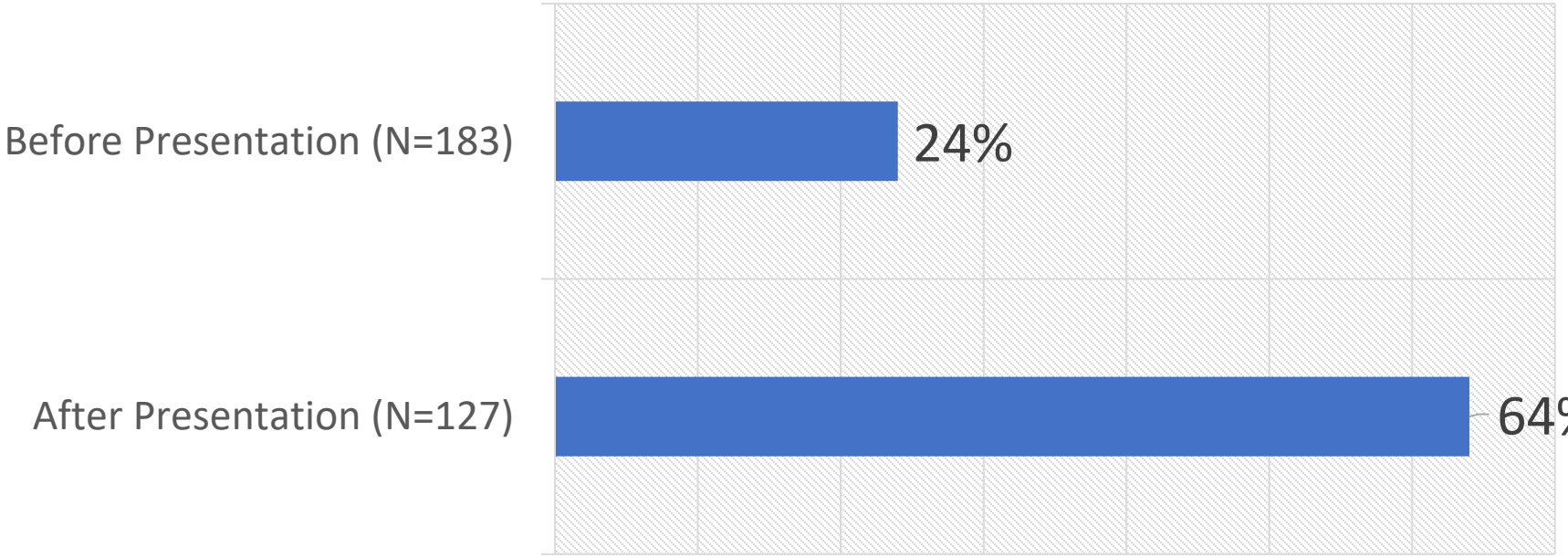
Other

- Quebec (2)
- Northwest Territories
- Yukon (2)
- Guam (2)
- British Columbia

Level 2&3 Outcomes: Learning & Satisfaction - Live Webinar Sessions

Learners reported their confidence on the learning objectives before and after the presentation (somewhat confident – very confident)



Relative Gain in Confidence: 167%

Absolute Gain in Confidence: 40%

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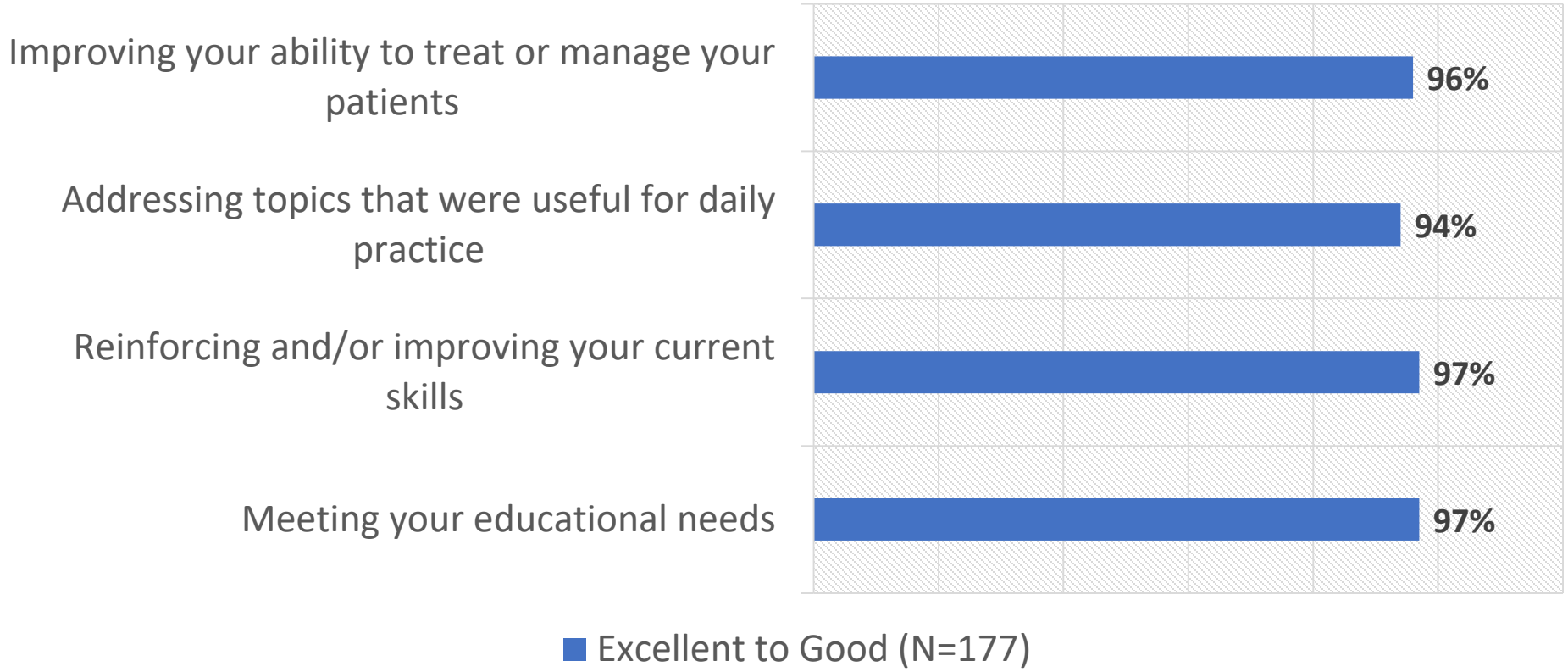
Level 2&3 Outcomes: Learning & Satisfaction - Live Webinar Sessions

Analysis of participant responses related to educational needs

Participants reported the activity was "Excellent" to "Good" at:



Learners reported high levels of satisfaction related to the ability of the activity to impact practical applications

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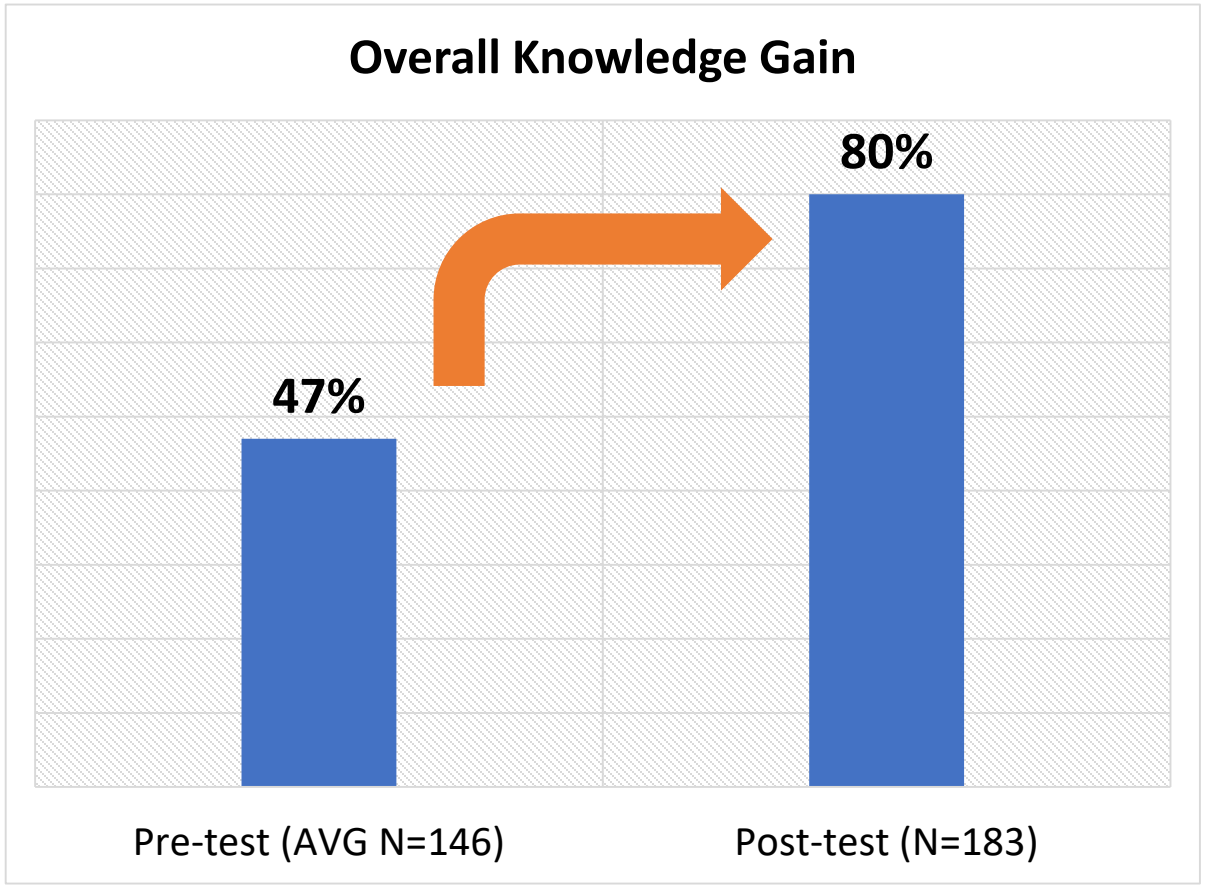
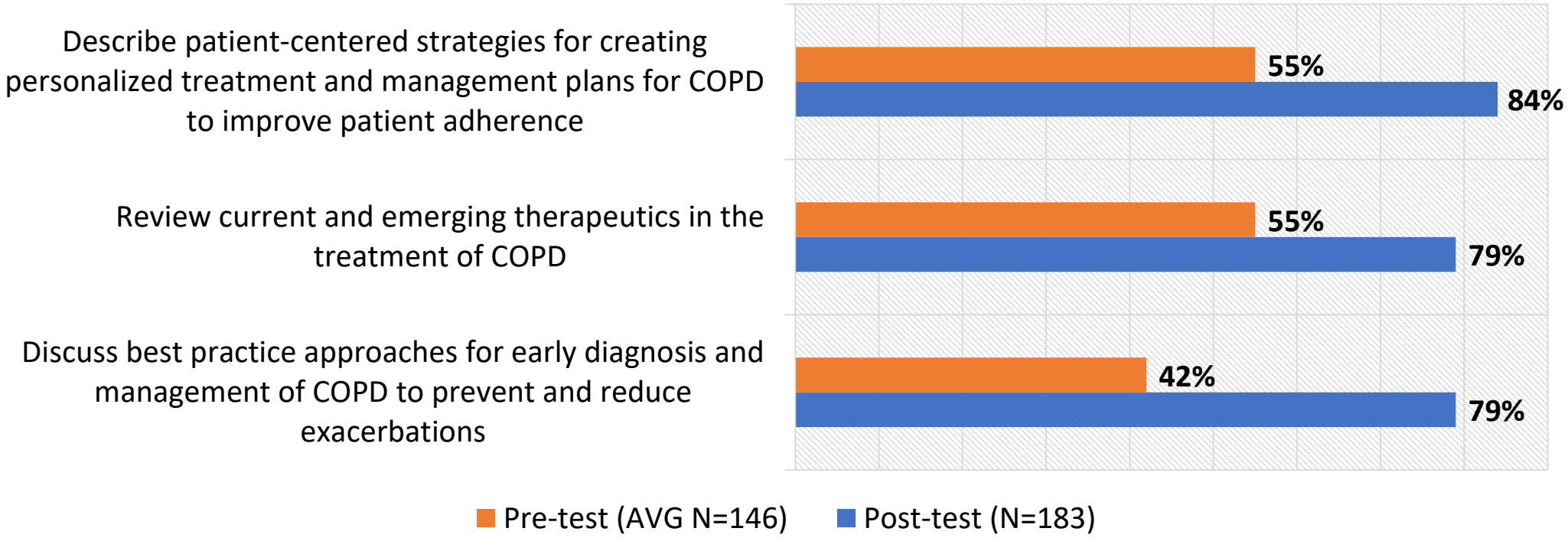
Level 3 Outcomes (Knowledge): Live Webinar Sessions: Overall Knowledge Gain



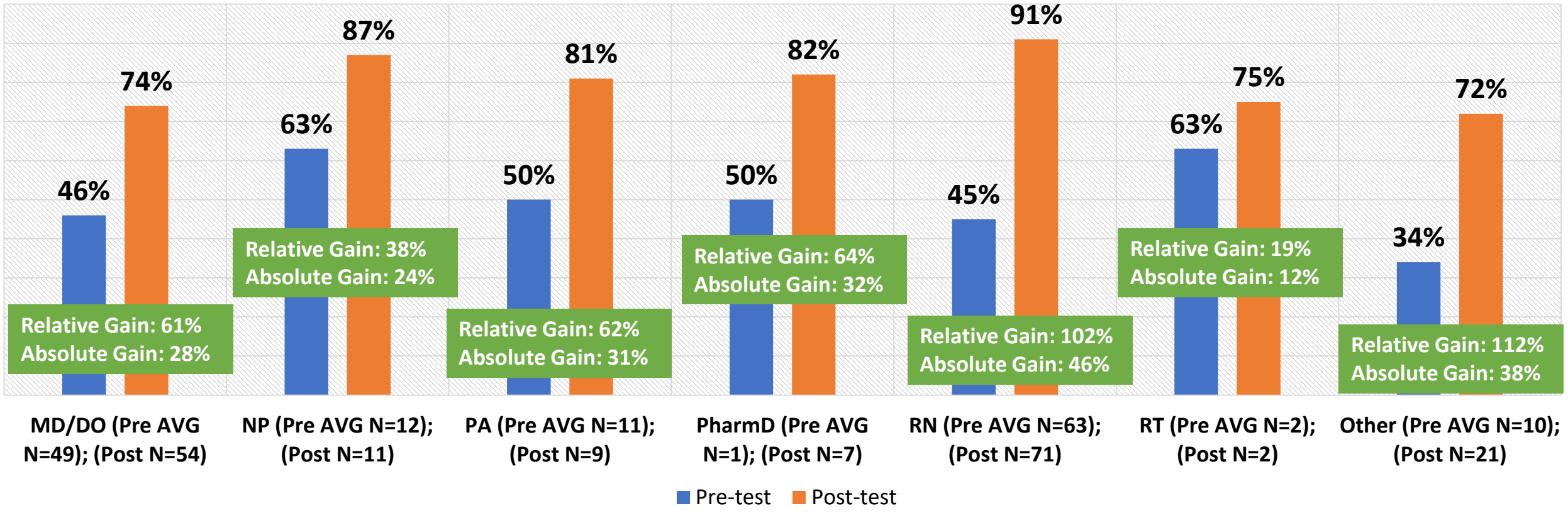
70% Relative Knowledge Gain

33% Absolute Knowledge Gain

Level 3 Outcomes (Knowledge) - Live Webinar Sessions By Learning Objective



Level 3 Outcomes (Knowledge): Live Webinar Sessions: Overall Knowledge Gain



Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

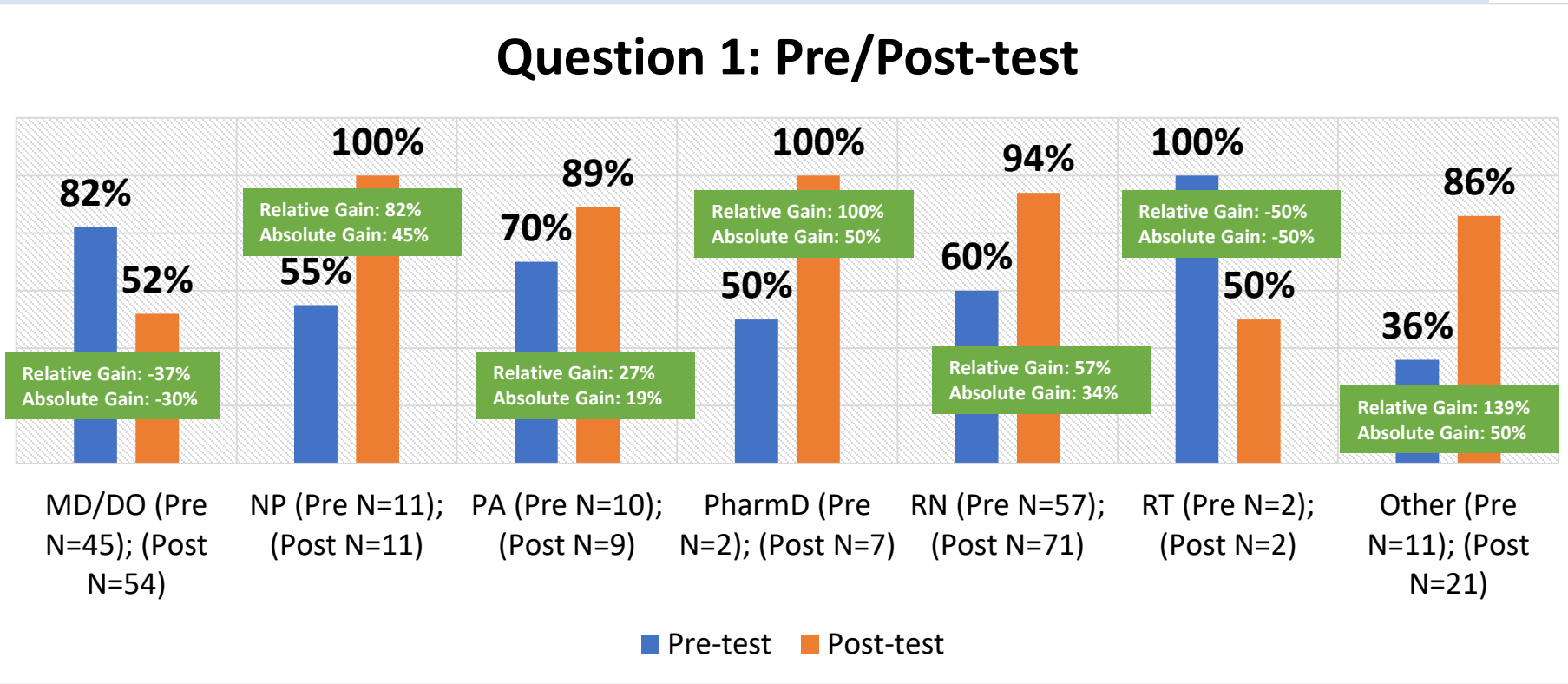
[Live Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: Question 1

Learning Objective: ***Discuss best practices approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

Question 1: A 60-year-old smoker presented with shortness of breath on exertion. His spirometry findings were pre-bronchodilator 1.23 L (67% predicted) with FEV1/FVC of 59% and post-bronchodilator 1.37 L (75% predicted) with FEV1/FVC of 66%. Using the GOLD criteria for staging COPD, he would be:

a. Gold Stage I
b. Gold Stage II
c. Gold Stage III
d. Gold Stage IV



Average Knowledge Gain (Question 1): 26%

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Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

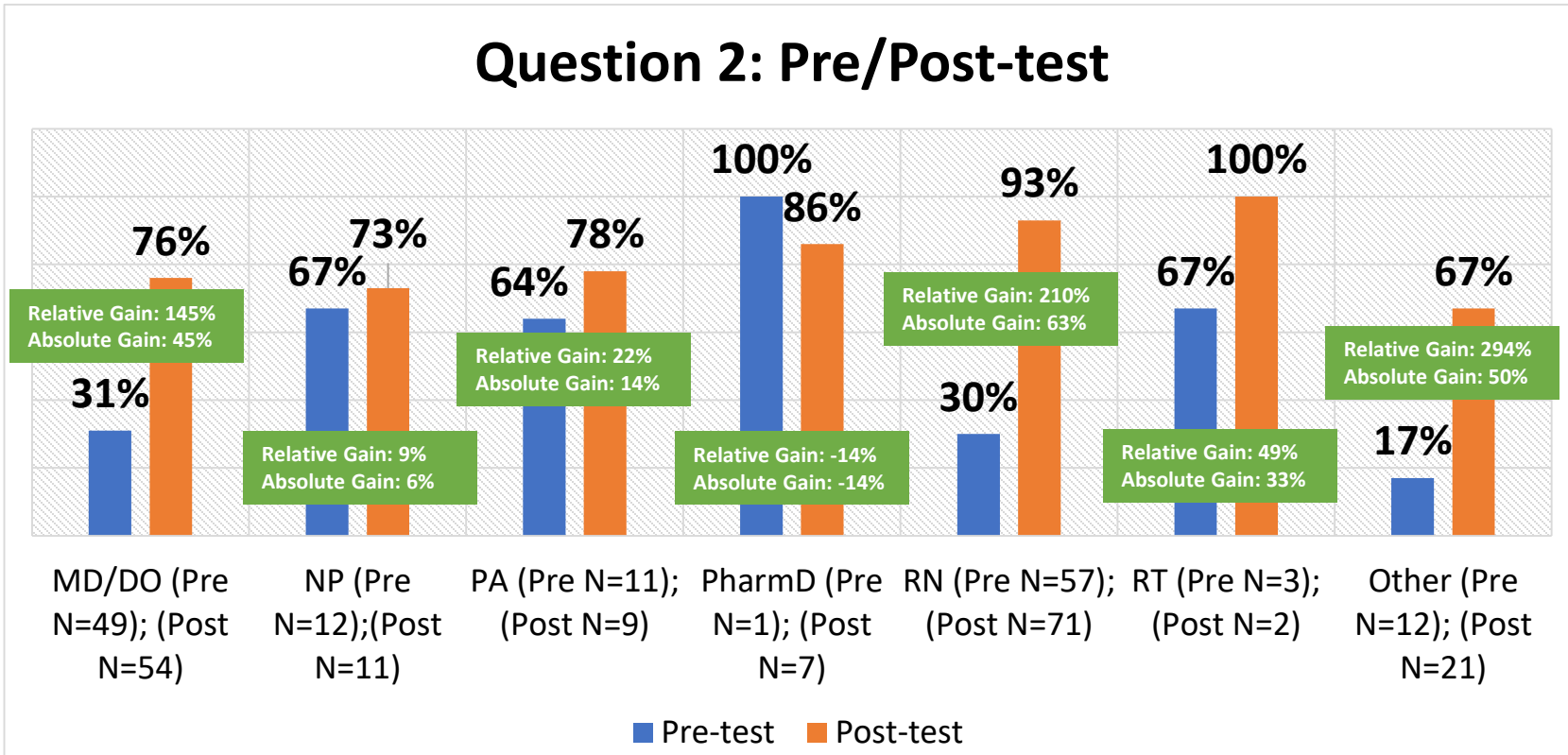
Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: Question 2

Learning Objective: ***Discuss best practices approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

Question 2: A 55-year-old former heavy smoker presents with a history of shortness of breath and intermittent wheezing that responds to 2 inhalations of albuterol using a MDI device. Using pulmonary function testing, which of the following can be the most helpful in distinguishing whether he has asthma or COPD?

a. **Spirometry response to inhaled albuterol**
b. Assessing severity of airflow obstruction (FEV1)
c. Measuring small airway function with FEF_{25-75}
d. Cannot be distinguished by lung function testing

Average Knowledge Gain (Question 2): 52%



Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

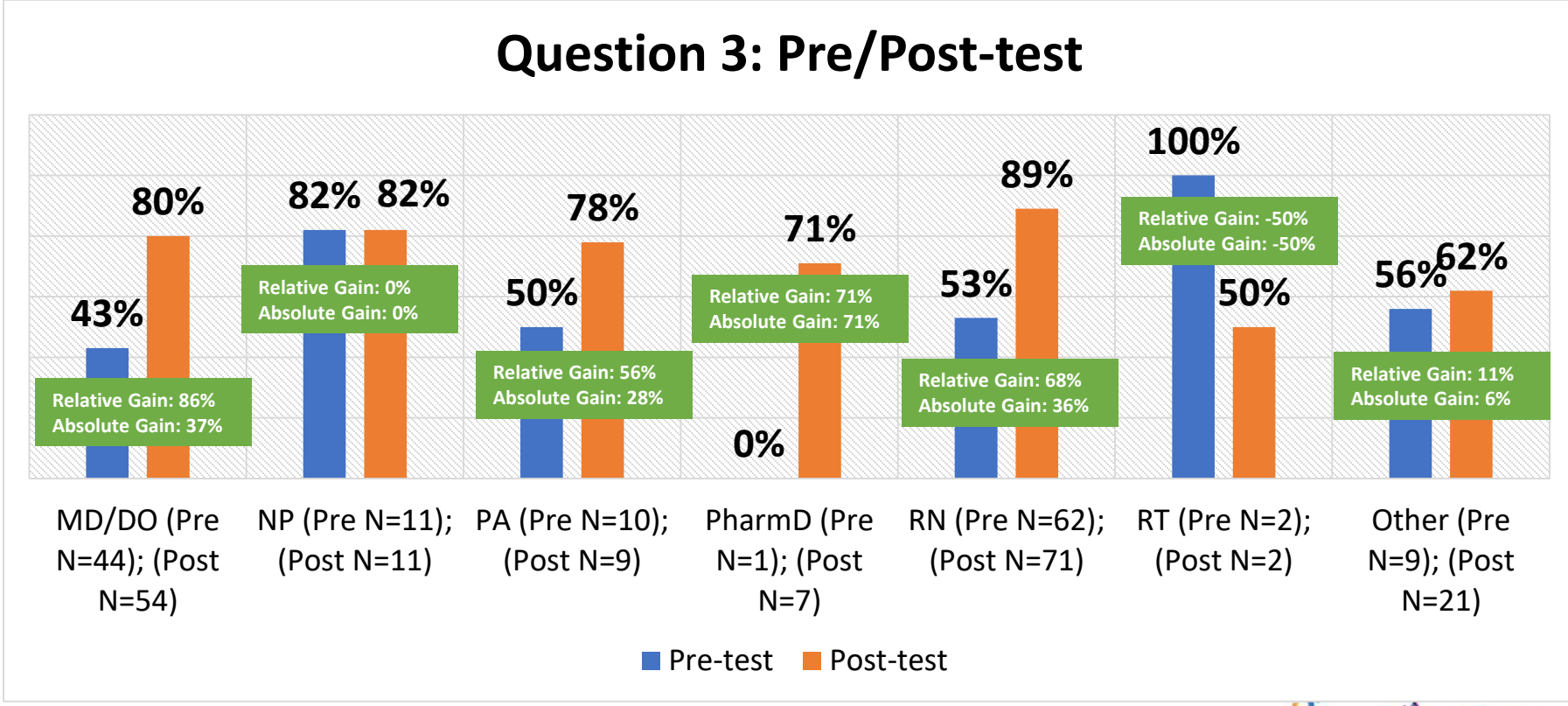
[Live Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: Question 3

Learning Objective: ***Review current and emerging therapeutics in the treatment of COPD***

Question 3: Which of these has been proven to reduce exacerbations of COPD?

a. Regular use of short-acting beta agonist (e.g. albuterol)
b. Pneumococcal vaccination
c. Smoking cessation for 6 months
d. Regular use of long-acting bronchodilator (e.g. tiotropium)



Average Knowledge Gain (Question 3): 33%

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

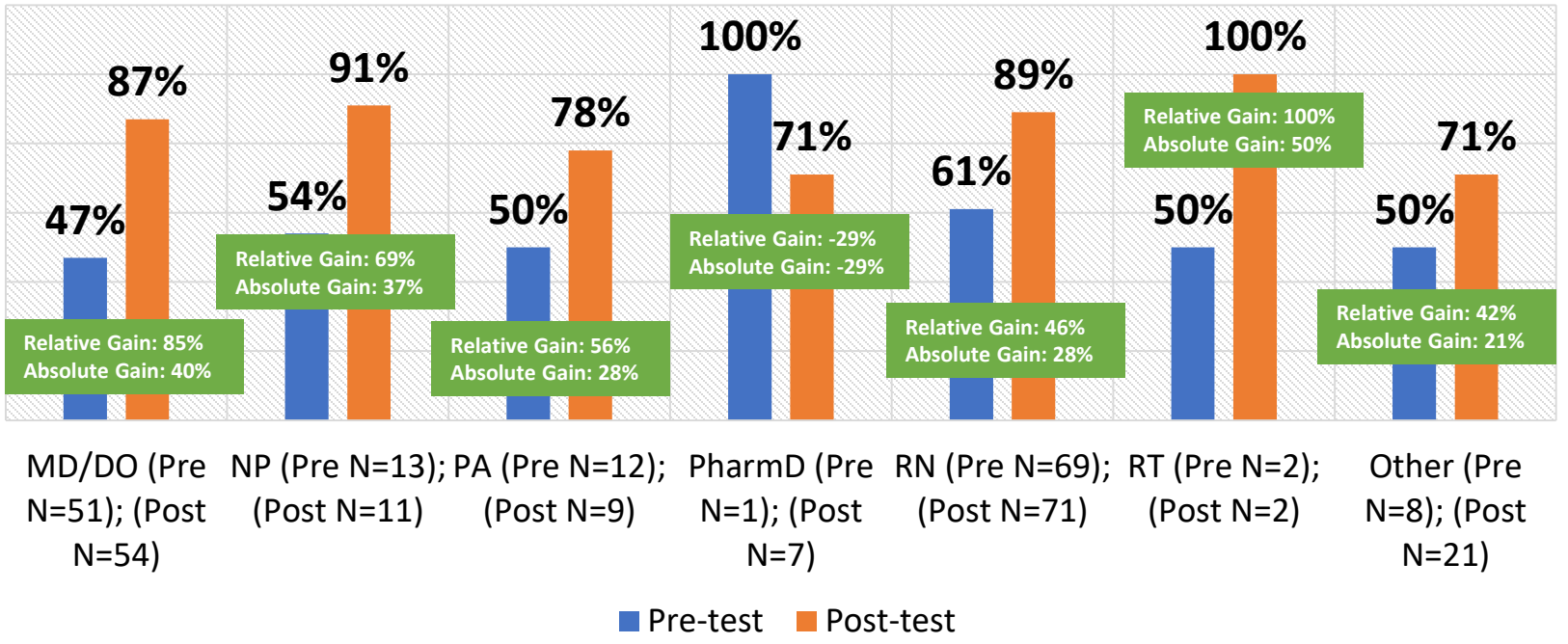
Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: Question 4

Learning Objective: ***Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence***

Question 4: A 60-year-old man has been admitted to the hospital for a COPD exacerbation. Following discharge, which of the following measures has been shown to improve his survival (mortality)?

a. Add a LABA/ICS to his regimen
b. Add a PDE-4 inhibitor to his regimen
c. Begin an early program and pulmonary rehabilitation
d. Prolonged course of oral corticosteroid

Average Knowledge Gain (Question 4): 42%



Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

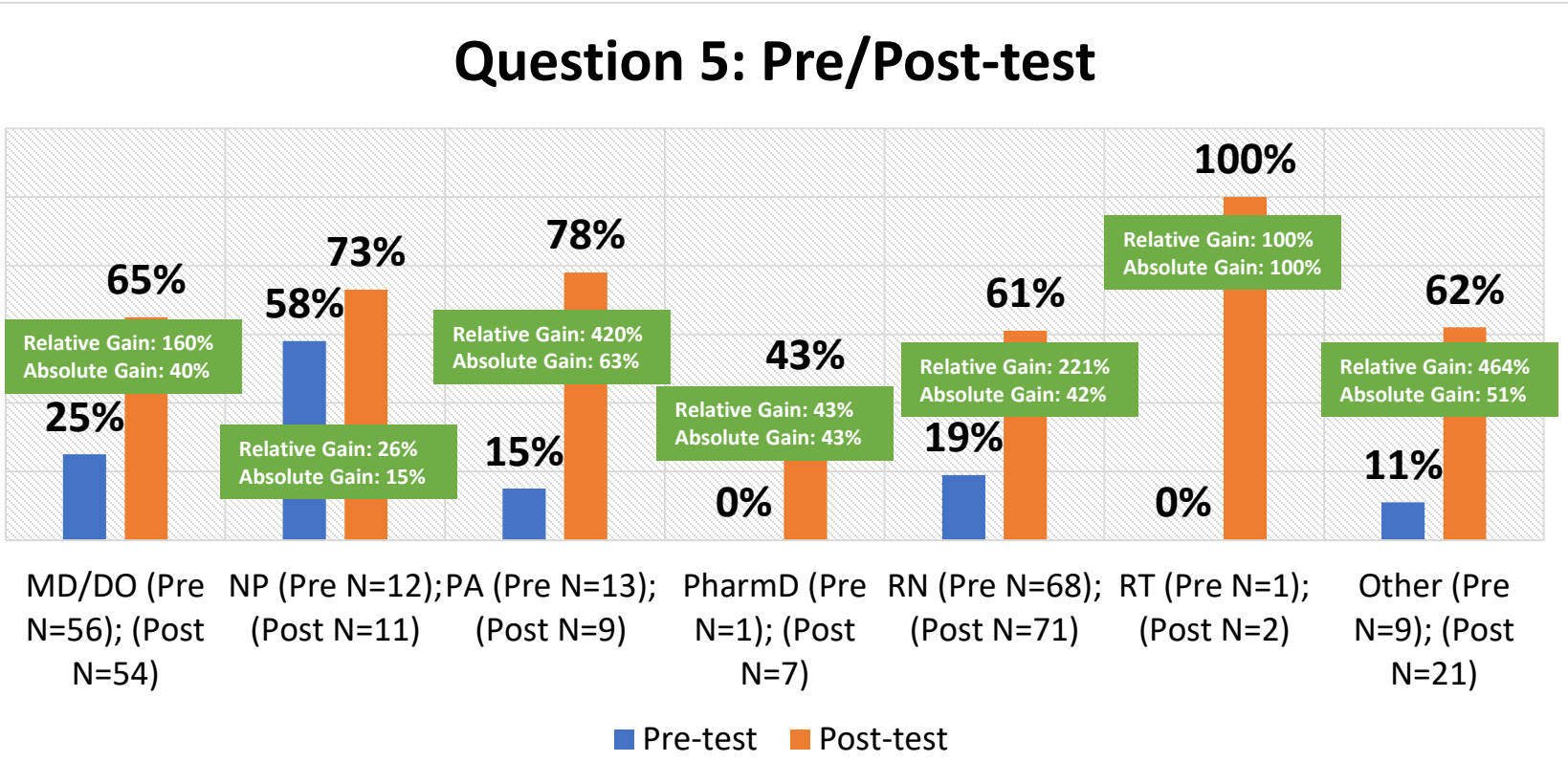
Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: Question 5

Learning Objective: ***Discuss best practices approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

Question 5: A 55 year old obese man (BMI 35 kg/m2) is smoking 1 pack of cigarettes a day. He admits to chronic daily cough and sputum production. He is GOLD stage II COPD and has previous myocardial infarction. Which of the following puts the patient at most risk for recurrent exacerbations?

a. Obesity
b. Chronic daily cough and sputum
c. Emphysema on his CT scan
d. His history of coronary artery disease

Average Knowledge Gain (Question 5): 283%



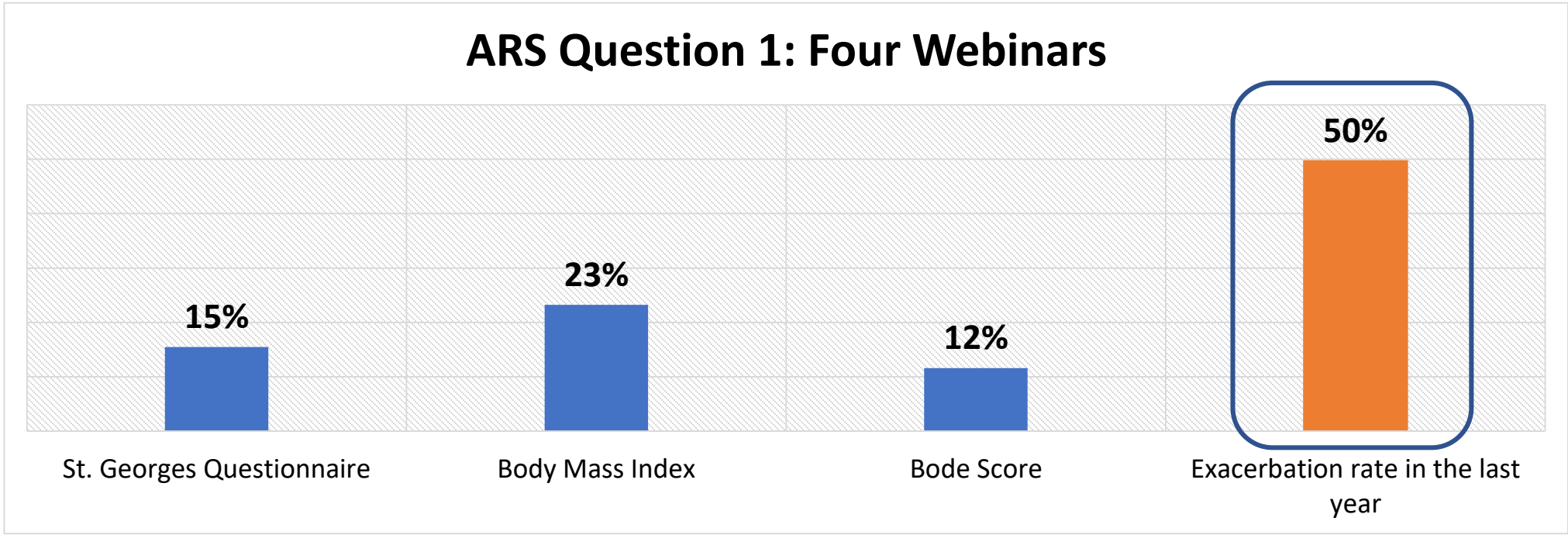
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 3 Outcomes (Knowledge): Live Webinar Sessions: ARS Question 1

Learning Objective: ***Discuss best practices approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

ARS Question 1: For many years, staging COPD severity relied on lung function measurements such as the FEV1. A new GOLD COPD staging assessment added exercise capacity using the modified Medical Research Council score or COPD assessment test (CAT score) to the assessment. What additional measure is needed to stage COPD using new GOLD criteria?



N=155

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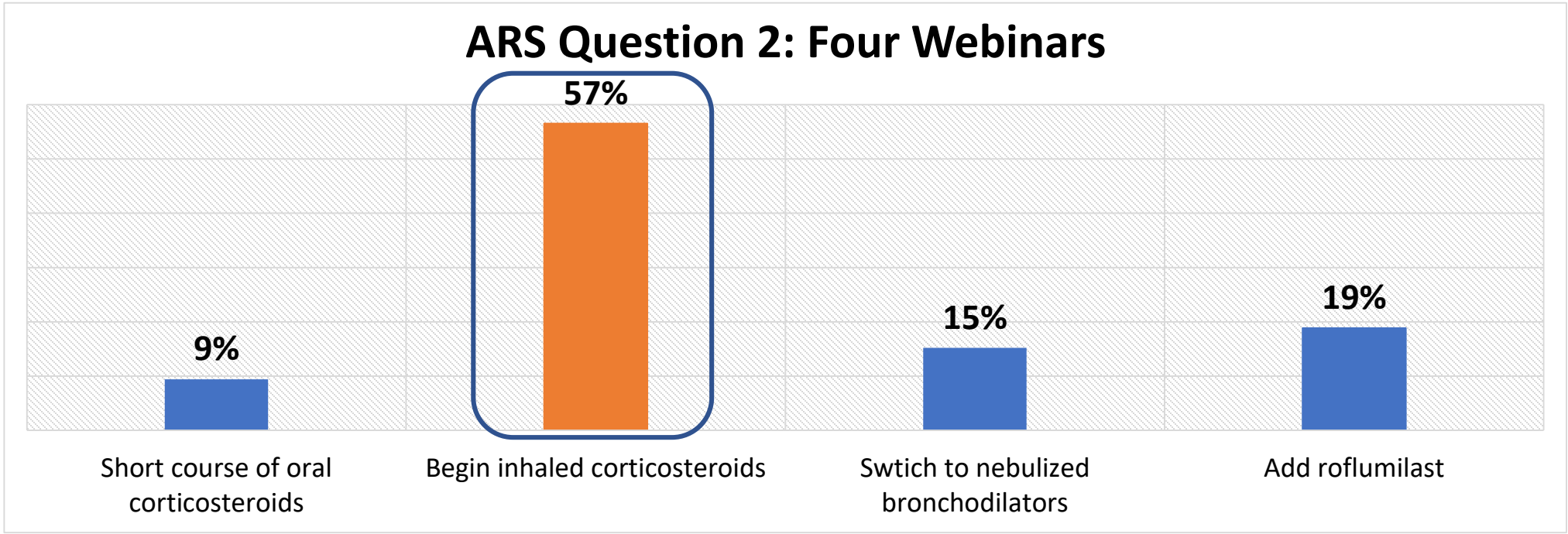
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: ARS Question 2

Learning Objective: ***Discuss best practices approaches for early diagnosis and management of COPD to prevent and reduce exacerbations***

ARS Question 2: 60-year-old female executive, has been having increasing difficulty with her symptoms of COPD and has an increased frequency of exacerbations (2 exacerbations within the past 6 months). She has advanced COPD and has been using a LABA/LAMA. What additional therapy is suggested in the GOLD Guidelines for this patient?



N=138

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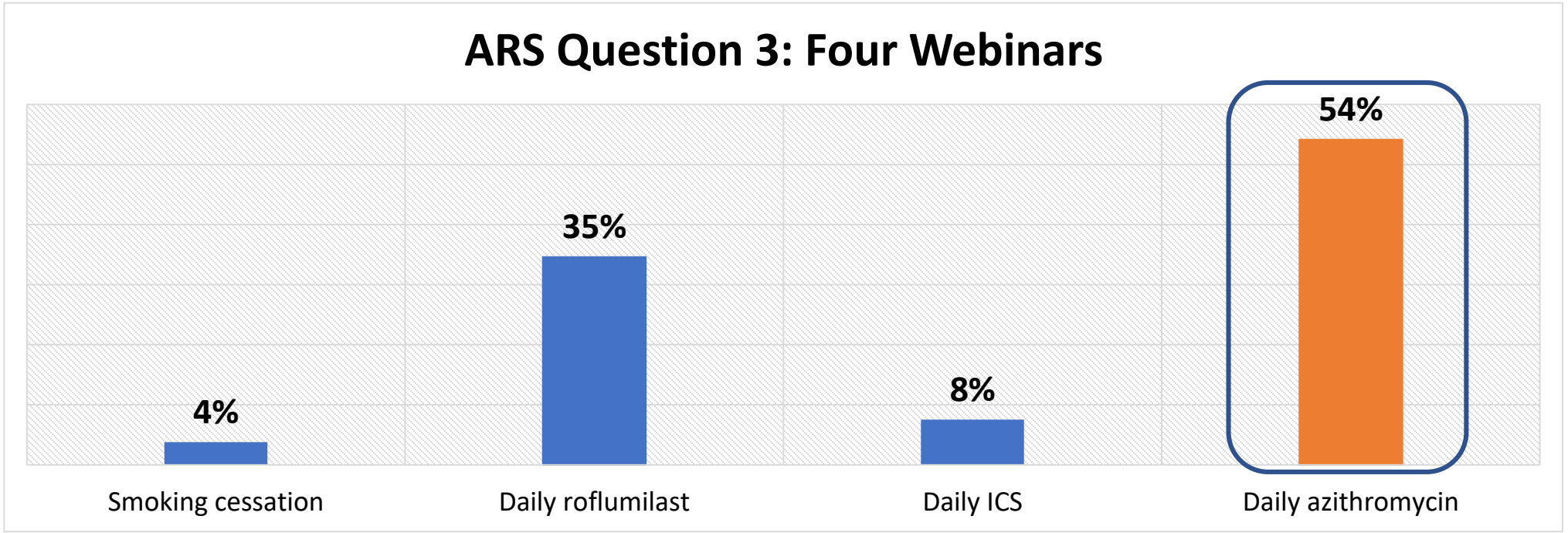
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Level 3&4 Outcomes (Knowledge/Competence): Live Webinar Sessions: ARS Question 3

Learning Objective: ***Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence***

ARS Question 3: 65 year old man from East Texas with multiple visits to physician for flare ups of breathing problems including frequent prednisone and antibiotics about every 2 months. He continues to smoke 1 ppd and coughs up several tablespoons of sputum every day. He has been taking LAMA/LABA for more than a year. His FEV1 is 43%. His eosinophil count off prednisone is 400 cells/µl. Which of the following are NOT indicated?



N=133

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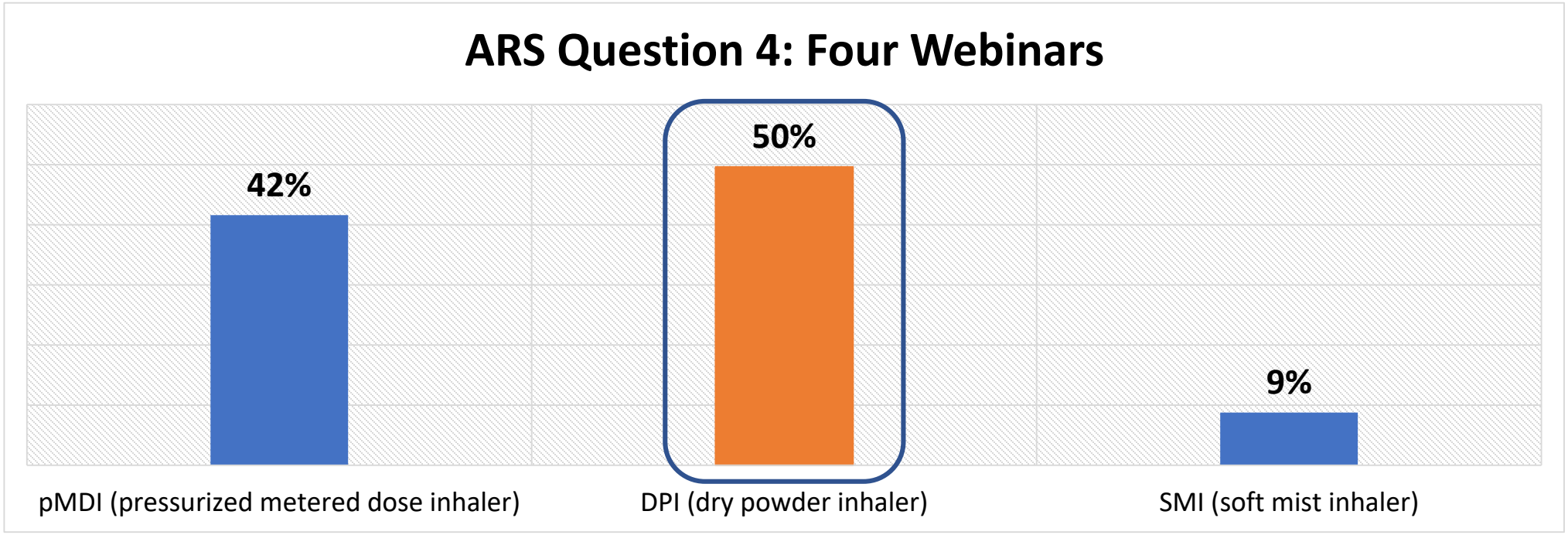
Level 3 Outcomes (Knowledge): Live Webinar Sessions: ARS Question 4

Learning Objective: ***Describe patient-centered strategies for creating personalized treatment and management plans for COPD to improve patient adherence***

ARS Question 4: Which of the following inhaler types has the most inspiratory flow resistance?



N=137

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Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

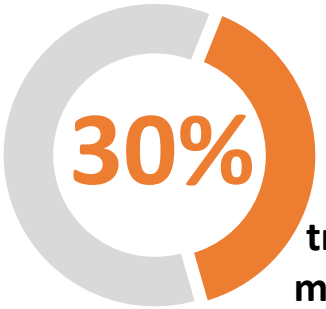
Level 4 Outcomes (Competence): Live Webinar Sessions

An analysis of open-ended comments demonstrates the following changes learners intend to make:

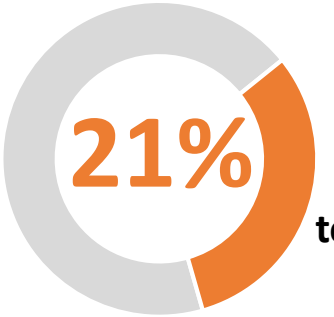
92%

N=177

Learners intend to make changes to practice as a result of the activity

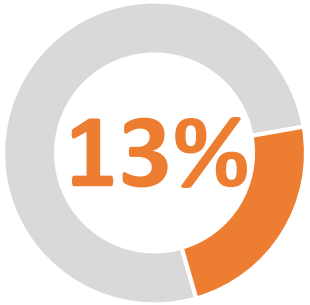


Increase in overall knowledge including treatment and management of exacerbations

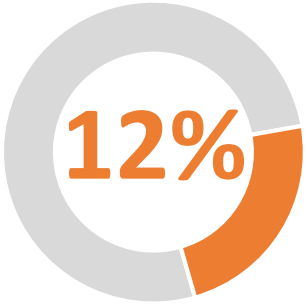


Patient education including inhaler technique and smoking cessation

Application of current guidelines for the treatment of COPD



Proper use of medications



Encourage pulmonary rehabilitation

Use of spirometry to establish diagnosis

N=151

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Program Evaluation: Live Webinar Sessions

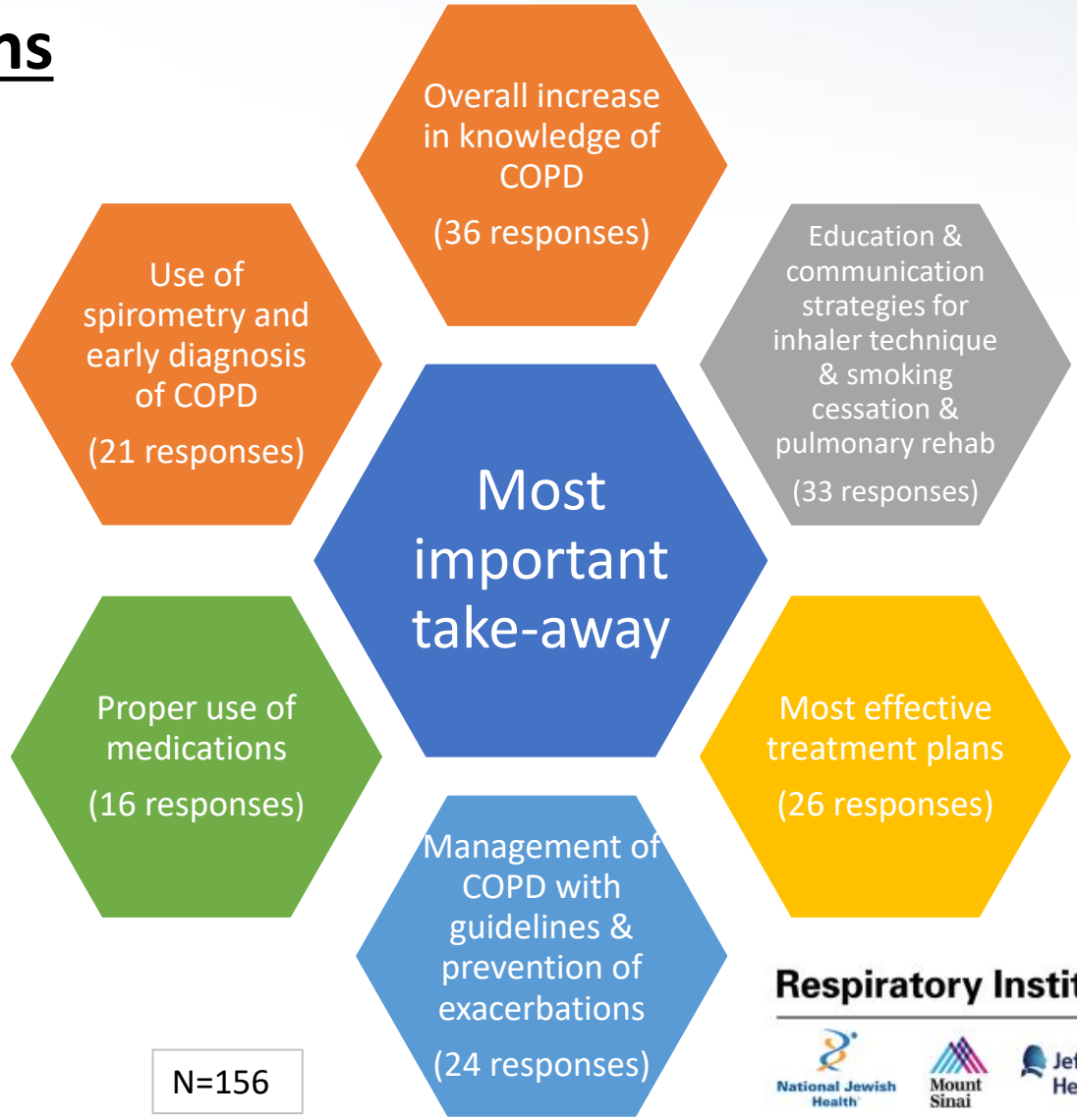
100%

- Material presented in an objective manner and free of commercial bias

100%

- Content presented was evidence-based and clinically relevant

N=177



N=156

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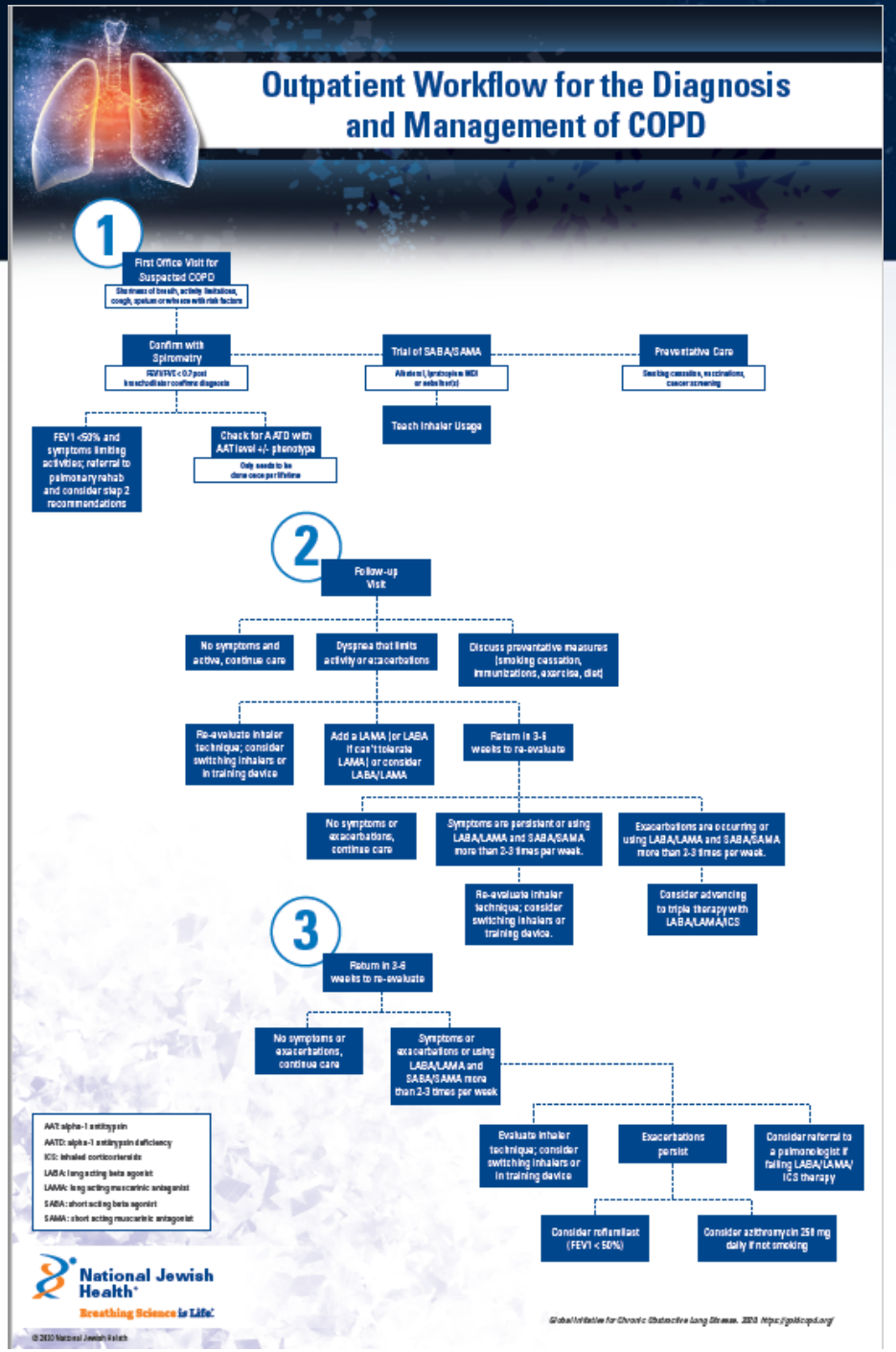
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

75% of learners indicated they plan to use the clinical reference aid in practice.

N=177



Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Program Evaluation: Live Webinar Sessions

What do you think is the primary reason why making a diagnosis of COPD is so difficult?	
Variability in patterns of clinical presentation	Ease of access to spirometry
Symptoms can overlap with asthma	Lack of understanding by primary care providers
Symptoms are subjective	Time constraints
Lack of referral to pulmonologists	Patient history and conversation
Poor understanding of the pathophysiology	Access to testing
Clinical limits and policies	Variability of clinical presentation
Proper diagnostic testing for proper diagnosis	Lack of understanding the data
Lack of attention to current guidelines for care	Obtaining a reliable patient history

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Program Evaluation: Live Webinar Sessions

Strategies for Overcoming Barriers

- Education for inhaler technique
- Early diagnosis
- Spirometry testing
- Motivational interviewing
- Management of exacerbations
- Appropriate interpretation of PFTs and how to guide therapy
- Help patients and families/caregivers understand the treatment plan
- Referral to pulmonary rehab

69%

N=177

Learners indicated the activity addressed strategies for overcoming barriers to optimal patient care

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Program Evaluation: Live Webinar Sessions

What topics would you like more information about in future educational activities?	
Chronic urticaria	Disaster medicine
COVID-19	NTM infections
Cardiology	Dermatology
Ventilator management	Pediatric emergencies
Chronic kidney disease	Lyme disease
Triple therapy	Renal disease
Diabetes	Immune deficiency
Atrial fibrillation	Severe asthma
Cancer	Pulmonary hypertensions
Sleep	Neurology

Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Program Evaluation: 45-day Follow-up Survey: Live Webinar Sessions

66%

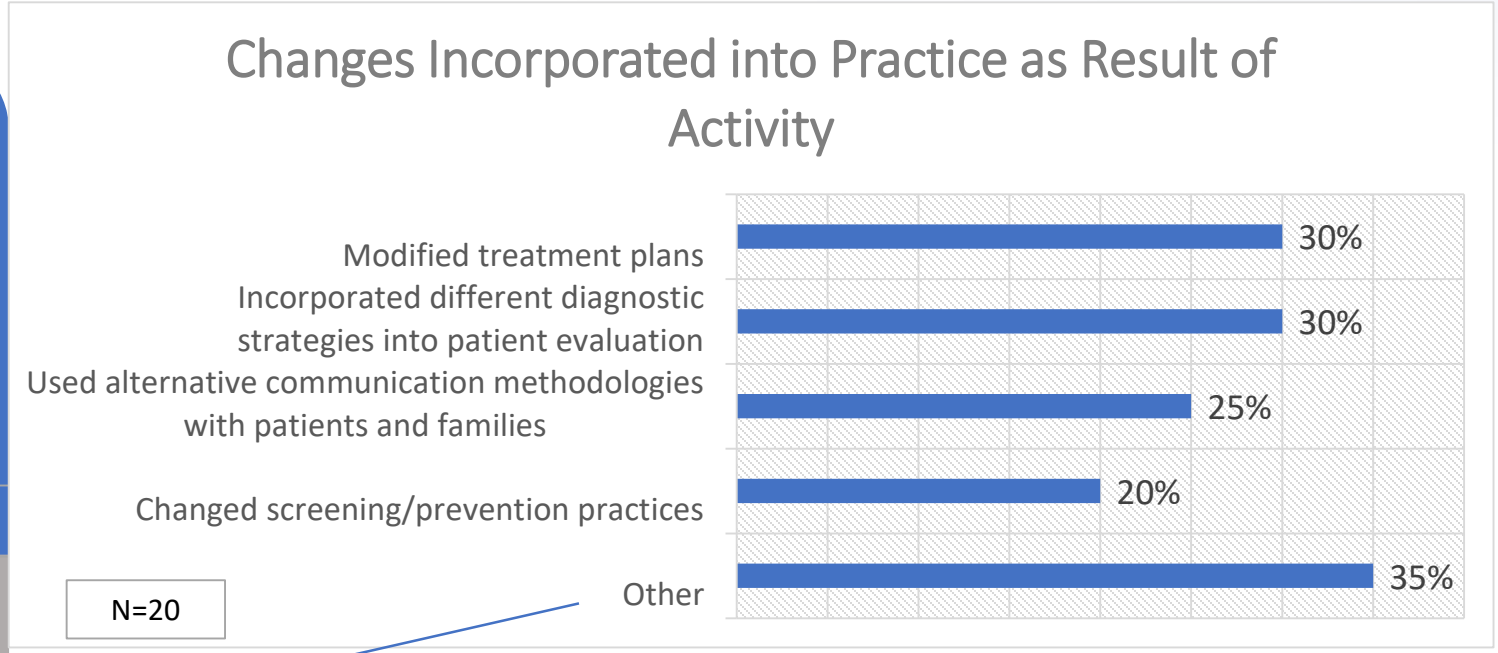
Respondents to the follow-up survey **N=32**

reported they have made or are still thinking about making changes to their practice

63%

Respondents to the follow-up survey **N=32**

reported the activity provided new ideas and information to use in practice.



Other Includes:

- Early airway management, preventing respiratory fatigue, triage screening tools, using CAT questionnaire
- Modified treatment plan
- Pulmonary rehabilitation program
- Care plan

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Program Evaluation: 45-day Follow-up Survey: Live Webinar Sessions

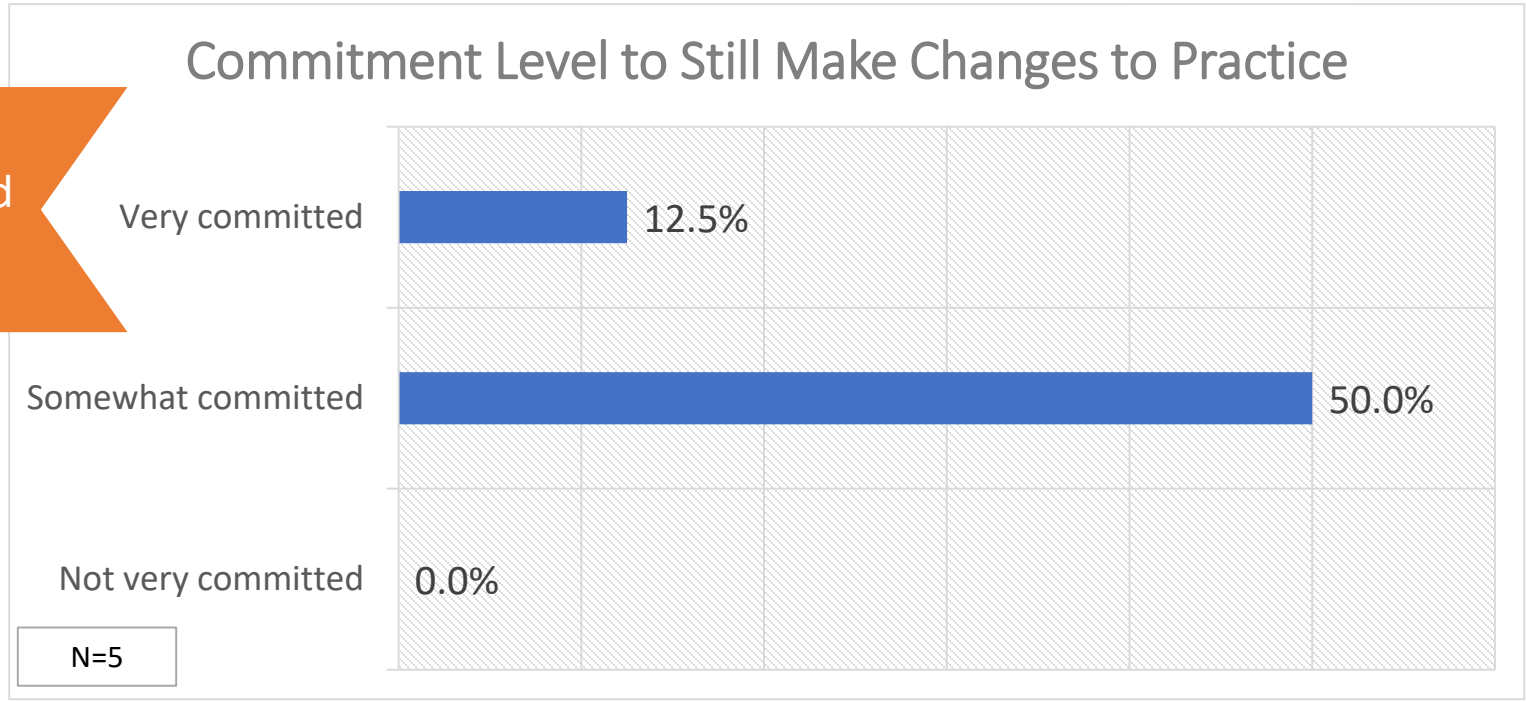
63%

Respondents to the follow-up survey

N=8

who have not made changes yet are still thinking of making changes

68 patients have benefited from this information



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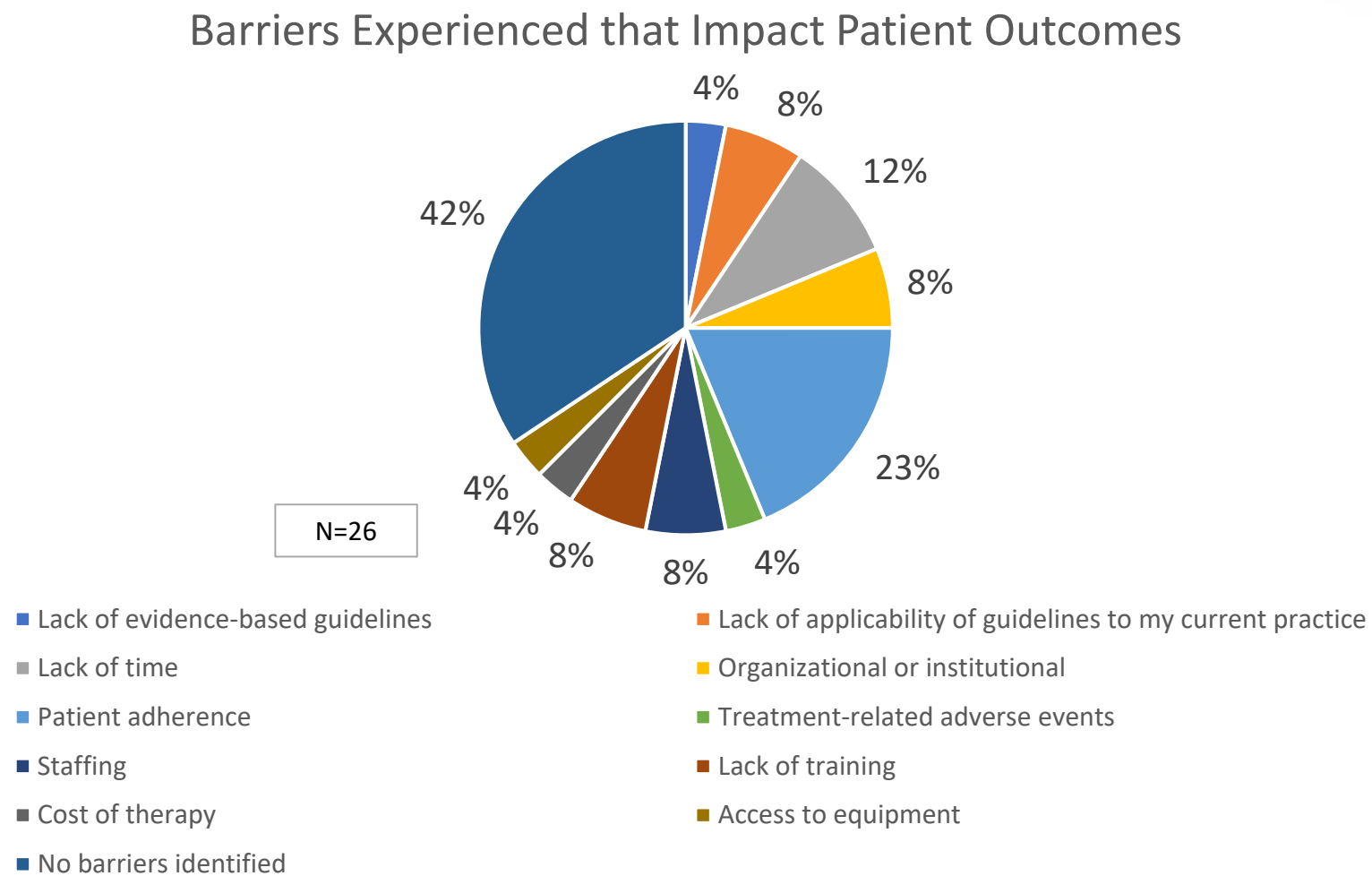
Challenging Cases in COPD: Early Diagnosis, Management and Exacerbation Prevention

[Live Final Outcomes]

Program Evaluation: 45-day Follow-up Survey: Live Webinar Sessions

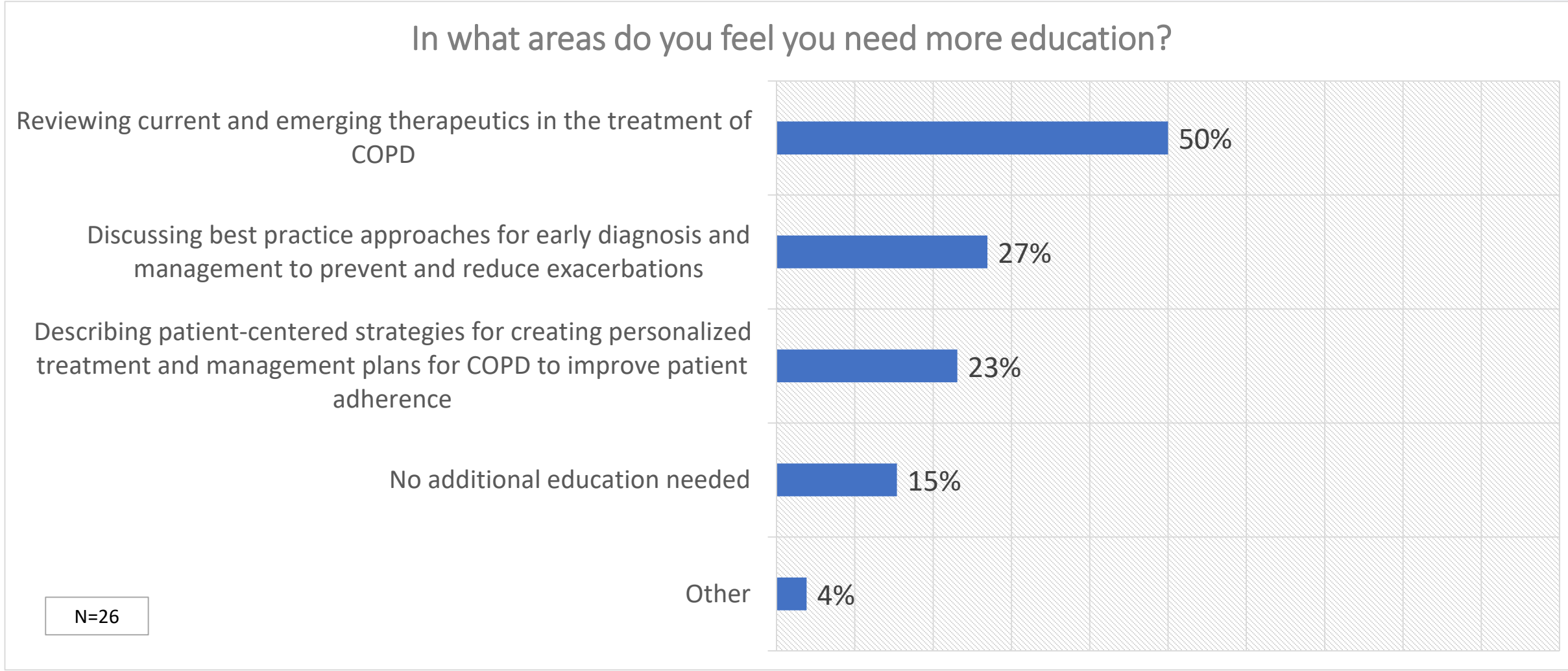


42%

N=26

Learners indicated the activity provided information, education, tools, or resources to address barriers.

Program Evaluation: 45-day Follow-up Survey: Live Webinar Sessions



Accreditation

NJH is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The NJH Office of Professional Education produced and accredited this program and adhered to the updated ACCME guidelines.

Online Enduring

NJH designates this enduring material for a maximum of 1.0 *AMA PRA Category 1 Credit*™.
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Live Webinar Series

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