

**COPD:** Optimizing Care in the  
**CAPTURE Study**

# COPD: Optimizing Care in the CAPTURE Study

## Final Outcomes Summary

# COPD: Optimizing Care in the CAPTURE Study

39192501	COPD: Optimizing Care in the CAPTURE Study		
<p><b>Objectives:</b> 1. Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD. 2. Select pharmacological and non-pharmacological therapies for patients with COPD in accordance with updated clinical practice guidelines. 3. Review proper inhaler technique, assessment of patients' technique, and strategies to improve patient adherence. 4. Appraise the use of evidence-based strategies for effective communication in interactions with patients with COPD to improve engagement, self-management, and coordination of care.</p>			
<p><b>Target Audience:</b> PCPs, NPs, PAs, RNs and MAs enrolled in five Practice-Based Research Networks participating in a NIH-funded study to validate a new COPD assessment tool.</p>		<p><b>Anticipated Reach:</b> 550-715</p>	<p><b>Modality/# Activities:</b> Multiple live educational sessions; four online enduring modules</p>
<p><b>Program Locations (Live):</b> Duke clinics, OHSU clinics, Atrium clinics, LANet clinics, and High Plains (CO) clinics, University of Illinois Chicago (UIC)</p>		<p><b>Dates (Live Activity):</b> September 2018 – January 2020</p>	<p><b>Relevant Links (Online):</b> <a href="https://capture-copd.njhealtheducation.org/">https://capture-copd.njhealtheducation.org/</a></p>
<p><b>Outcomes Levels:</b> Moore's Levels 1-4</p>	<p><b>Outcomes Planning:</b> Outcomes will be measured via participation totals, specialty, designation, pre-test, post-test, interactive polling questions, and evaluations. The metrics will demonstrate participation, satisfaction, learning, engagement and change in knowledge and competency to achieve Moore's Level 4 outcomes.</p>		
<p><b>Summary:</b> This educational initiative consists of a live and online program designed to support basic COPD education in diagnosis, management and treatment for a group of 110 primary care sites that are part of six Practice-Based Research Networks (PBRNs) and currently enrolled in an NIH-funded study to validate a new COPD assessment tool, CAPTURE. The live portion of this program consists of multiple live educational sessions within six healthcare networks featuring Principal Investigators leading a key points discussion via phone to answer questions as providers experience the first module of online education as a group. The online program featured multi-media presentations in four modules with synchronized lecture and slides to address key points of practice and mirror the live education.</p>			

# COPD: Optimizing Care in the CAPTURE Study

## Background – Final Report

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This live and online educational initiative supports basic COPD education in diagnosis, management, and treatment for a group of 110 primary care sites that are part of six Practice-Based Research Networks (PBRNs) and currently enrolled in an NIH-funded study to validate a new COPD assessment tool, CAPTURE.

The online program also features the expert speakers, who lead multi-media presentations in four (4) modules with synchronized lecture and slides to address key points of practice and mirror the live education.

The live interactive educational sessions within six healthcare networks feature Principal Investigators leading a key points discussion via phone to answer questions as providers experience the first module of online education as a multi-disciplinary group. Clinic sites randomly selected as an alpha site receive an additional video on the CAPTURE tool as beta sites only receive the first module titled COPD101: Basic Diagnosis and Management.

# COPD: Optimizing Care in the CAPTURE Study

The core of this project is the CAPTURE COPD Study which is a 5-year, NIH funded study aimed to train clinical teams to better diagnose and treat COPD as well as evaluate the effectiveness of a new tool designed to better identify those at risk for COPD. The education created for the study is also publically available as accredited CME/CNE.

LIVE  
Study

- 110** primary care clinics will receive COPD101 in live team trainings
- 50% will be randomized to receive training on the CAPTURE tool
  - To date, 62 teams have been trained (30 control, 32 treatment)

ONLINE  
Study

4 online modules were developed to supplement live trainings for a deeper dive into COPD content



COPD101: Basic Diagnosis and Management  
CME Credit: 1.0 CNE Credit: 1.2



COPD Diagnosis - By The Numbers  
CME Credit: 1.0 CNE Credit: 1.2



Optimizing COPD Management  
CME Credit: 1.0 CNE Credit: 1.2



COPD Patient-Centered Care - Adherence With Therapy  
CME Credit: 1.0 CNE Credit: 1.2

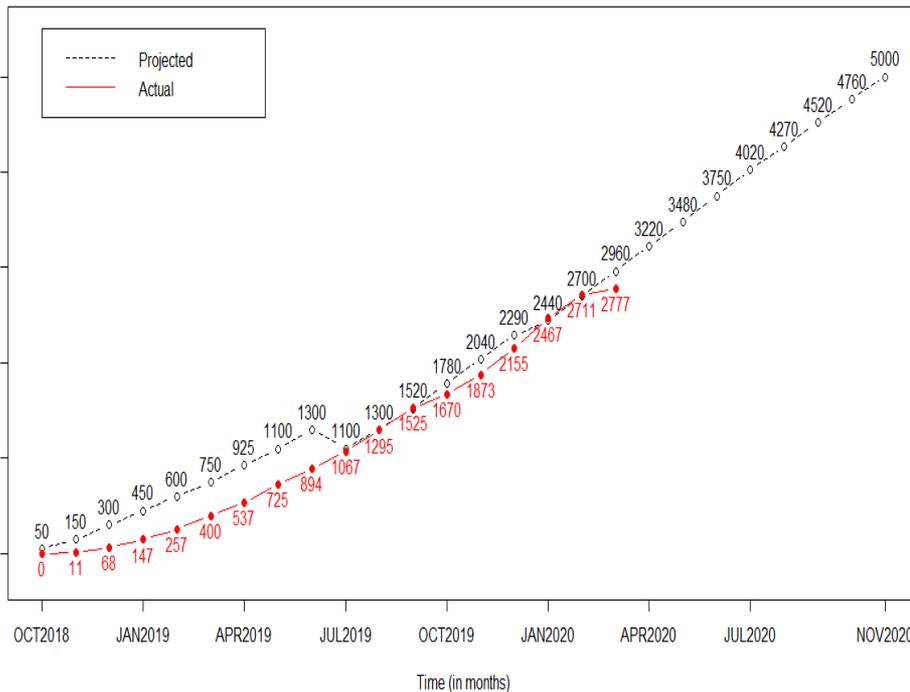
ONLINE  
Public

4 parallel online modules were made available publically for healthcare professionals involved in the diagnosis and treatment of COPD

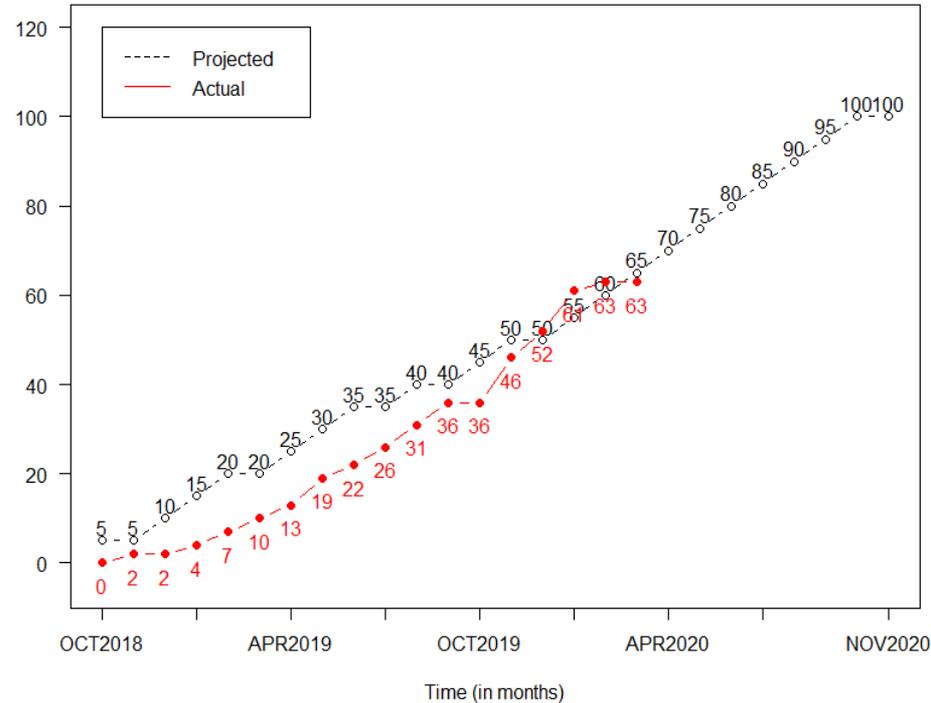
# COPD: Optimizing Care in the CAPTURE Study

## CAPTURE Study Recruitment Update:

Overall enrollment, subject level



Overall enrollment, practice level



*Per Dr. Barry Make, Principal Investigator, progress toward recruitment goals for the study is on track with live sessions anticipated to be completed by the end of 2020. Results will be shared after all data has been collected.*

## Learning Objectives – Final Report

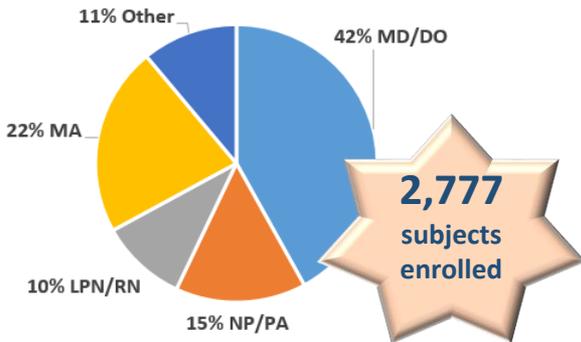
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1. Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.
2. Select pharmacological and non-pharmacological therapies for patients with COPD in accordance with updated clinical practice guidelines.
3. Review proper inhaler technique, assessment of patients' technique, and strategies to improve patient adherence.
4. Appraise the use of evidence-based strategies for effective communication in interactions with patients with COPD to improve engagement, self-management, and coordination of care.

# COPD: Optimizing Care in the CAPTURE Study

## Participation

**616** live participants  
(62 Primary Care Clinics)

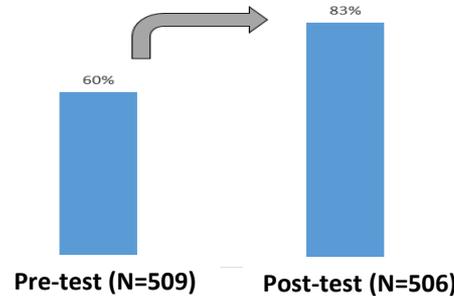


## Satisfaction

- ✓ **100%** of respondents indicated that the activity met the learning objectives
- ✓ **98%** of respondents indicated that the activity met educational needs

## Educational Impact

**38%** overall relative knowledge gain



### KNOWLEDGE BY LEARNING OBJECTIVE:

Apply updated clinical practice guidelines to the diagnosis & management of patients with COPD

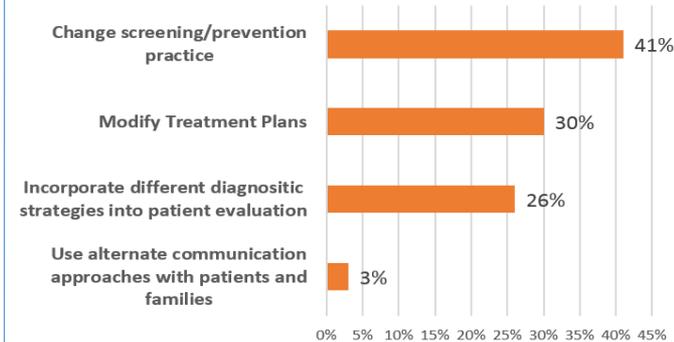
**33%**  
increase in knowledge from pre to post test

Select pharmacological & non-pharmacological therapies for patients with COPD

**72%**  
increase in knowledge from pre to post test

## Intent to Change

**97%** of learners report that they are somewhat to extremely likely to make changes to their practice based on what they learned



## Persistent Learning Needs

**Recommendations for future education include:**

- Medication side effects
- Smoking cessation strategy
- Spirometry interpretation
- Risks related to agricultural occupation/living
- Hands on training with different devices for COPD treatment



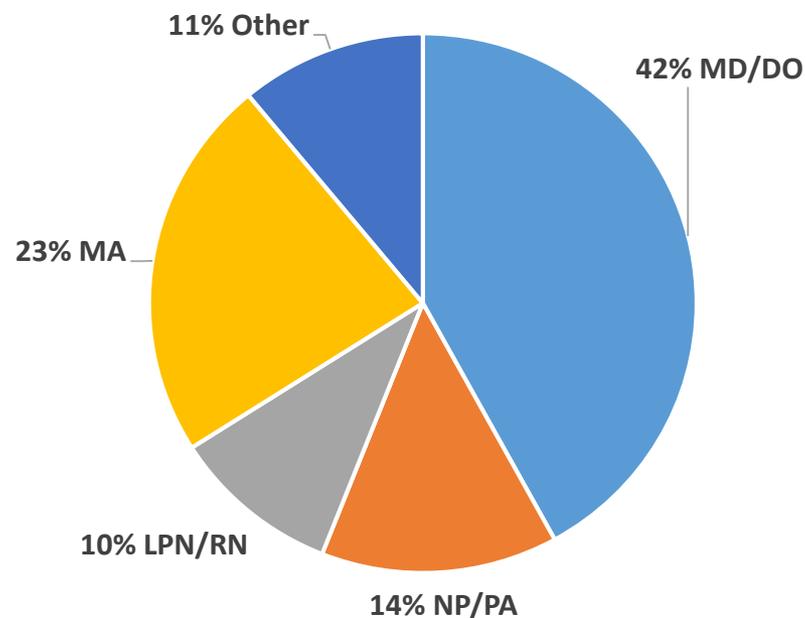
**COPD:** Optimizing Care in the  
**CAPTURE Study**

Live Sessions  
COPD101: Basic Diagnosis and  
Management

# COPD: Optimizing Care in the CAPTURE Study

## Final Report – Live Sessions Level 1 Outcomes: Participation

Designation	# of Participants
MD/DO	257
NP	52
PA	37
RN/LPN	61
MA	139
Student	12
Other	58
<b>Total (62 live sessions)</b>	<b>616</b>

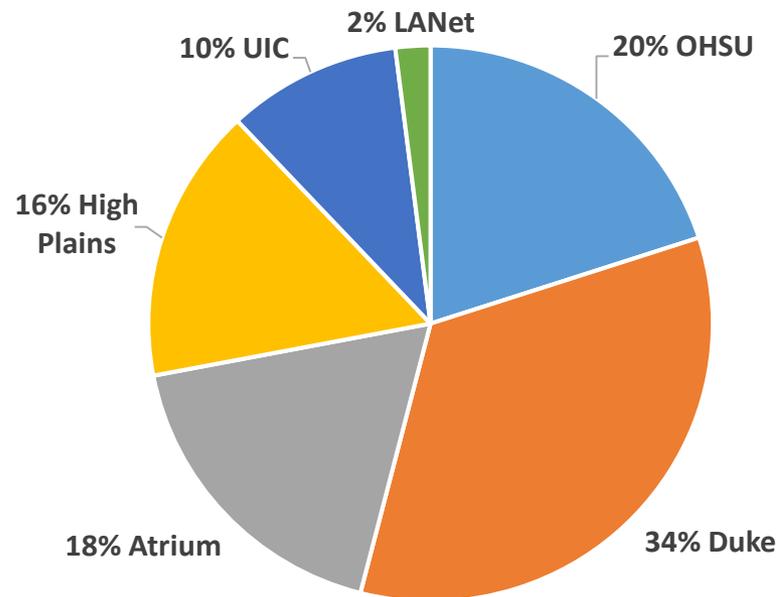


# COPD: Optimizing Care in the CAPTURE Study

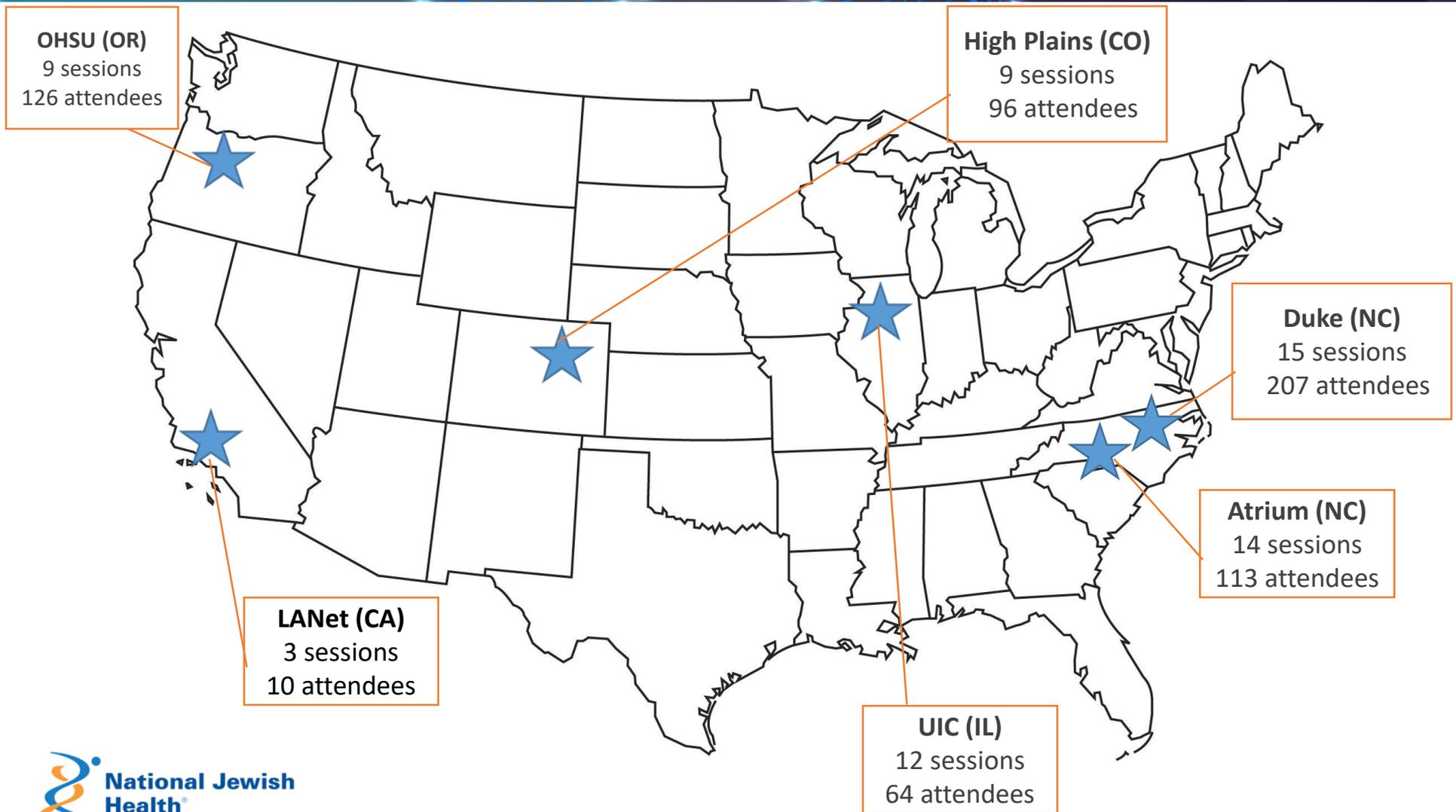
## Final Report – Live Sessions

### Level 1 Outcomes: Participation by Practice-Based Research Network

Practice-Based Research Network (PBRN)	# of Participants
OHSU	126
Duke	207
Atrium	113
LANet	10
High Plains (CO)	96
University Illinois Chicago (UIC)	64
<b>Total (62 live sessions)</b>	<b>616</b>



# COPD: Optimizing Care in the CAPTURE Study

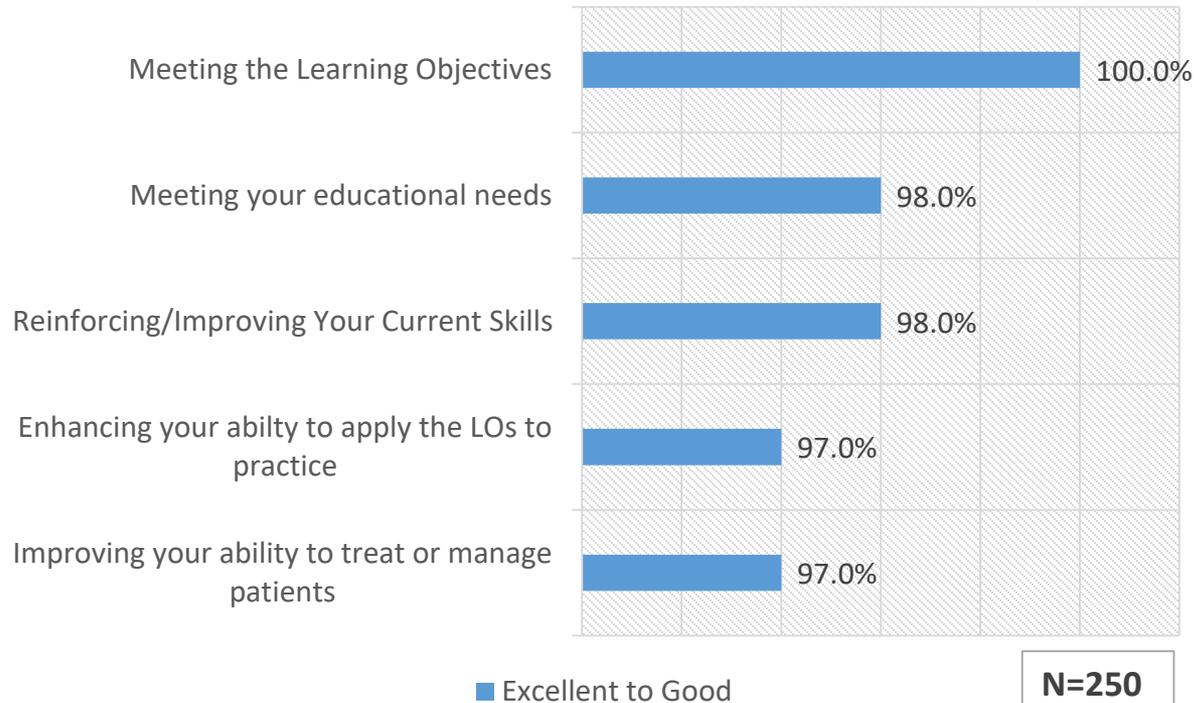


# COPD: Optimizing Care in the CAPTURE Study

## Final Report – Live Sessions Level 2 Outcomes: Learning & Satisfaction



Participants report the activity was “Excellent” to “Good” at:



### Evaluation

- ✓ 99% reported the material was presented without commercial bias
- ✓ 95% reported the activity addressed strategies for overcoming barriers to optimal patient care

## Final Report – Live Sessions

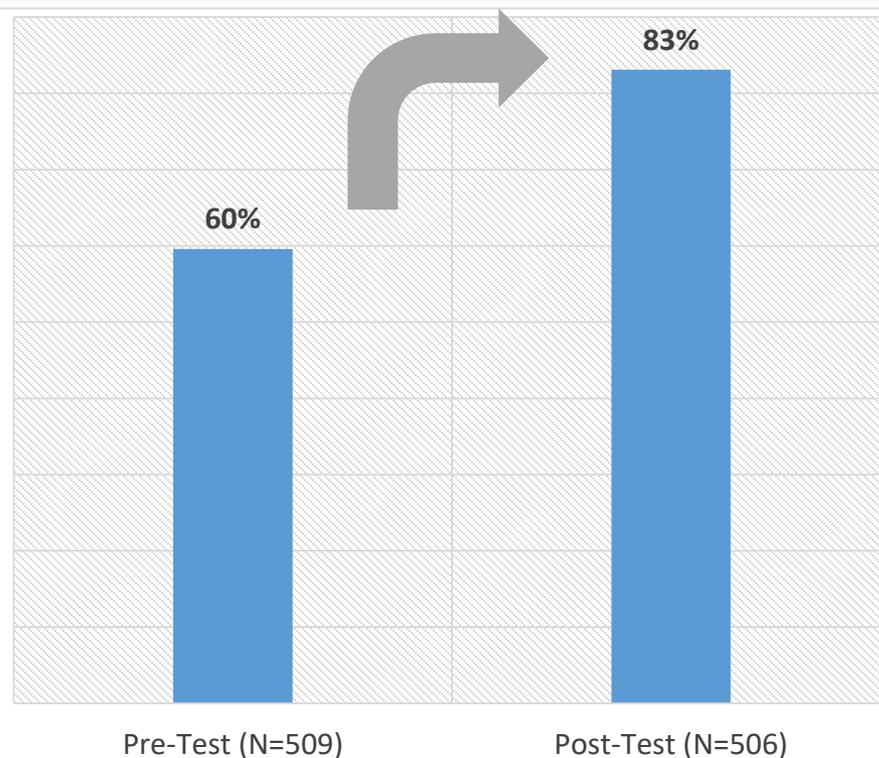
### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Aggregate Scores Across All Sites



**38%**

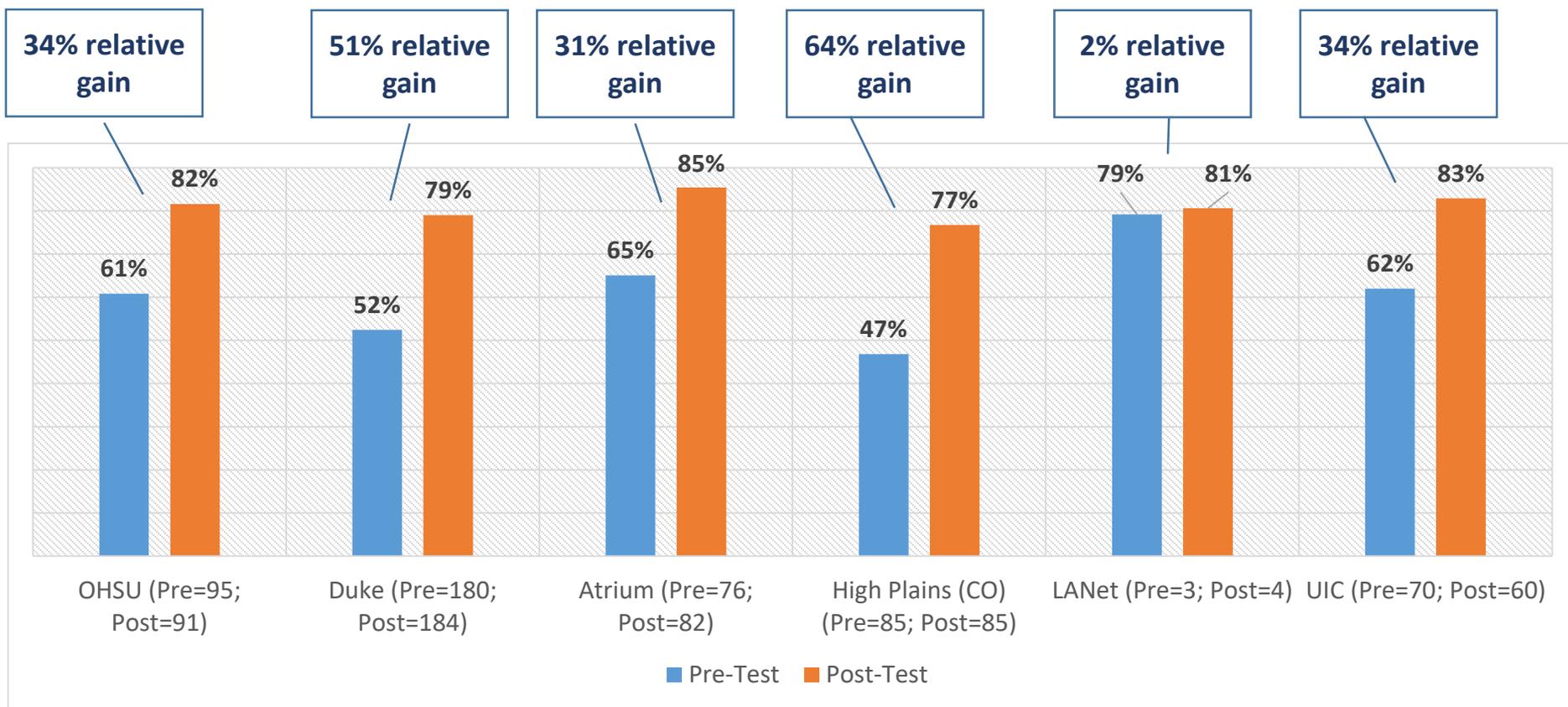
Overall relative increase from pre- to post activity

Level 3 and 4 outcomes were measured by comparing pre-and post-test answers. Attendees' responses to these questions demonstrated that participants gained knowledge as a result of the activity.



# COPD: Optimizing Care in the CAPTURE Study

## Final Report – Live Sessions Level 3 Outcomes: Knowledge



# COPD: Optimizing Care in the CAPTURE Study

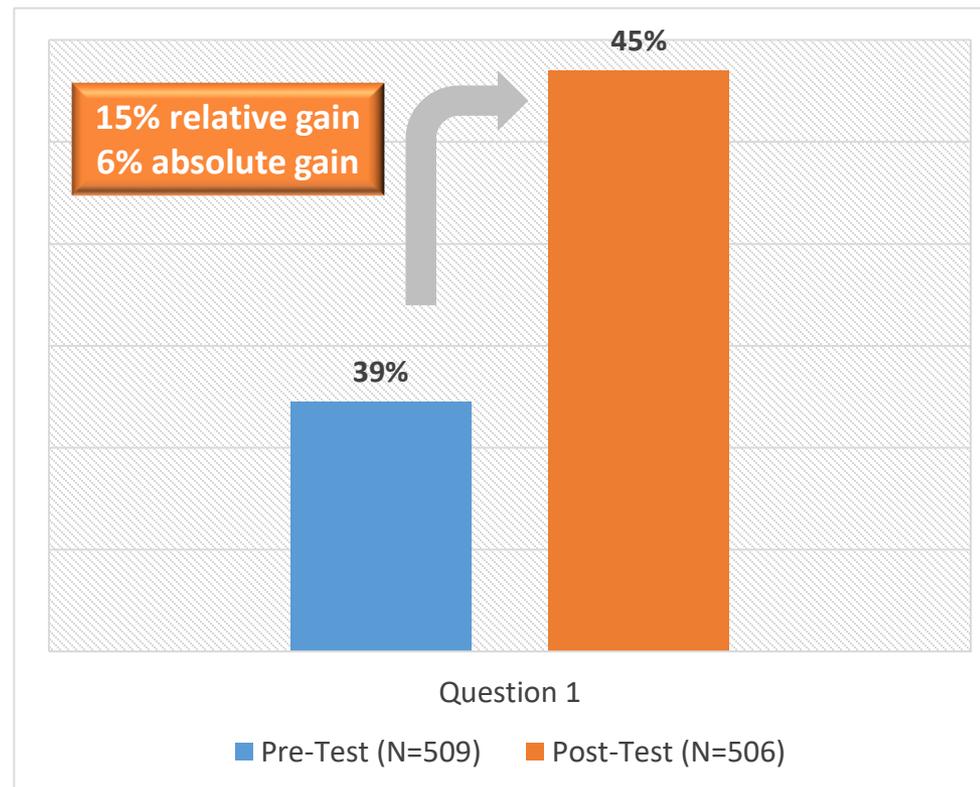
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 1 – Aggregate Score Across All Sites

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q1:** If the CAPTURE score is 2, 3, or 4 what factor strongly suggests need for further evaluation including spirometry?

- A. Frequent Bad Colds
- B. A peak flow less than 250 in women or 350 in men**
- C. A peak flow of 250 or higher in women or 350 or higher in men
- D. More than 20 pack year smoking history



# COPD: Optimizing Care in the CAPTURE Study

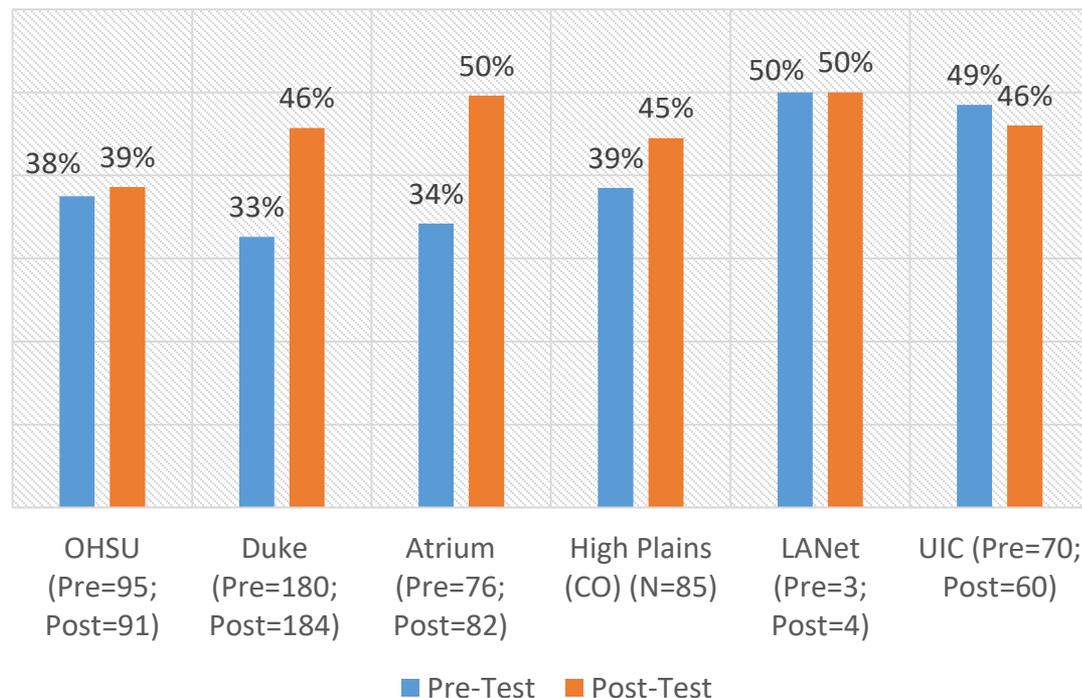
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 1 By PBRN

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q1:** If the CAPTURE score is 2, 3, or 4 what factor strongly suggests need for further evaluation including spirometry?

- A. Frequent Bad Colds
- B. A peak flow less than 250 in women or 350 in men**
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# COPD: Optimizing Care in the CAPTURE Study

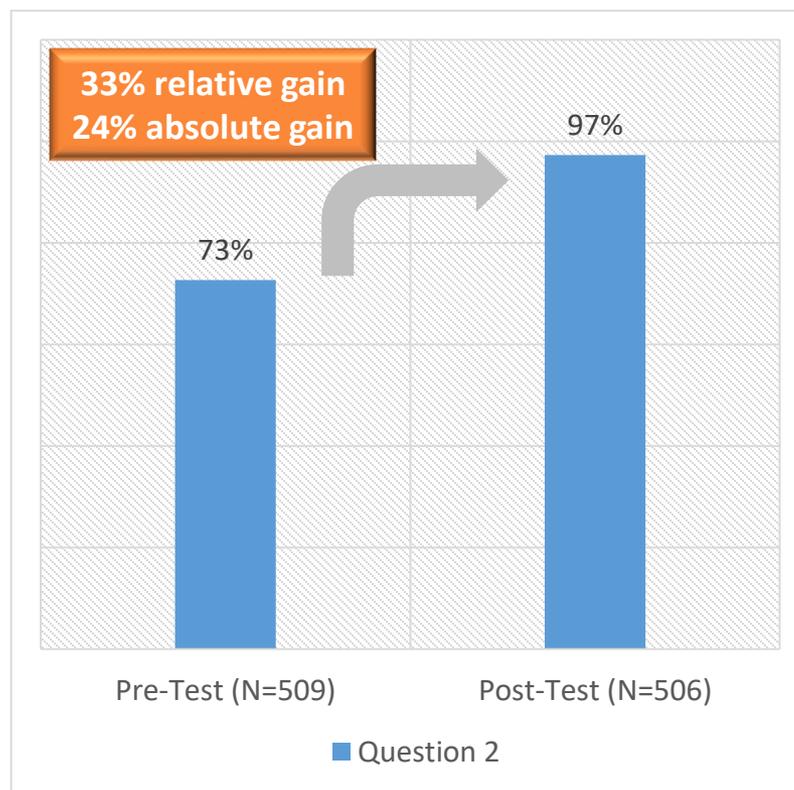
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 2 – Aggregate Score Across All Sites

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q2:** I make the diagnosis of COPD with confidence in my patients on the basis of:

- A. Chest imaging (chest CT scan and/or chest x-ray)
- B. Medical History
- C. Physical Examination
- D. Spirometry**



# COPD: Optimizing Care in the CAPTURE Study

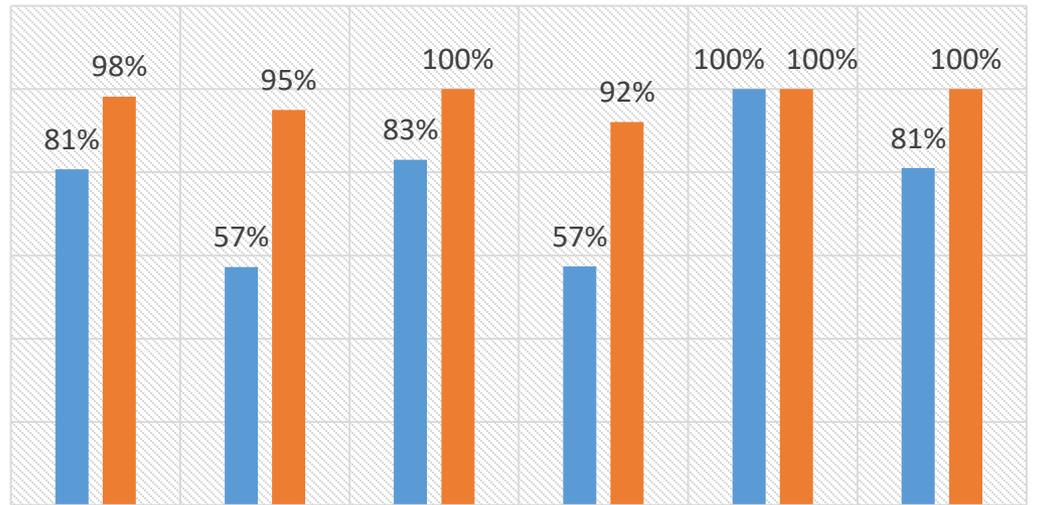
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 2 By PBRN

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q2: I make the diagnosis of COPD with confidence in my patients on the basis of:**

- A. Chest imaging (chest CT scan and/or chest x-ray)
- B. Medical History
- C. Physical Examination
- D. Spirometry**



OHSU (Pre=95; Post=91)    Duke (Pre=180; Post=184)    Atrium (Pre=76; Post=82)    High Plains (CO) (N=85)    LANet (Pre=3; Post=4)    UIC (Pre=70; Post=60)

■ Pre-Test    ■ Post-Test

# COPD: Optimizing Care in the CAPTURE Study

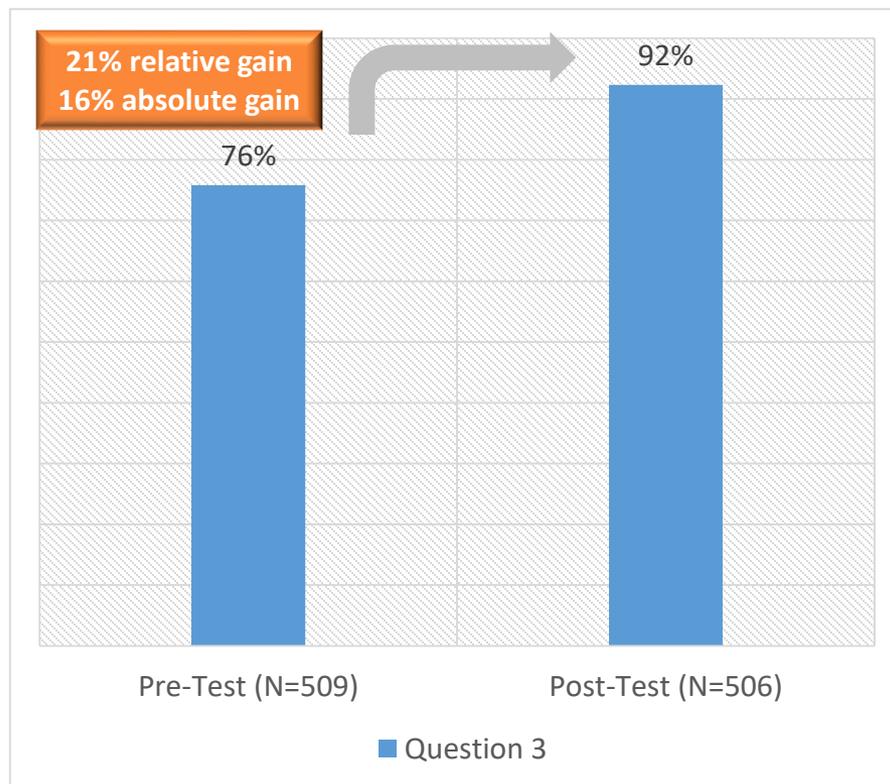
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 3 – Aggregate Score Across All Sites

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q3: The most important therapy for patients with COPD is:**

- A. Influenza Vaccination
- B. Smoking Cessation**
- C. Maintenance inhaled bronchodilators
- D. Oxygen



# COPD: Optimizing Care in the CAPTURE Study

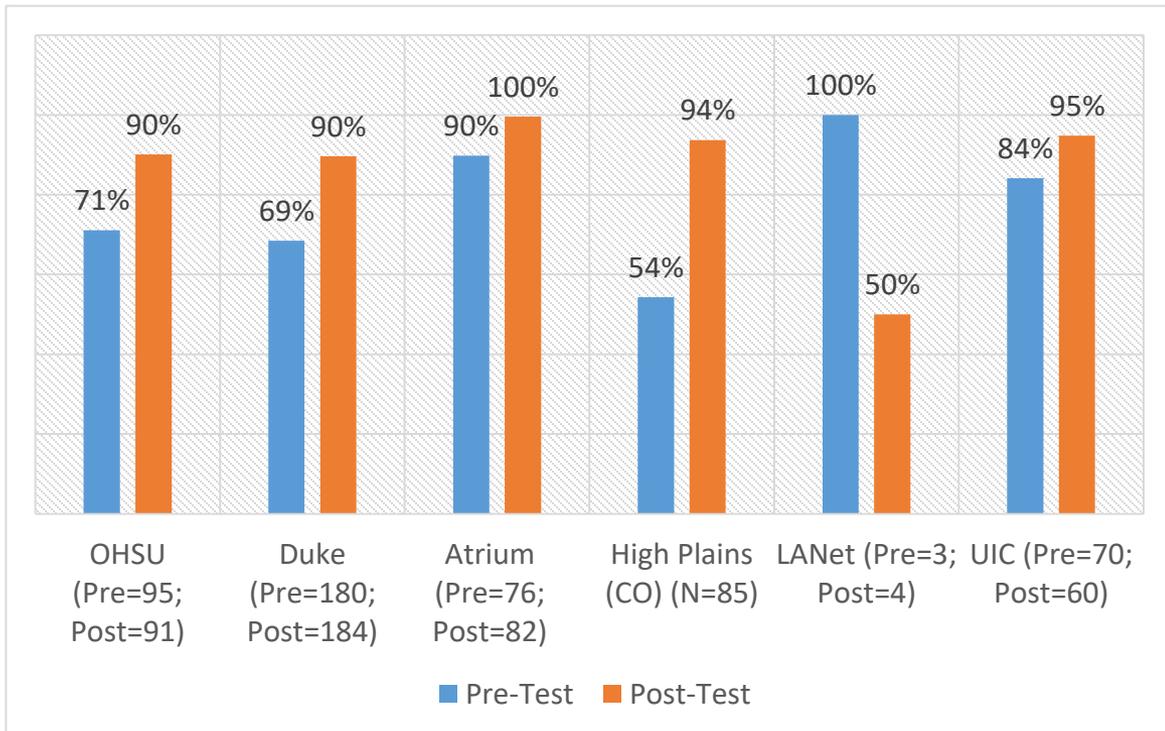
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 3 By PBRN

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

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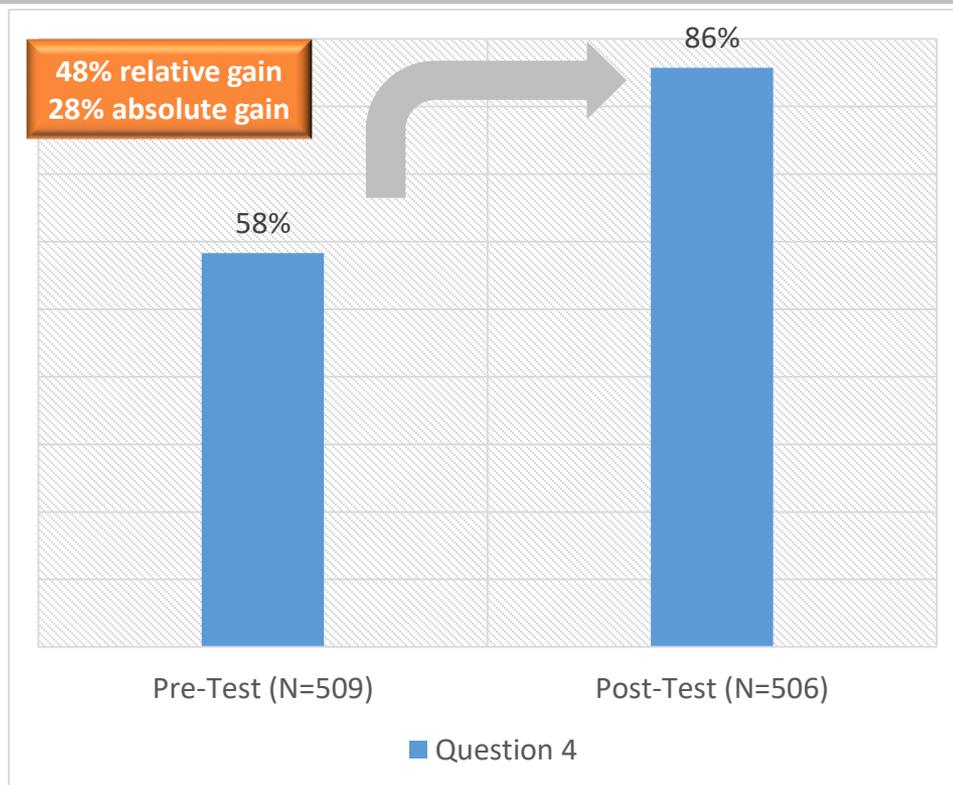
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 4 – Aggregate Score Across All Sites

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q4: Pulmonary rehabilitation is indicated in which patients:**

- A. FEV1 < 50% predicted
- B. FEV1 < 80% predicted
- C. **COPD patients who are symptomatic**
- D. Spirometry



# COPD: Optimizing Care in the CAPTURE Study

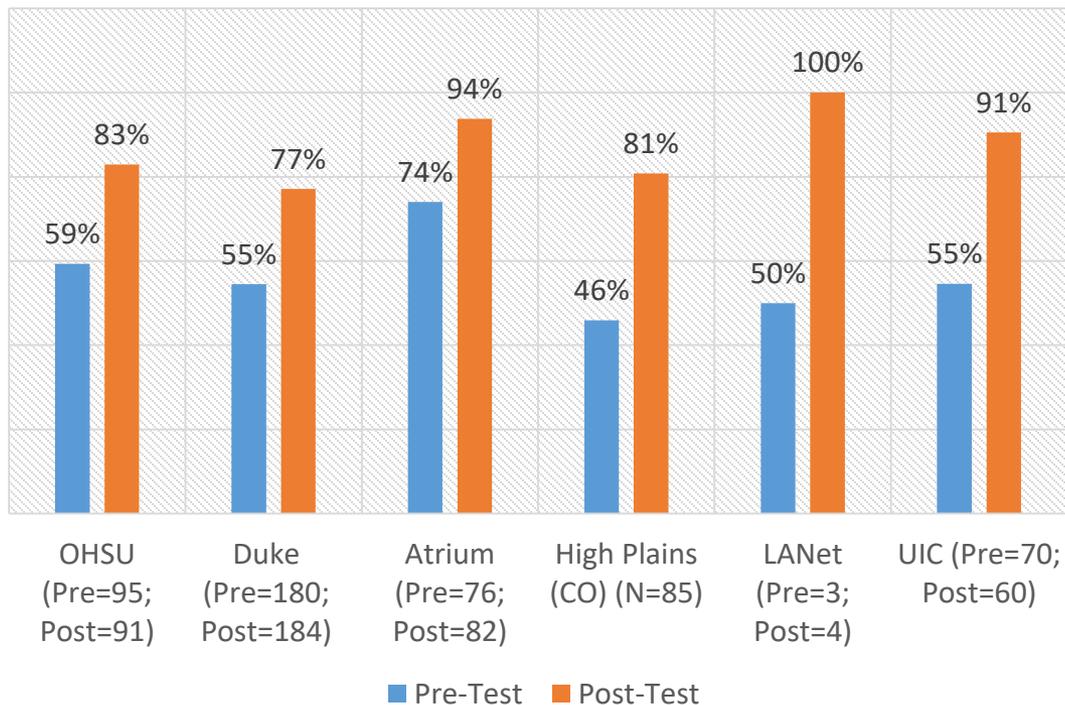
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 4 By PBRN

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q4: Pulmonary rehabilitation is indicated in which patients:**

- A. FEV1 < 50% predicted
- B. FEV1 < 80% predicted
- C. **COPD patients who are symptomatic**
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# COPD: Optimizing Care in the CAPTURE Study

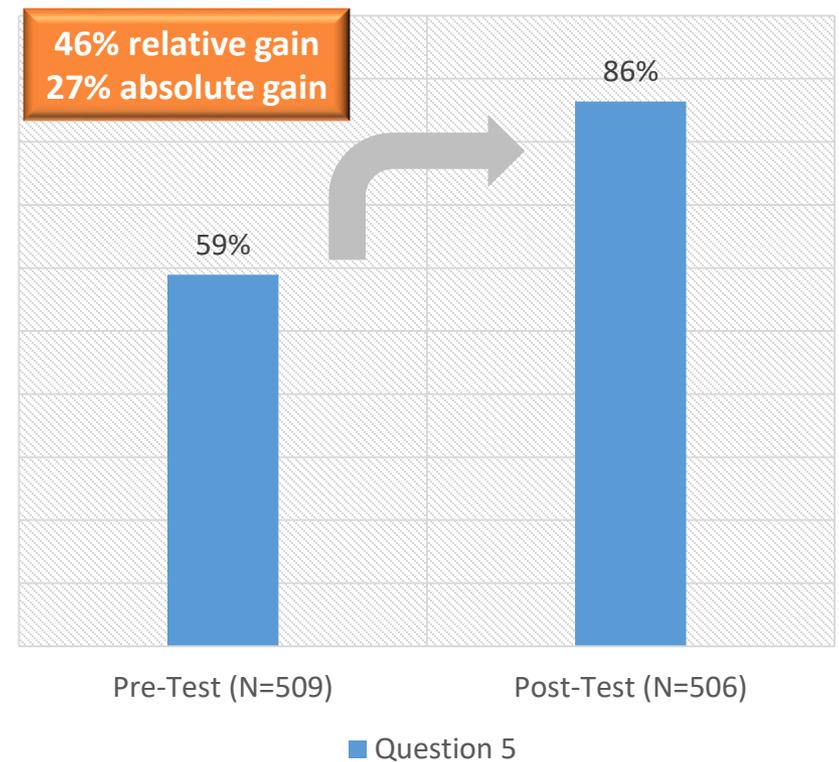
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 5 – Aggregate Score Across All Sites

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q5: COPD severity that best guides therapy is based on:**

- A. Spirometry
- B. History of COPD Exacerbations
- C. Shortness of breath
- D. **History of exacerbations and shortness of breath**



# COPD: Optimizing Care in the CAPTURE Study

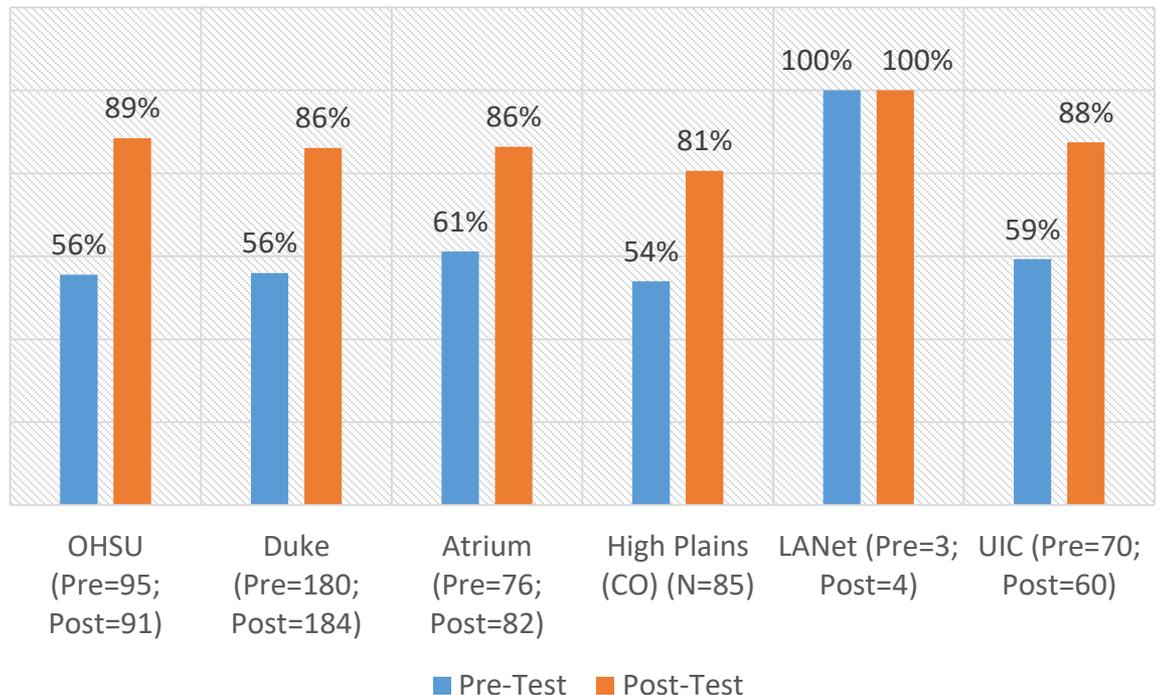
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 5 By PBRN

**Learning Objective:** *Apply updated clinical practice guidelines to the diagnosis and management of patients with COPD.*

**Q5: COPD severity that best guides therapy is based on:**

- A. Spirometry
- B. History of COPD Exacerbations
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# COPD: Optimizing Care in the CAPTURE Study

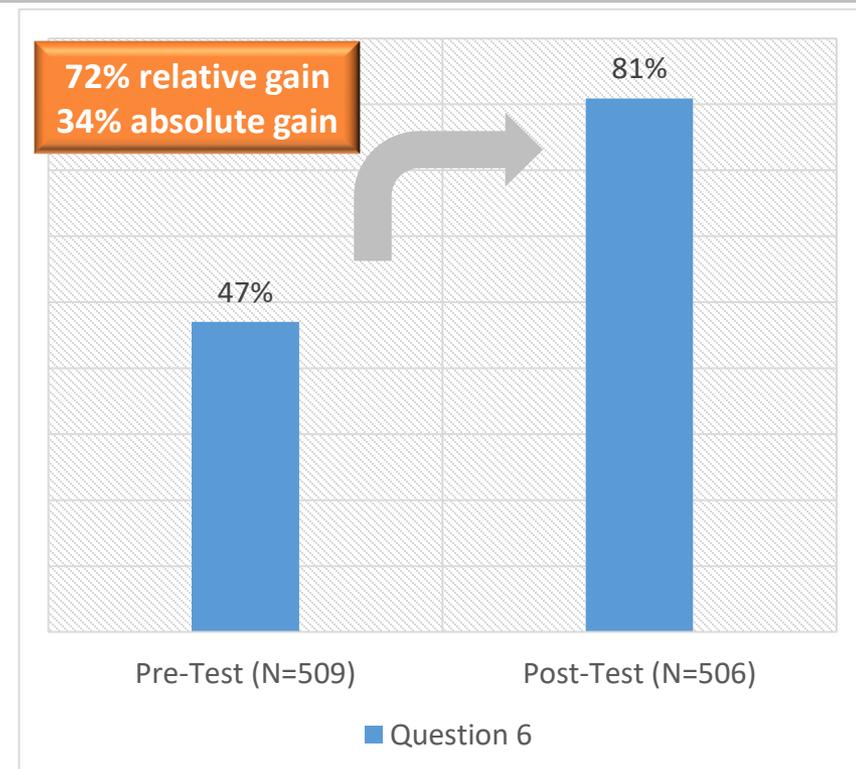
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 6 – Aggregate Score Across All Sites

**Learning Objective:** *Select pharmacological and non-pharmacological therapies for patients with COPD in accordance with updated clinical practice guidelines*

**Q6: The glycopyrrolate and formoterol combination inhaler is in which category of medication?**

- A. Inhaled corticosteroids
- B. LABA & Anti-inflammatories
- C. LABA, LAMA & Anti-Inflammatory
- D. LABA & LAMA**



# COPD: Optimizing Care in the CAPTURE Study

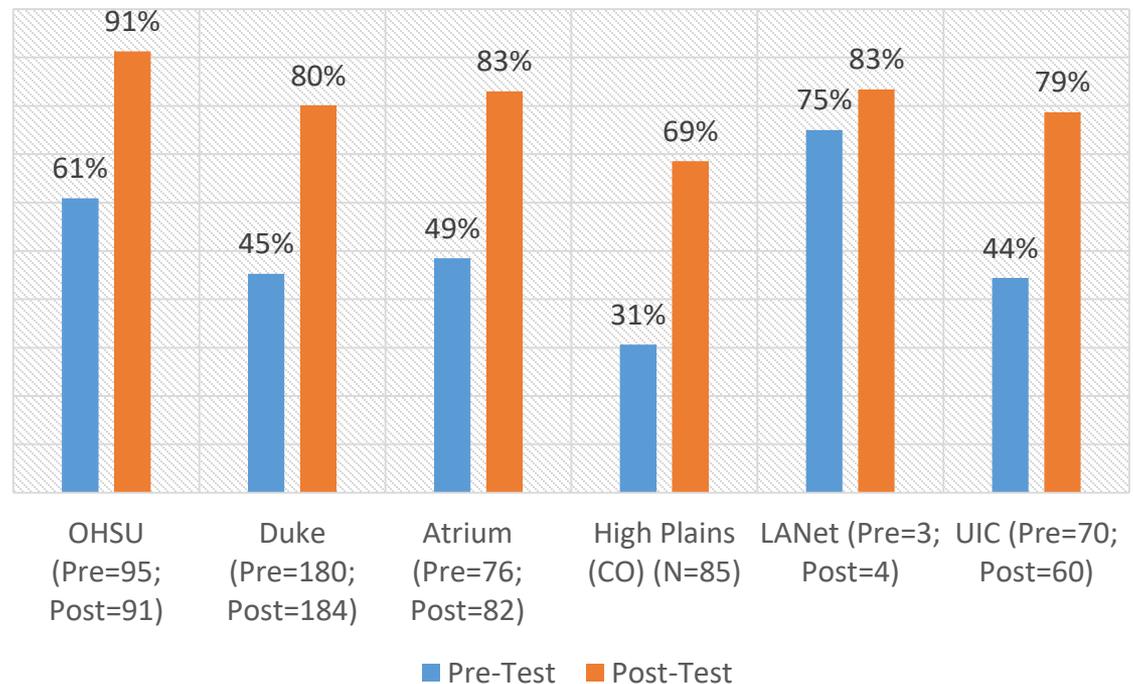
## Final Report – Live Sessions

### Level 3 Outcomes: Knowledge - Pre- to Post-Test: Question 6 By PBRN

**Learning Objective:** *Select pharmacological and non-pharmacological therapies for patients with COPD in accordance with updated clinical practice guidelines*

**Q6: The glycopyrrolate and formoterol combination inhaler is in which category of medication?**

- A. Inhaled corticosteroids
- B. LABA & Anti-inflammatory
- C. LABA, LAMA & Anti-Inflammatory
- D. LABA & LAMA



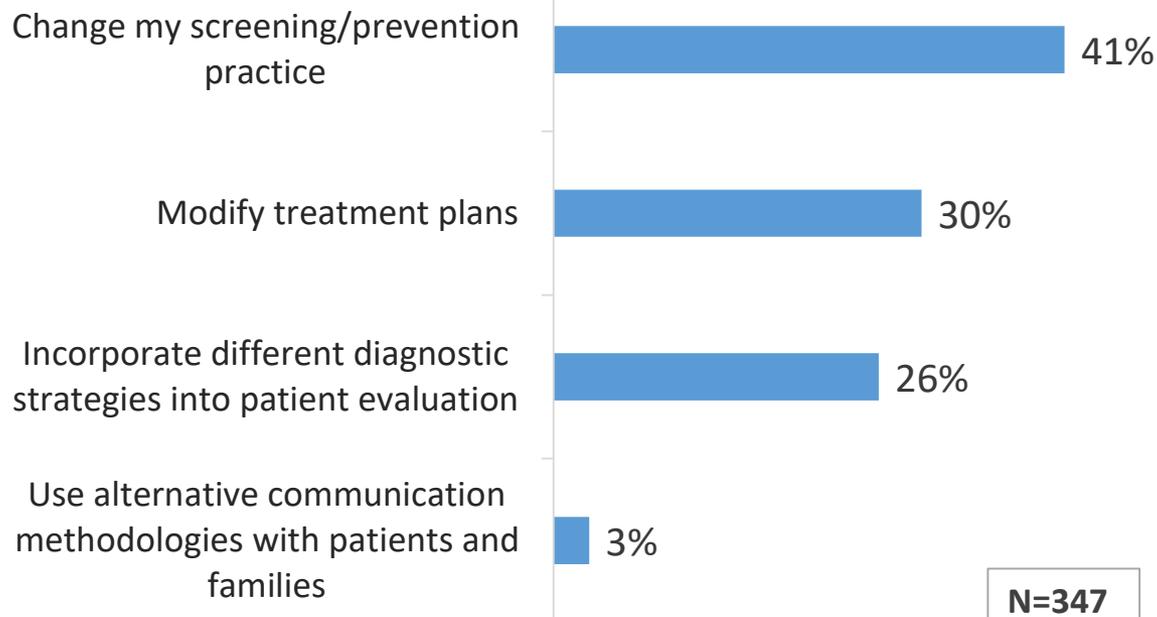
## Final Report – Live Sessions Level 4 Outcomes: Competence (Evaluation)



97%

Of participants indicated that they intended to make changes to practice as a result of the activity

Of those that indicated they planned to make changes to their practice, below are the planned changes:



## 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.

NJH designates this live activity for a maximum of 1 *AMA PRA Category 1 Credits*<sup>™</sup> and 1.2 CBRN nursing contact hours.



# Enduring Program: CAPTURE COPD

*In addition to attending the live session of COPD101: Basic Diagnosis and Management, study participants have the opportunity to view all four modules through the CAPTURE COPD website which is exclusive to study participants.*

## CAPTURE Study Site: Level 1 Outcomes: Participation

**Total Participation**  
**Learners: 50**  
**Completers: 34**  
**Certificates: 27**

### Module 1: Alpha

COPD 101: Basic Diagnosis and Management

- Learners: 18
- Completers: 13
- Certificates: 7

### Module 1: Beta

COPD101: Basic Diagnosis and Management

- Learners: 16
- Completers: 11
- Certificates: 10

### Module 2

COPD Diagnosis: By the Numbers

- Learners: 10
- Completers: 4
- Certificates: 5

### Module 3

Optimizing COPD Management

- Learners: 3
- Completers: 3
- Certificates: 3

### Module 4

COPD Patient-centered Care: Adherence with Therapy

- Learners: 3
- Completers: 3
- Certificates: 2

# COPD: Optimizing Care in the CAPTURE Study

## CAPTURING COPD: A Team Approach to Diagnosis, Treatment, and Management

### Enduring Program of Four Modules

**CAPTURING COPD: A Team Approach to Diagnosis, Treatment and Management**  
Now approved for AAFP credit!

[Enroll Now](#)



Identifying and treating patients with Chronic Obstructive Pulmonary Disease (COPD) is urgent in light of the mortality, morbidity and economic consequences of the disease. **CAPTURING COPD: A Team Approach to Diagnosis, Treatment and Management** is a free CME/CNE activity consisting of nine 15-20 minute lessons disbursed across four main modules. These include an overview of the disease, how to effectively diagnose patients, best care practices and therapies for treating patients, and methods to ensure patient adherence. The program features patient cases with learner interaction and is presented by experts in the field of COPD, including Barry Make, MD, Bruce Bender, PhD, and Deborah Fending, RN, BSN, AE-C of National Jewish Health, and Barbara Yawn, MD, of the University of Minnesota. It is designed for primary care physicians and community pulmonologists, nurse practitioners, physician assistants, and nurses who are involved in the management of COPD. Learners can complete each module individually for separate credits.

**Available Courses**

- COPD101: Basic Diagnosis and Management**  
CME Credit: 1.0 CNE Credit: 1.2
- COPD Diagnosis - By The Numbers**  
CME Credit: 1.0 CNE Credit: 1.2
- Optimizing COPD Management**  
CME Credit: 1.0 CNE Credit: 1.2
- COPD Patient-Centered Care - Adherence With Therapy**  
CME Credit: 1.0 CNE Credit: 1.2

Launched January 5, 2019

Healio EducationLab

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**National Jewish Health**  
Breathing Science is Life.

**CAPTURING COPD**  
COPD101: Basic Diagnosis and Management

CME CNE

CME information Prefest Activity Posttest Evaluation

**Overview**

Author(s)/Faculty: Barry Make, MD  
Source: Healio - Pulmonology Education Lab  
Type: Multimedia  
Release Date: 1/7/2019  
Credit Type: CME / CNE / AAFP  
Cost: Free

Articles/Items: 2  
Expiration Date: 1/6/2020  
Number of Credits: 1.2

Provider(s): **National Jewish Health**

Identifying and treating patients with Chronic Obstructive Pulmonary Disease (COPD) is urgent in light of the mortality, morbidity and economic consequences of the disease. **CAPTURING COPD: A Team Approach to Diagnosis, Treatment and Management** is a free CME/CNE activity consisting of nine 15-20 minute lessons disbursed across four main modules. These include an overview of the disease, how to effectively diagnose patients, best care practices and therapies for treating patients, and methods to ensure patient adherence. The program features patient cases with learner interaction and is presented by experts in the field of COPD, including Barry Make, MD, Bruce Bender, PhD, and Deborah Fending, RN, BSN, AE-C of National Jewish Health, and Barbara Yawn, MD, of the University of Minnesota.

Next >

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Launched May 17, 2019 on Healio

# COPD: Optimizing Care in the CAPTURE Study

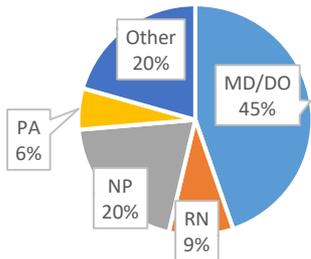
## Participation

**705**  
Completers

**1,556 Learners**

### Specialties:

266 Pulmonary  
252 Primary Care  
149 Critical Care  
334 Other



N=1,001

## Satisfaction

**97%** of respondents indicated that the activity met the learning objectives.

**96%** of respondents indicated that the activity met educational needs.

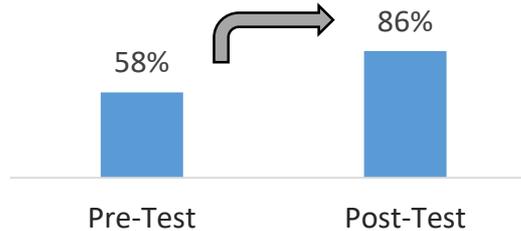
*Excellent summary of COPD and good review of basics.*

*A great review of spirometry interpretation and need for monitoring/training.*

## Educational Impact

**48%** overall relative knowledge gain

### Aggregate Pre- to Post-Test



### NARROWING THE GAPS BY LEARNING OBJECTIVE

Apply updated clinical practice guidelines

**52%** increase in knowledge from pre to post test

Select pharmacological & non-pharmacological therapies

**42%** increase in knowledge from pre to post test

Review proper inhaler technique, assess patient's technique

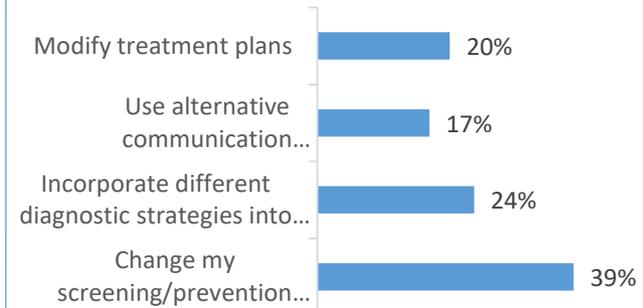
**40%** increase in knowledge from pre to post test

Appraise the use of evidence-based strategies for effective communication

**52%** increase in knowledge from pre to post test

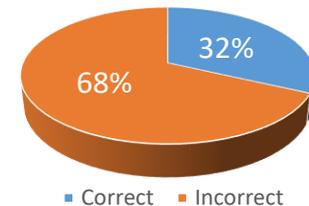
## Intent to Change

**95%** of learners report that they are somewhat to extremely likely to make changes to their practice based on what they learned



## Persistent Knowledge Gap

### Module 3: Question 1



**68%** unable to use strategies for effective communication in interactions with patients to improve engagement, self-management, & coordination of care.

# COPD: Optimizing Care in the CAPTURE Study

## Learning Objectives

- Module 1: COPD 101: Basic Diagnosis and Management
  - Accurately diagnose and assess the severity of COPD
  - State the goals of COPD management
  - Describe maintenance pharmacotherapy for COPD patients
  - Incorporate smoking cessation, vaccination, and pulmonary rehabilitation into COPD treatment plans
- Module 2: COPD Diagnosis: By the Numbers
  - Explain why spirometry is done in suspected COPD patients
  - Discuss correct technique when performing spirometry
  - Identify common patterns for normal, as well as obstructive and restrictive lung diseases
  - Identify the uses of spirometry and pulmonary function tests in COPD care
- Module 3: Optimizing COPD Management
  - Learn why physicians are best suited to address tobacco use with patients
  - Understand the clinician's role and importance of non-pharmacologic intervention in the management of your patients with COPD
  - Identify the need for oxygen therapy in your COPD patients
  - Understand the classes of inhaled medications used for COPD maintenance
- Module 4: COPD Patient-centered Care: Adherence with Therapy
  - Understand the advantages of inhaled drug delivery
  - Examine the differences of the various methods of inhaled drug delivery
  - Identify the challenge of patient non-adherence
  - Learn how to adopt Shared Decision Making into your clinical work

## Level 1 Outcomes - Participation: CAPTURING COPD Enduring Program

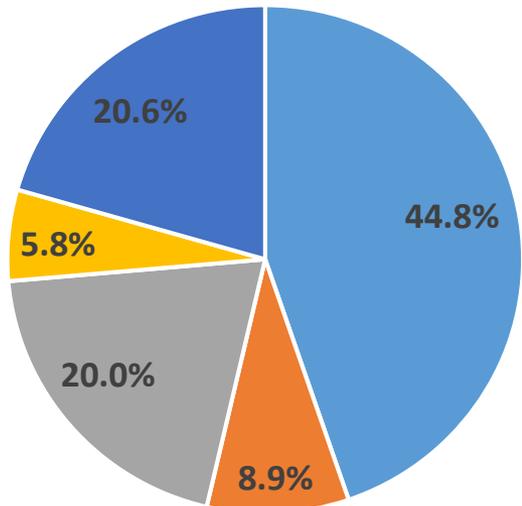
<u>Module 1</u> COPD101: Basic Diagnosis and Management	<ul style="list-style-type: none"><li>• Learners: 606</li><li>• Completers: 265</li><li>• Certificates: 230</li></ul>
<u>Module 2</u> COPD Diagnosis: By the Numbers	<ul style="list-style-type: none"><li>• Learners: 375</li><li>• Completers: 187</li><li>• Certificates: 160</li></ul>
<u>Module 3</u> Optimizing COPD Management	<ul style="list-style-type: none"><li>• Learners: 311</li><li>• Completers: 144</li><li>• Certificates: 134</li></ul>
<u>Module 4</u> COPD Patient-centered Care: Adherence with Therapy	<ul style="list-style-type: none"><li>• Learners: 264</li><li>• Completers: 109</li><li>• Certificates: 101</li></ul>

**Total  
(All 4 Modules)**

- Learners: 1,556
- Completers: 705
- Certificates: 625

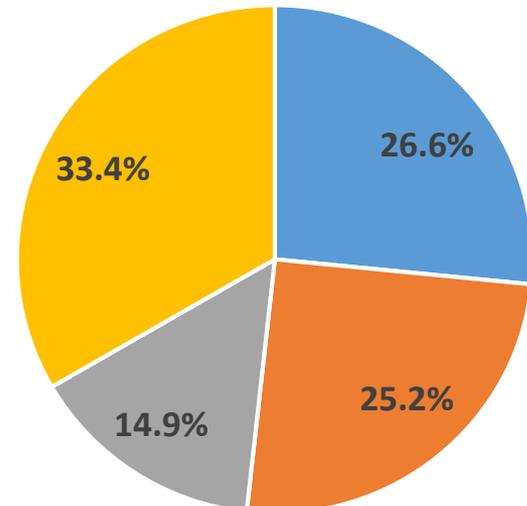
## Level 1 Outcomes: Participant and Specialty Breakdown (CAPTURING COPD Enduring Program – All 4 Modules)

Participation by Degree



■ MD/DO ■ RN ■ NP ■ PA ■ Other

Participation by Specialty



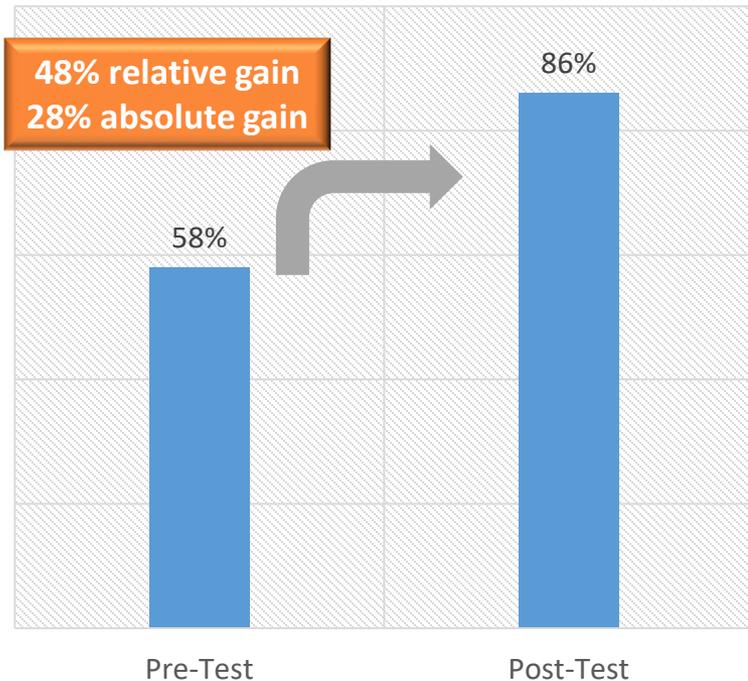
■ Pulmonary ■ Family/Internal/Adult ■ Critical Care ■ Other

## Level 2 Outcomes: Satisfaction Online Enduring Program

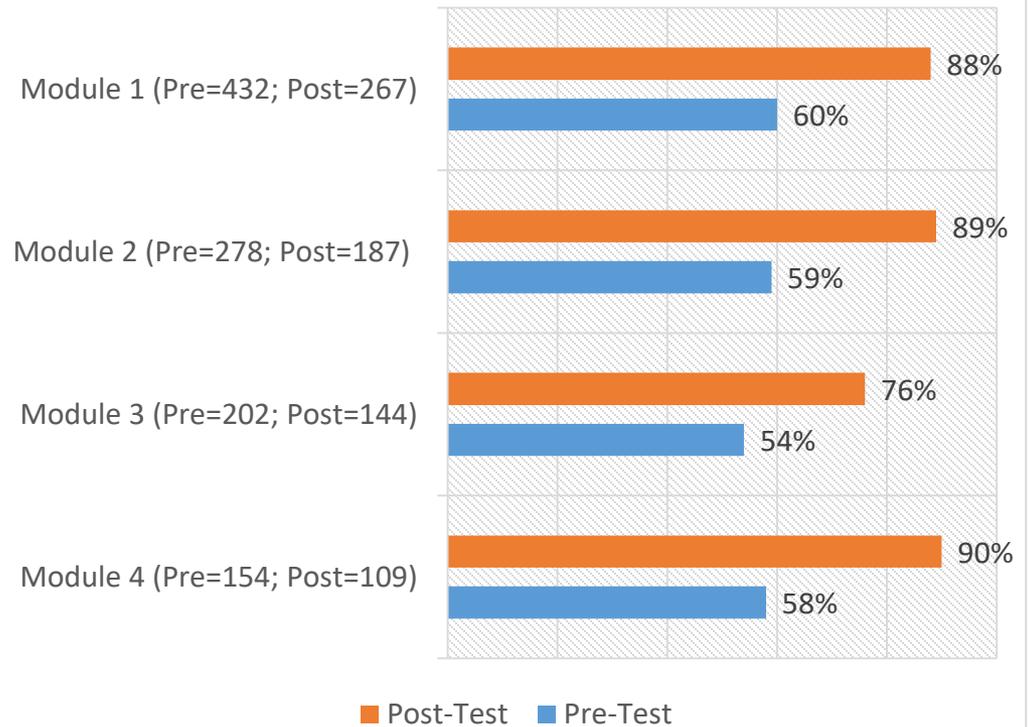
Module		Comments
1	COPD 101	<ul style="list-style-type: none"><li>• Excellent summary of COPD and a good review of the basics</li><li>• Excellent knowledge gains to improve my skill</li></ul>
2	COPD By the Numbers	<ul style="list-style-type: none"><li>• The entire presentation was important</li><li>• A great review of Spirometry interpretation and the need for monitoring/training of Spirometry testers.</li><li>• I now have a better understanding on spirometry interpretation</li></ul>
3	Optimizing COPD Management	<ul style="list-style-type: none"><li>• Great review and update</li><li>• Very well updated, wonderful format</li></ul>
4	Patient-Centered Care: Adherence	<ul style="list-style-type: none"><li>• I really trust anyone's information from National Jewish. Such an awesome institution</li><li>• Excellent concise presentation</li></ul>

## Level 3 Outcomes - Overall Knowledge Gain: CAPTURING COPD

### Aggregate Pre- to Post-Test



### Pre- to Post-test by Module



## Knowledge: Module 1: COPD 101 Basic Diagnosis and Management

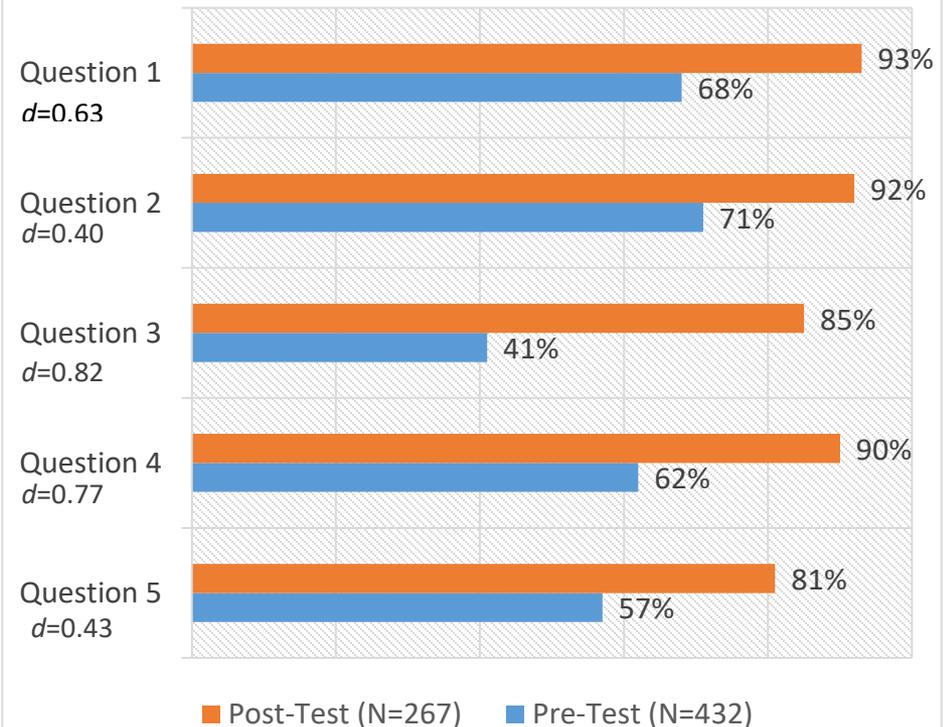
**Learning Objectives:** 1) Apply the updated clinical practice guidelines to the diagnosis and management of patients with COPD. 2) Select pharmacological and non-pharmacological therapies for patients with COPD in accordance with updated clinical practice guidelines

- 1) I make the diagnosis of COPD with confidence in my patients on the basis of:
- 2) The most important therapy for patients with COPD is:
- 3) Pulmonary rehabilitation is indicated in which patients:
- 4) COPD severity that best guides therapy is based on:
- 5) The glycopyrrolate and formoterol combination inhaler is which category of medication?

**Module 1** question demonstrated a significant learning gains ( $p < .0001$ ) with moderate to large effect sizes as evidenced by Cohen's  $d$ .

Cohen (1988) = .2 small, .4 medium, .8 large

### Module 1: Pre- and Post-test



## Knowledge: Module 2: COPD Diagnosis: By the Numbers

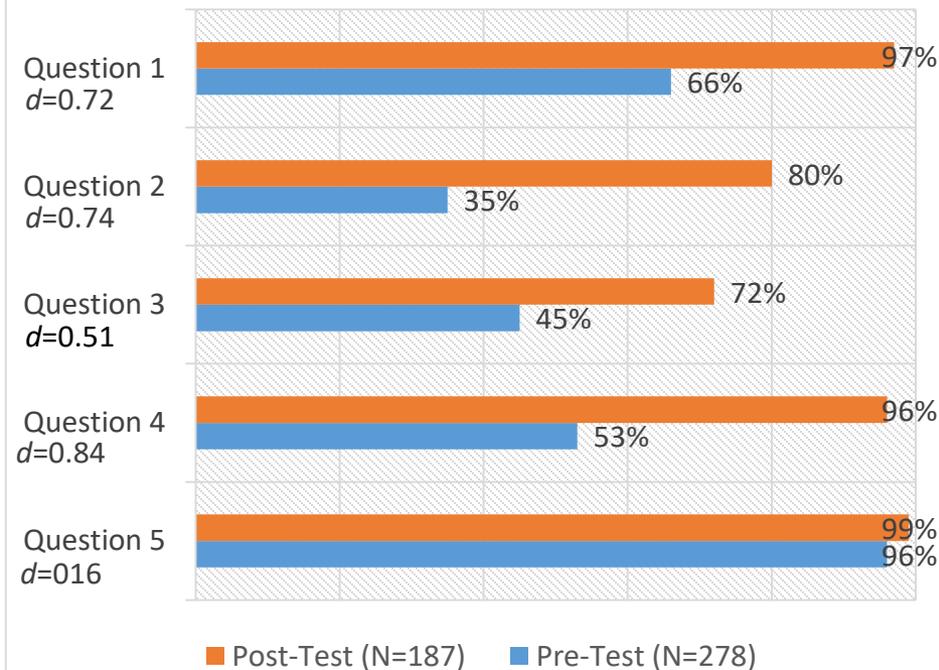
**Learning Objectives:** 1) Apply the updated clinical practice guidelines to the diagnosis and management of patients with COPD. 2) Review proper inhaler technique, assessment of patient's technique, and strategies to improve patient adherence.

- 1) Common presenting symptoms of COPD include:
- 2) COPD diagnosis is a clinical diagnosis
- 3) Obstructive lung disease is defined by:
- 4) The most common error in spirometry is:
- 5) A patient may have good effort but poor spirometry technique.

**Module 2** question demonstrated a significant learning gains ( $p < .0001$ ) for questions 1-4 with moderate to large effect sizes for questions 1-4 as evidenced by Cohen's  $d$ . Question 5 was not significant ( $p = .127$ ) and has a very low effect size.

Cohen (1988) = .2 small, .4 medium, .8 large

### Module 2: Pre- and Post-test



## Knowledge: Module 3: Optimizing COPD Management

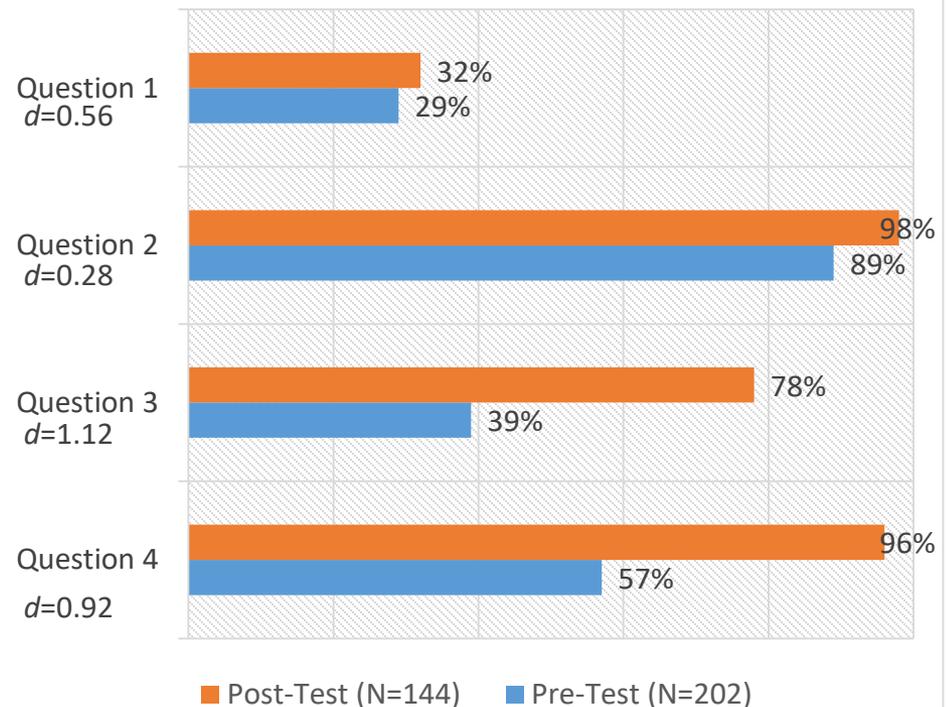
**Learning Objectives:** 1) Apply the updated clinical practice guidelines to the diagnosis and management of patients with COPD. 2) Appraise the use of evidence-based strategies for effective communication in interactions with COPD to improve engagement, self-management, and coordination of care.

- 1) Based on the United States Preventive Services Task Force recommendation statement, which one of the following tobacco smoking cessation interventions should you recommend to this patient?
- 2) Which of the following regarding an acute exacerbation of chronic obstructive pulmonary disease are correct?
- 3) Supplemental oxygen is ONLY appropriate for COPD patients with baseline hypoxemia at rest
- 4) Pulmonary Rehabilitation is more effective at improving dyspnea than a bronchodilator.

**Module 3** question demonstrated a significant learning gains ( $p < .05$ ) with small to very large effect sizes as evidenced by Cohen's  $d$ .

Cohen (1988) = .2 small, .4 medium, .8 large

### Module 3: Pre- and Post-test



# COPD: Optimizing Care in the CAPTURE Study

## Knowledge: Module 4: COPD Patient-centered Care: Adherence with Therapy

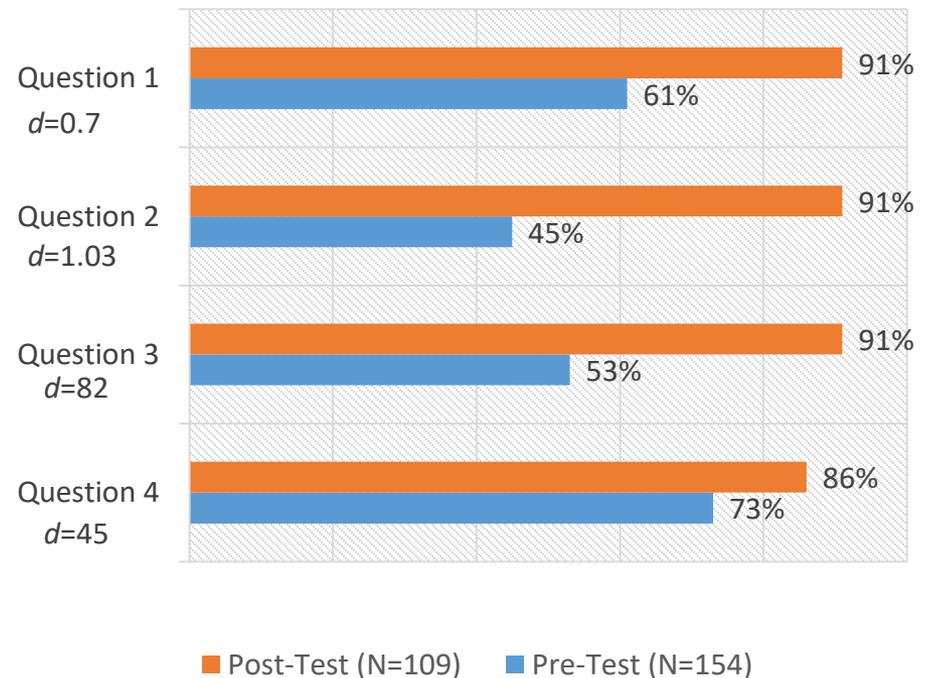
**Learning Objectives:** 1) Appraise the use of evidence-based strategies for effective communication in interactions with patients with COPD to improve engagement, self-management, and coordination of care. 2) Review proper inhaler technique, assessment of patients' technique, and strategies to improve patient adherence.

- 1) The first of the 5 communication strategies to increase adherence is:
- 2) To clean an albuterol inhaler, a patient should:
- 3) Which of the following is a benefit of using a spacer with a metered-dose inhaler?
- 4) If a patient has been using an MDI successfully for COPD medication for a few months, which of the following techniques should you routinely review/assess?

**Module 4** question demonstrated a significant learning gains ( $p < .05$ ) with moderate to large effect sizes as evidenced by Cohen's  $d$ .

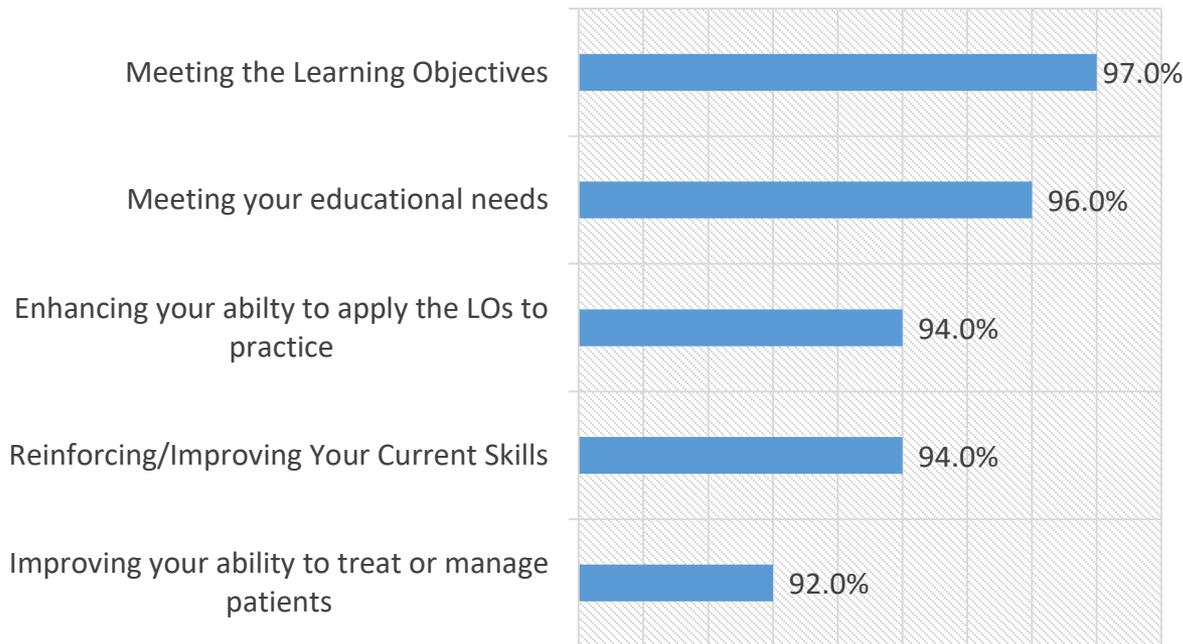
Cohen (1988) = .2 small, .4 medium, .8 large

### Module 4: Pre- and Post-test



## Level 2 Satisfaction - Enduring Evaluation: Module 1: COPD101: Basic Diagnosis and Management

Participants report the activity was “Excellent” to “Good” at:



N=234

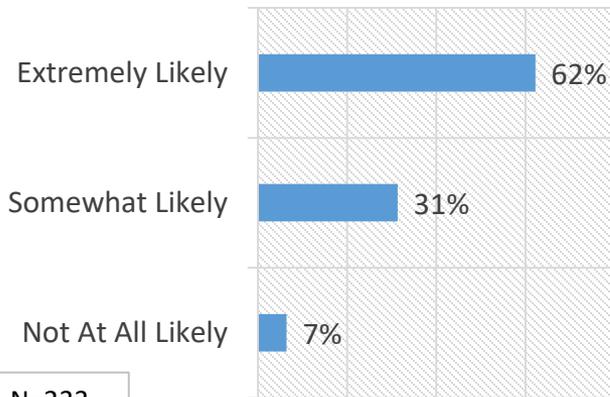
■ Excellent to Good

### Evaluation

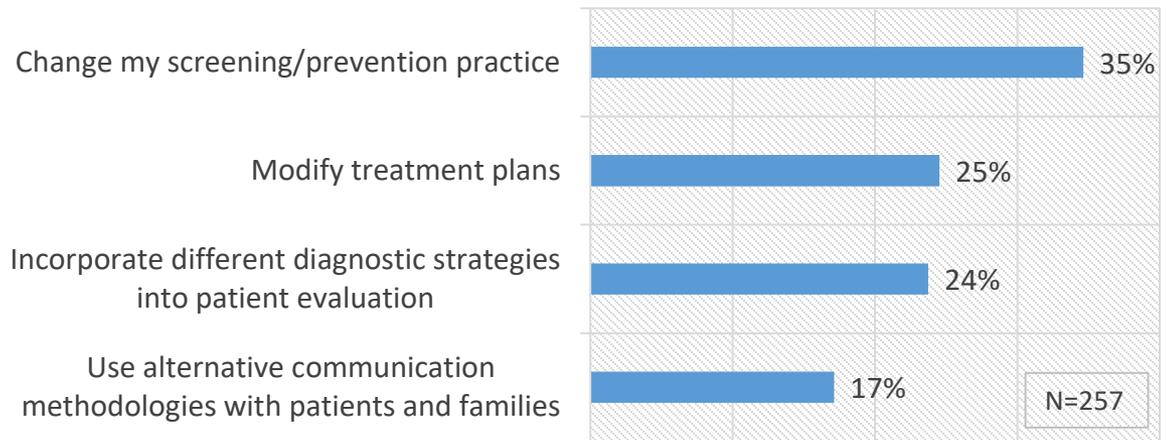
- ✓ 97% reported the material was presented without commercial bias
- ✓ 92% reported the activity addressed strategies for overcoming barriers to optimal patient care

## Level 4 Competence - Enduring Evaluation: Module 1: COPD 101: Basic Diagnosis and Management

As a result of what I learned, I intend to make changes in my practice:



As a result of what I learned, I intend to make the following changes in my practice:



**93%** of participants indicated that they intend to make changes in their practice with the majority of them indicating that they would change screening and modify treatment plans.

## Level 2 Satisfaction - Enduring Evaluation: Module 2: COPD Diagnosis: By the Numbers

Participants report the activity was “Excellent” to “Good” at:

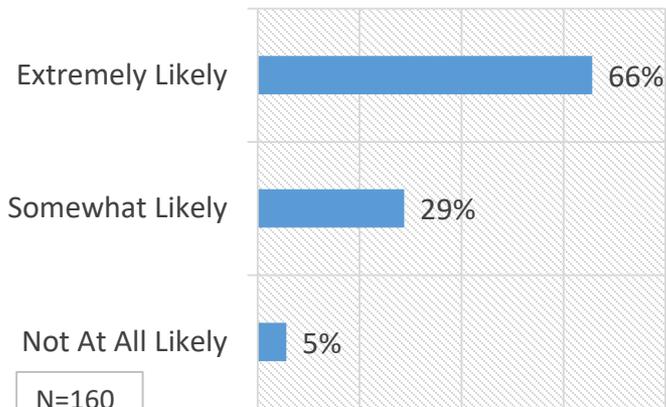


### Evaluation

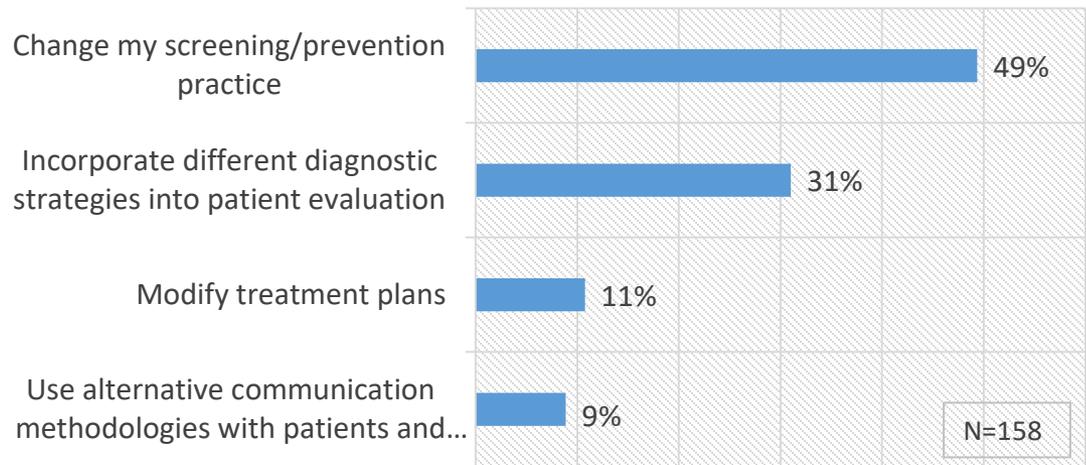
- ✓ 97% reported the material was presented without commercial bias
- ✓ 96% reported the activity addressed strategies for overcoming barriers to optimal patient care

## Level 4 Competence - Enduring Evaluation: Module 2: COPD Diagnosis: By the Numbers

As a result of what I learned, I intend to make changes in my practice:



As a result of what I learned, I intend to make the following changes in my practice:



**95%** of participants indicated that they intend to make changes in their practice with the majority of them indicating that they would change screening and diagnostic strategies.

## Level 2 Satisfaction - Enduring Evaluation: Module 3: Optimizing COPD Management

Participants report the activity was “Excellent” to “Good” at:

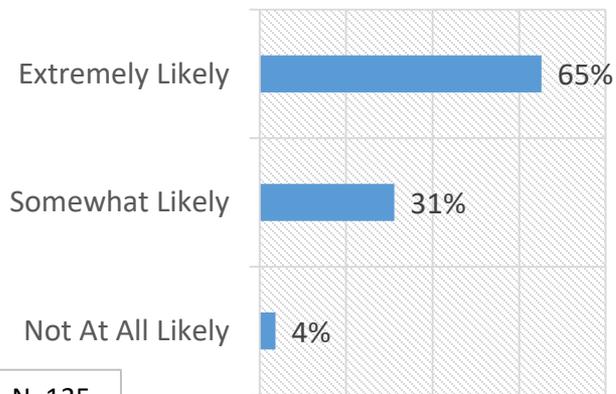


### Evaluation

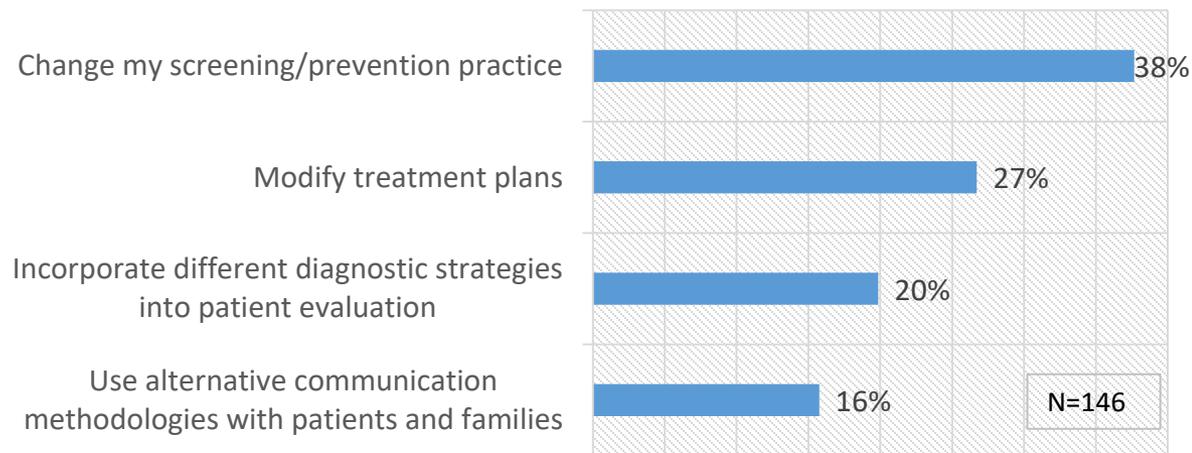
- ✓ 97% reported the material was presented without commercial bias
- ✓ 96% reported the activity addressed strategies for overcoming barriers to optimal patient care

## Level 4 Competence - Enduring Evaluation: Module 3: Optimizing COPD Management

As a result of what I learned, I intend to make changes in my practice:



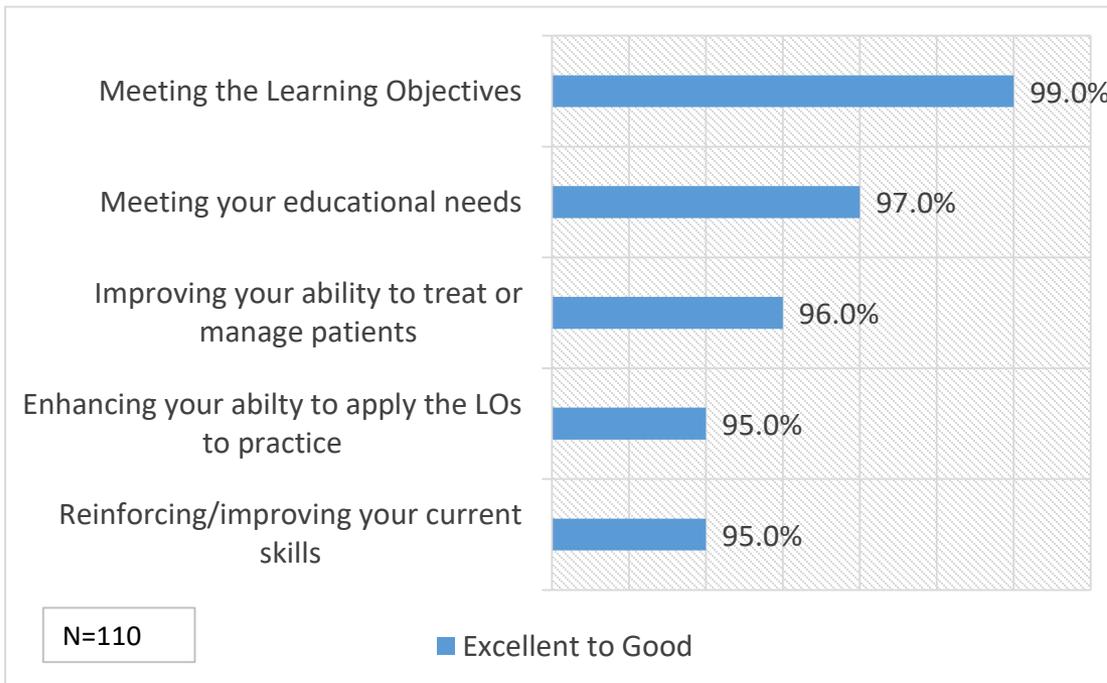
As a result of what I learned, I intend to make the following changes in my practice:



**96%** of participants indicated that they intend to make changes in their practice with the majority of them indicating that they would change screening and modify treatment plans.

## Level 2 Satisfaction - Enduring Evaluation: Module 4: COPD Patient-centered Care: Adherence with Therapy

Participants report the activity was “Excellent” to “Good” at:

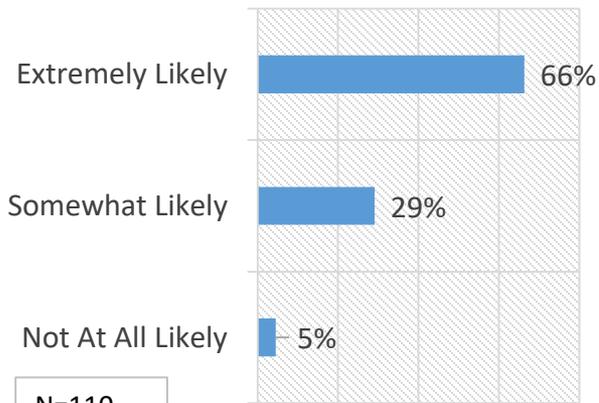


### Evaluation

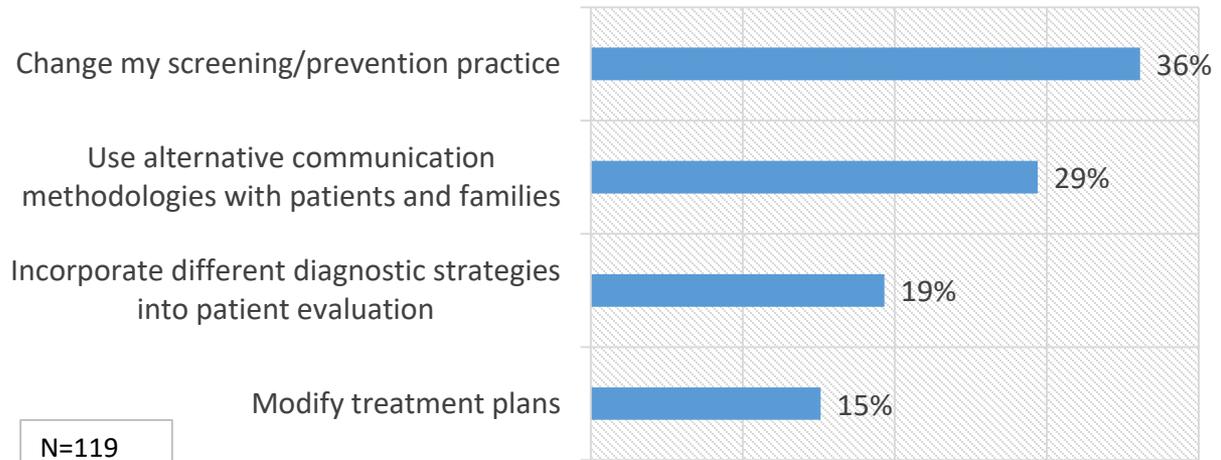
- ✓ 99% reported the material was presented without commercial bias
- ✓ 100% reported the activity addressed strategies for overcoming barriers to optimal patient care

## Level 4 Competence - Enduring Evaluation: Module 4: COPD Patient-centered Care: Adherence with Therapy

As a result of what I learned, I intend to make changes in my practice:

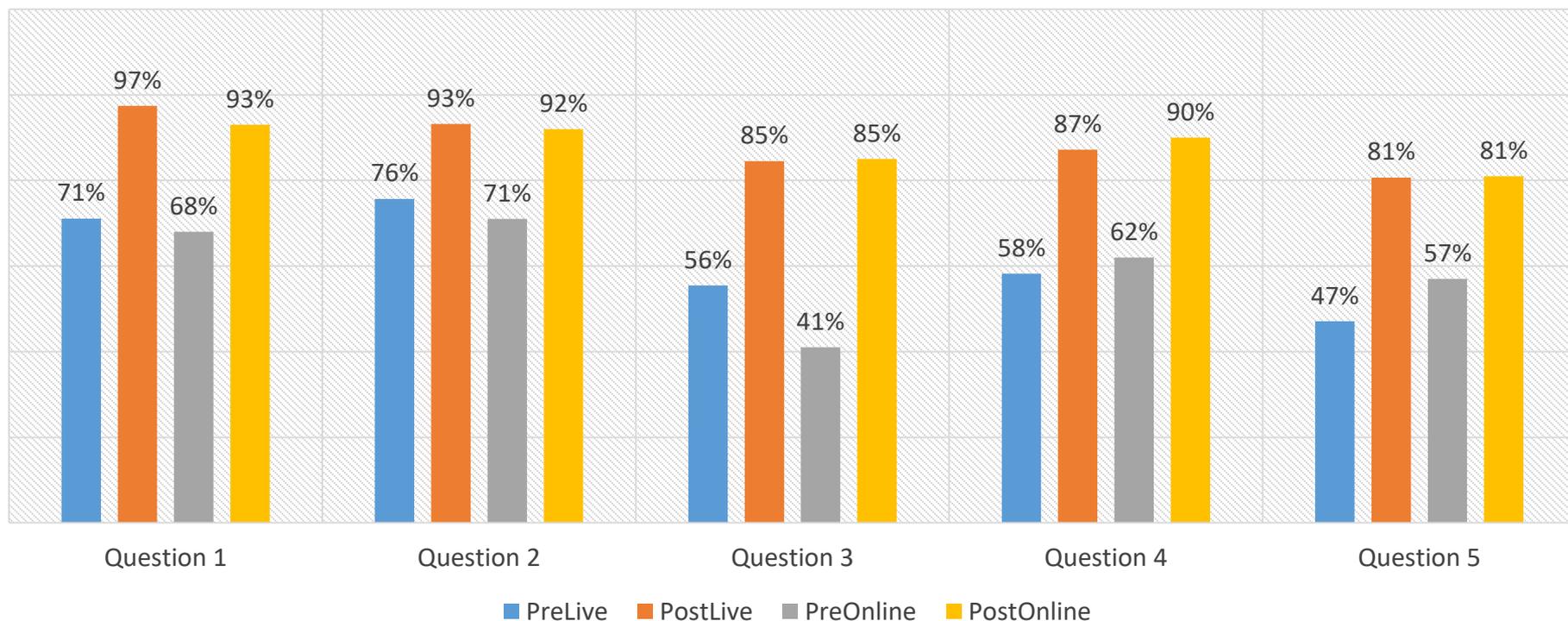


As a result of what I learned, I intend to make the following changes in my practice:



**95% of participants indicated that they intend to make changes in their practice with the majority of them indicating that they would change screening practices.**

## Level 3 Outcomes - Comparison of Live vs. Online Pre-test to Post-test (Module 1)



## 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.

NJH designates the online enduring program for a maximum of 4 *AMA PRA Category 1 Credits*<sup>™</sup>, 4.8 CBRN nursing contact hours and 4 AAFP Prescribed credits.



# COPD: Optimizing Care in the CAPTURE Study

## About NJH

- ✓ Largest pulmonary division in the world and the only hospital whose principal focus is respiratory and related diseases.
- ✓ #1 or #2 ranking in Pulmonology category by U.S. News & World Report (since category was added in 1997).
- ✓ Top 7 percent of institutions funded by the National Institutes of Health, an extraordinary achievement for an institution of NJH's size.
- ✓ The NJH COPD clinic is the largest single COPD clinic in the nation and was recently recognized by U.S. News and World Report for its expertise in treating COPD, receiving a "high-performing" designation
- ✓ Designated as a Specialized Center of Research for ILD by The National Institute of Health.
- ✓ 30 doctors named to "America's Top Doctors" in 2015.





**COPD:** Optimizing Care in the  
**CAPTURE Study**

Thank you for your support of  
this educational initiative!