
National Jewish Health®
Breathing Science is Life®
Final Outcomes Report
Live and Online Enduring
Grant ID: US IME_2023_00006911
BEYOND THE BASICS:
The Role of Advanced Practice Providers in Chronic Fibrosing ILD Care

Final Outcomes Summary

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Executive Summary

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Program Overview

This program was designed in collaboration with National Jewish Health and the Association of Pulmonary Advanced Practice Providers to engage NPs and PAs in the topic of CF-ILD with a progressive phenotype/progressive pulmonary fibrosis (PPF). A panel of nurse practitioners and a pulmonologist discuss the signs, symptoms and risk factors of CF-ILD with PPF, strategies for an early diagnosis, and effective communication strategies to improve health-care provider and patient engagement. The program utilized a combination of a live webinar and a video-based activity on the ArcheMedx platform with microlearning tactics to reinforce the education and improve retention. Other program features include a whiteboard animation to illustrate the pathophysiology of CF-ILD with PPF, an in-depth review of radiologic imaging, and a panel discussion on interprofessional and multidisciplinary care as well as differences in community-based and specialty care for patients with CF-ILD with PPF.

Learning Objectives

1. Utilize effective diagnostic strategies to identify and diagnose CF-ILD with PPF.
2. Identify signs, symptoms, risk factors, and the clinical characteristics associated with CF-ILD with PPF.
3. Apply effective communication strategies to improve healthcare provider and patient engagement.

Target Audience & Accreditation

Target Audience: Nurse Practitioners (NPs) and Physician Associates (PAs) who care for patients with ILD

NJH is accredited with commendation by the Accreditation Council for Continuing Medical Education (ACCME). NJH designates the live webinar and online enduring activities for a maximum of .75 *AMA PRA Category 1 Credits™* each.

Live Webinars:
June 22, 2023 & August 12, 2023

Enduring activity on myCME / ArcheMedX
June 30, 2023 – June 30, 2024
https://www.mycme.com/courses/advanced-providers-chronic-fibrosing-interstitial-lung-disease-8862

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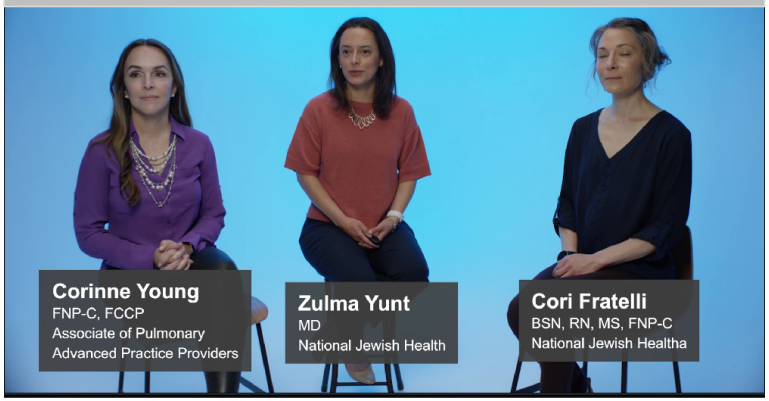
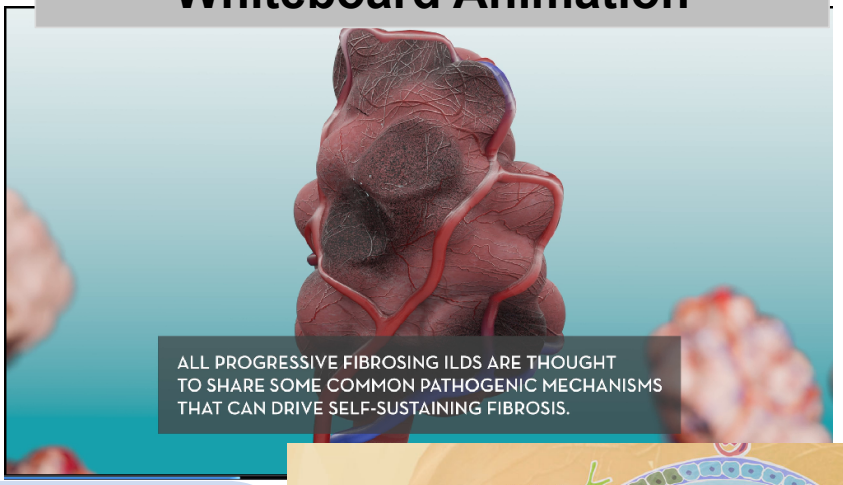
Program Features

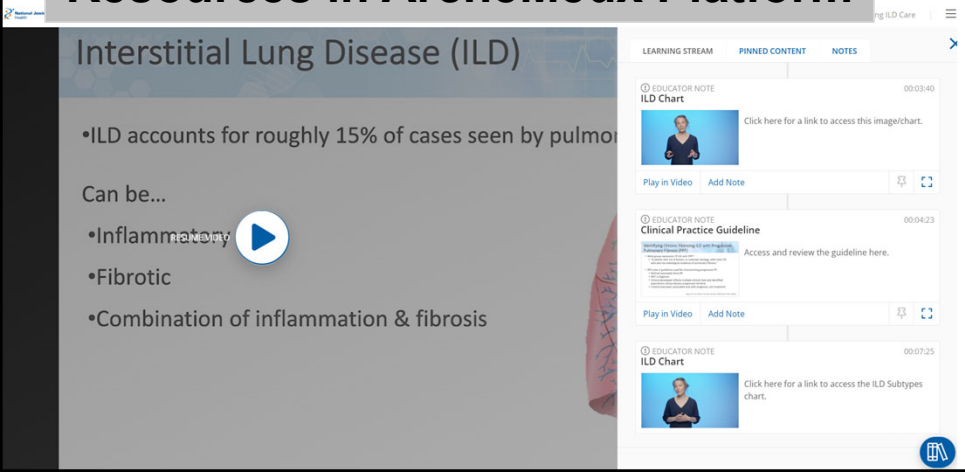
Faculty Roundtable Discussion

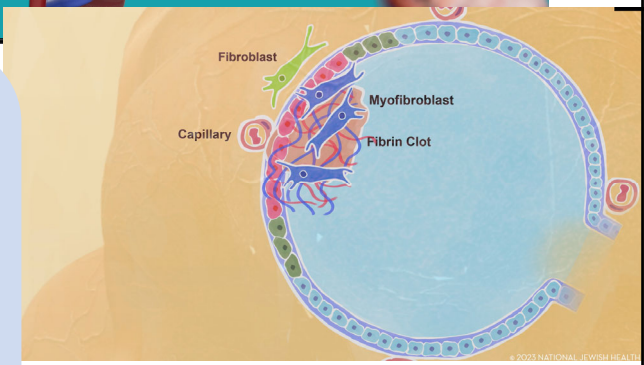


Whiteboard Animation



Resources in ArcheMedx Platform





98%

evaluation respondents reported the animation improved their understanding of the pathophysiology of CF-ILD

(N=414)

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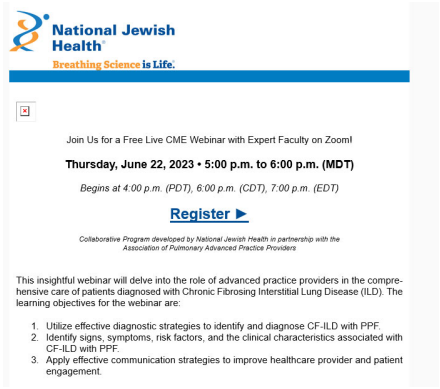
Final Outcomes Summary

Audience Generation

Personalized targeting tools across numerous tactics reach HCPs by leveraging demographic data (such as location, profession, specialty) and behavioral data (such as learner participation history, areas of interest).

Emails and e-newsletters sent to National Jewish Health (NJH), Association of Pulmonary Advanced Practice Providers (APAPP) and myCME databases



Social media ads and posts

Dedicated landing page on National Jewish Health website and myCME

Promotion of enduring activity at live conferences

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Final Outcomes Summary

Online Enduring

Beyond the Basics: The Role of Advanced Practice Providers in Chronic Fibrosing ILD Care

CME | 0.75 Credits

Description | Educational Objectives | CME/CE Information | Faculty and Disclosures | Instructions

Program Description

Chronic fibrosing ILD (CF-ILD) is a recently defined phenotypic subset of interstitial lung disease (ILD) characterized by worsening respiratory symptoms, declining lung function, limited responsiveness to immunomodulatory therapy, and potentially increased mortality. This program will focus on identifying signs, symptoms and risk factors of CF-ILD with a progressive fibrosing phenotype; strategies for early diagnosis; and effective communication strategies to improve healthcare provider and patient engagement.

Webcast

Time to Complete: 45 minutes

Released: June 30, 2023

Expires: June 30, 2024

Maximum Credits:
0.75 / *AMA PRA Category 1 Credits™*

Start Activity

EDUCATIONAL PARTNER

This activity is hosted on the site of our educational partner, ArcheMedX, an award-winning learning and analytics platform dedicated to improving clinical care by increasing learner competence, improving knowledge retention, and accelerating practice change.

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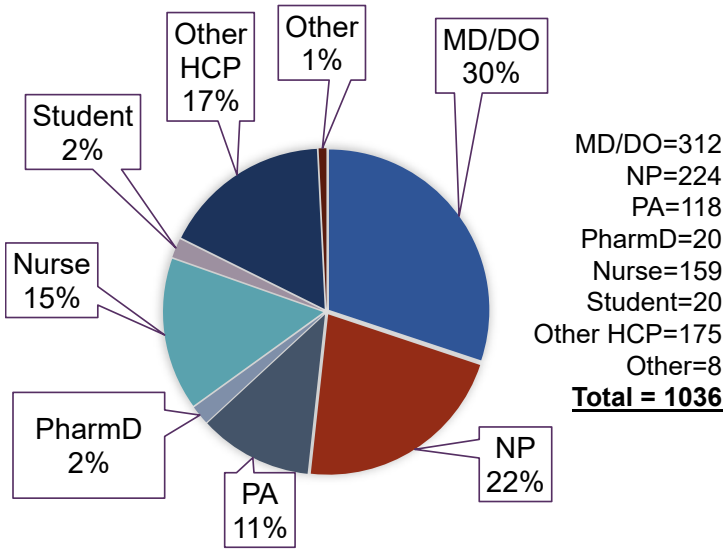
Final Outcomes Summary: Online Enduring

Educational Impact Summary

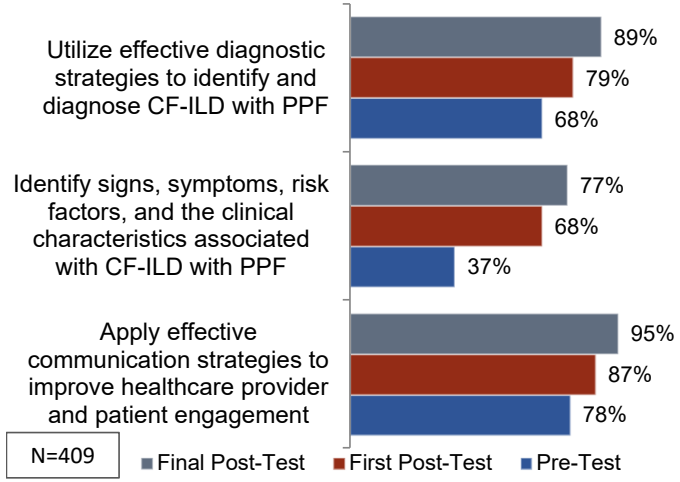
Participation



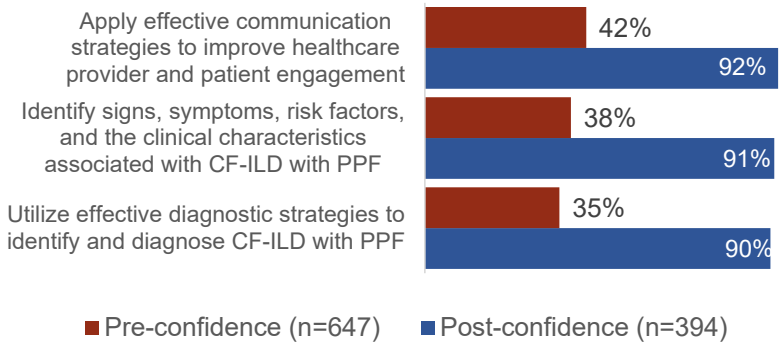
MD/DO=312
NP=224
PA=118
PharmD=20
Nurse=159
Student=20
Other HCP=175
Other=8
Total = 1036

91%
N=394
Evaluation respondents reported gaining strategies for overcoming barriers to optimal patient care

Learning Gain Across Objectives



Confidence Across Objectives



Evaluation

Met their educational needs **(98%)**

Reinforced or improved current skills **(99%)**

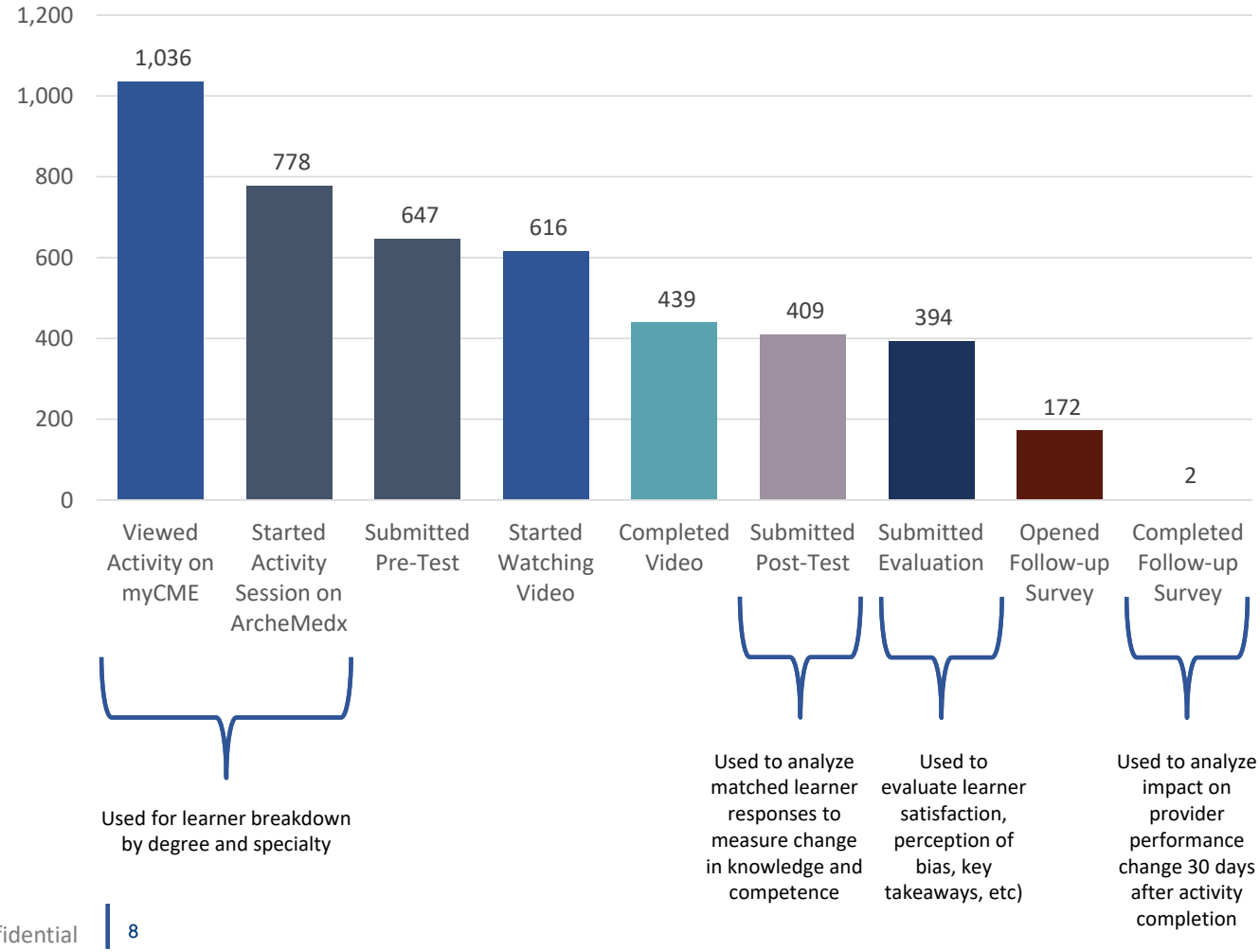
N=394

Improved ability to treat patients **(97%)**

95%
N=334
Evaluation respondents intend to make changes to practice as a result of the activity

Final Outcomes Summary: Online Enduring

Participation Funnel – myCME and ArcheMedx



Guarantee	Actuals
1,000 learners	1,036 learners

75% of learners on myCME engaged with the content on ArcheMedx

Mobile Use

41%

ArcheMedx learners who accessed the curriculum via a mobile device

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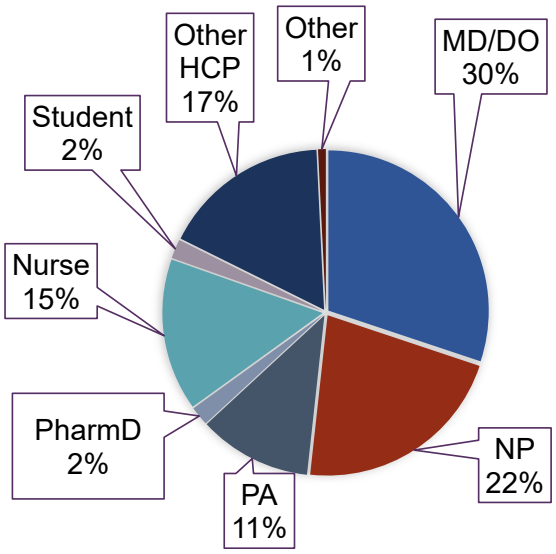
Final Outcomes Summary: Online Enduring

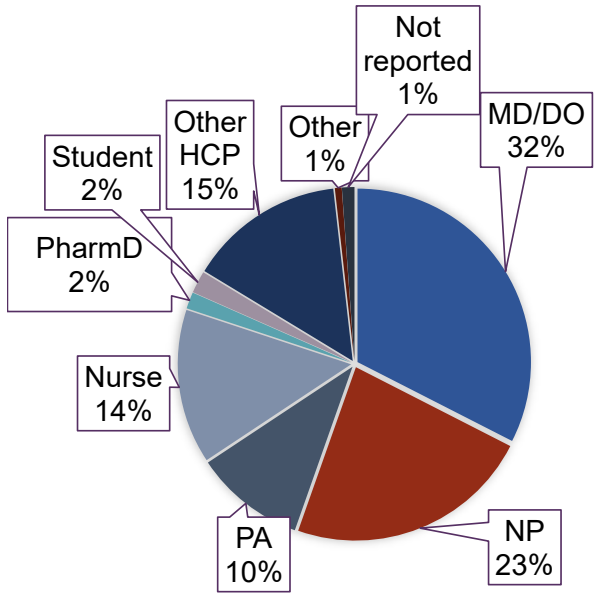
Level 1 Outcomes: Participation (Degree)

Learners on myCME



Degree	Total
MD/DO	312
NP	224
PA	118
Nurse	159
PharmD	20
Student	20
Other HCP	175
Other *(Administrator, Consumer, etc)*	8
Total Learners	**1,036**

Learners on ArcheMedx

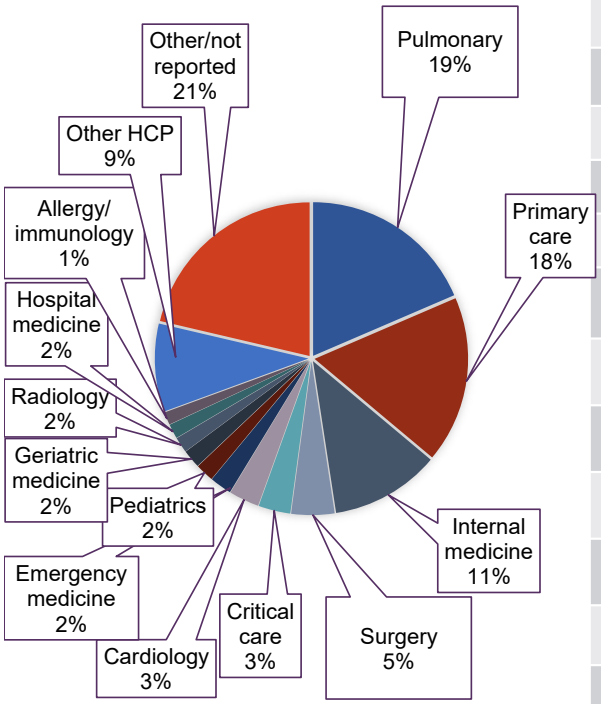


Degree	Total
MD/DO	253
NP	178
PA	80
Nurse	112
PharmD	12
Student	16
Other HCP	113
Other *(Administrator, Consumer, etc)*	5
Not reported	9
Total Learners	**778**

Final Outcomes Summary: Online Enduring

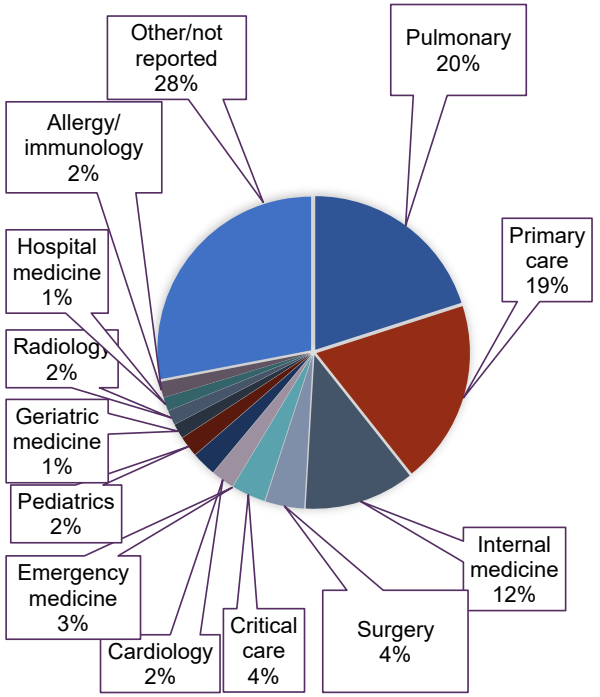
Level 1 Outcomes: Participation (Specialty)

Learners on myCME



Specialty	Total
Pulmonary	192
Primary care	182
Internal medicine	119
Surgery	47
Critical care	35
Cardiology	33
Emergency medicine	24
Pediatrics	20
Geriatric medicine	20
Radiology	17
Hospital medicine	16
Allergy/Immunology	14
Other HCP	96
Other/Not reported	221
Total Learners	**1,036**

Learners on ArcheMedx

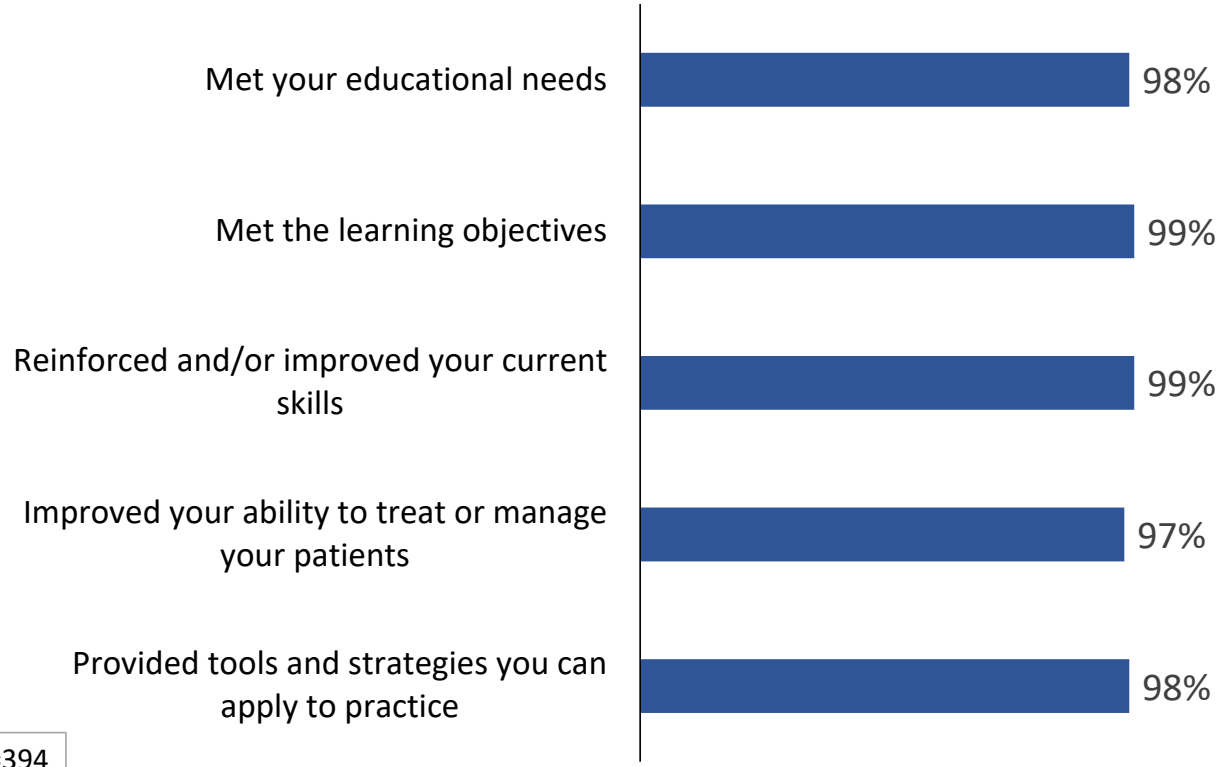


Specialty	Total
Pulmonary	156
Primary care	150
Internal medicine	90
Surgery	32
Critical care	28
Cardiology	19
Emergency medicine	20
Pediatrics	17
Geriatric medicine	12
Radiology	12
Hospital medicine	11
Allergy/Immunology	13
Other/Not reported	218
Total Learners	**778**

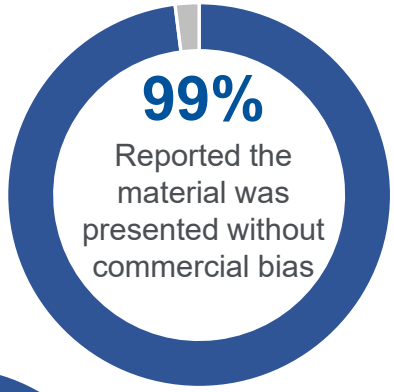
Final Outcomes Summary: Online Enduring

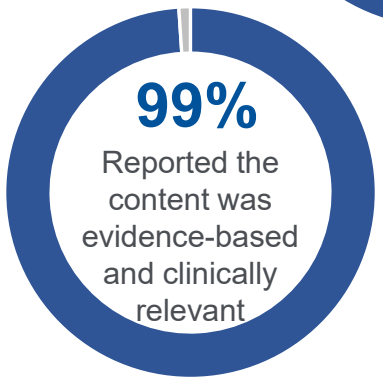
Level 2 Outcomes: Satisfaction

Evaluation respondents reported they "Strongly Agree" or "Agree" that the activity:



n=394





n=394

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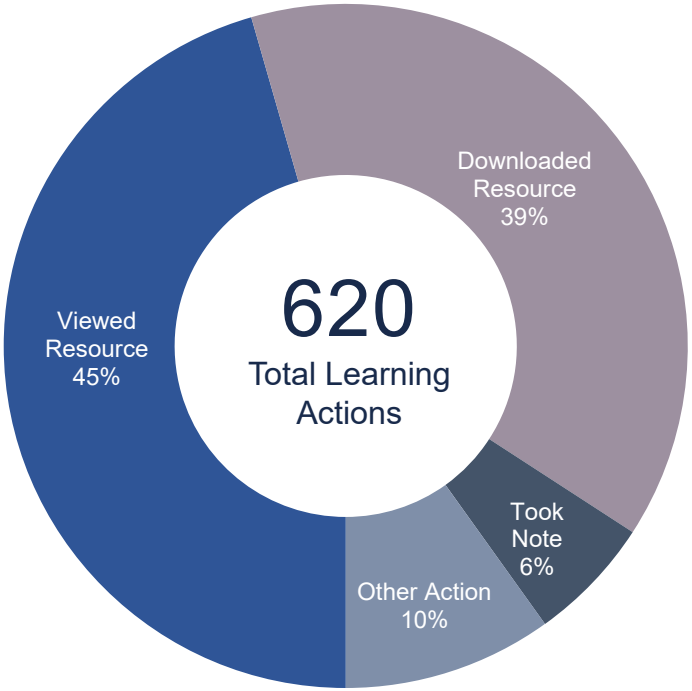
Final Outcomes Summary: Online Enduring

Learner Engagement while Viewing the Content



242
Resource Downloads

283
Resource Views

Top Resources Viewed and Downloaded

Viewed

ILD Chart resource

Idiopathic Pulmonary Fibrosis Update resource

Radiology Review video

CF-ILD Panel Discussion video

Downloaded

ILD Chart resource

Idiopathic Pulmonary Fibrosis Update resource

Radiology Review video and slides

Communicating with Patients – MedlinePlus Med Encyclopedia

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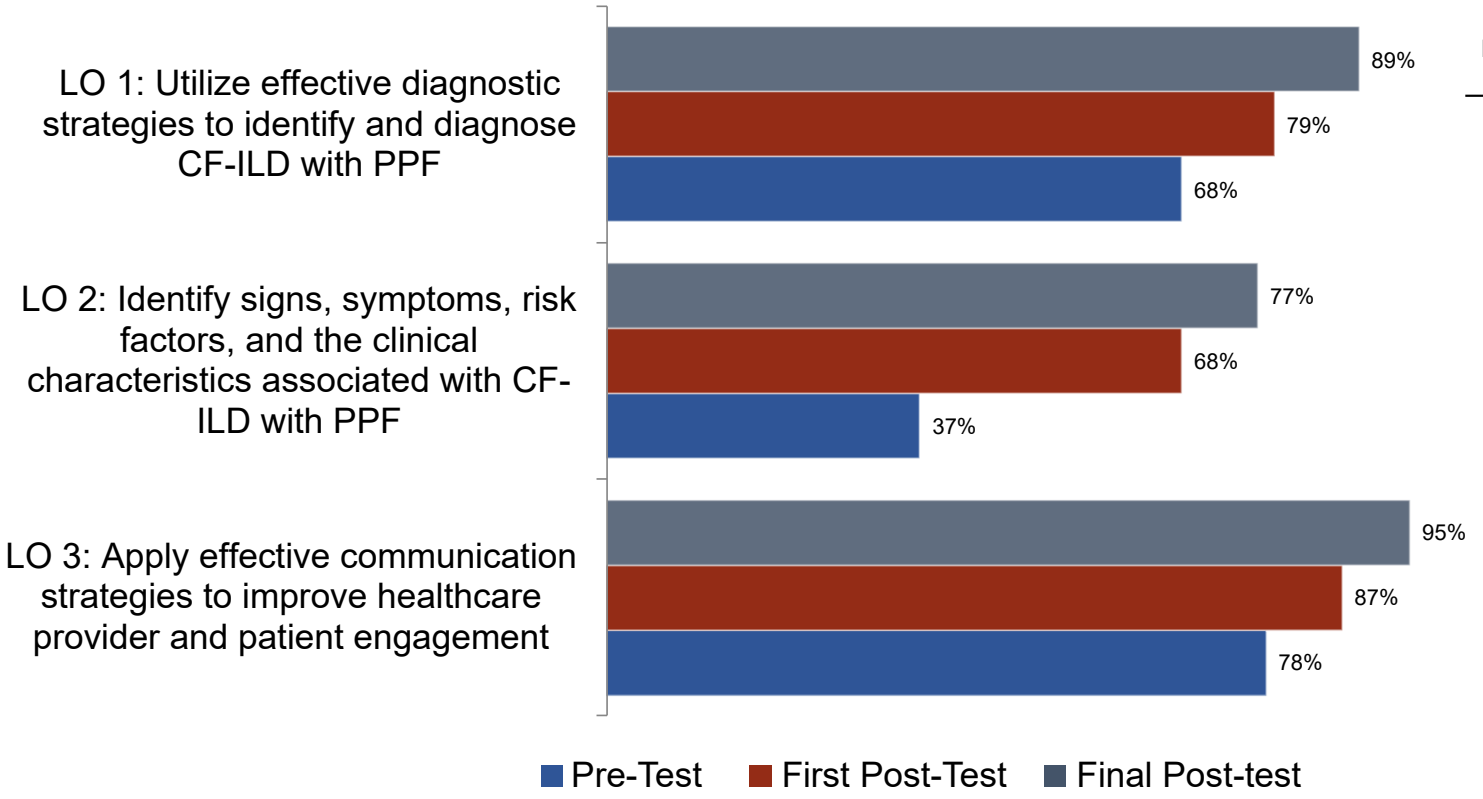
Final Outcomes Summary: Online Enduring

Level 3 & 4: Knowledge and Competence - Assessment by Learning Objectives



Relative Change

	First Post-Test	Final Post-Test
LO 1	16%	31%
LO 2	84%	108%
LO 3	14%	22%

n=409

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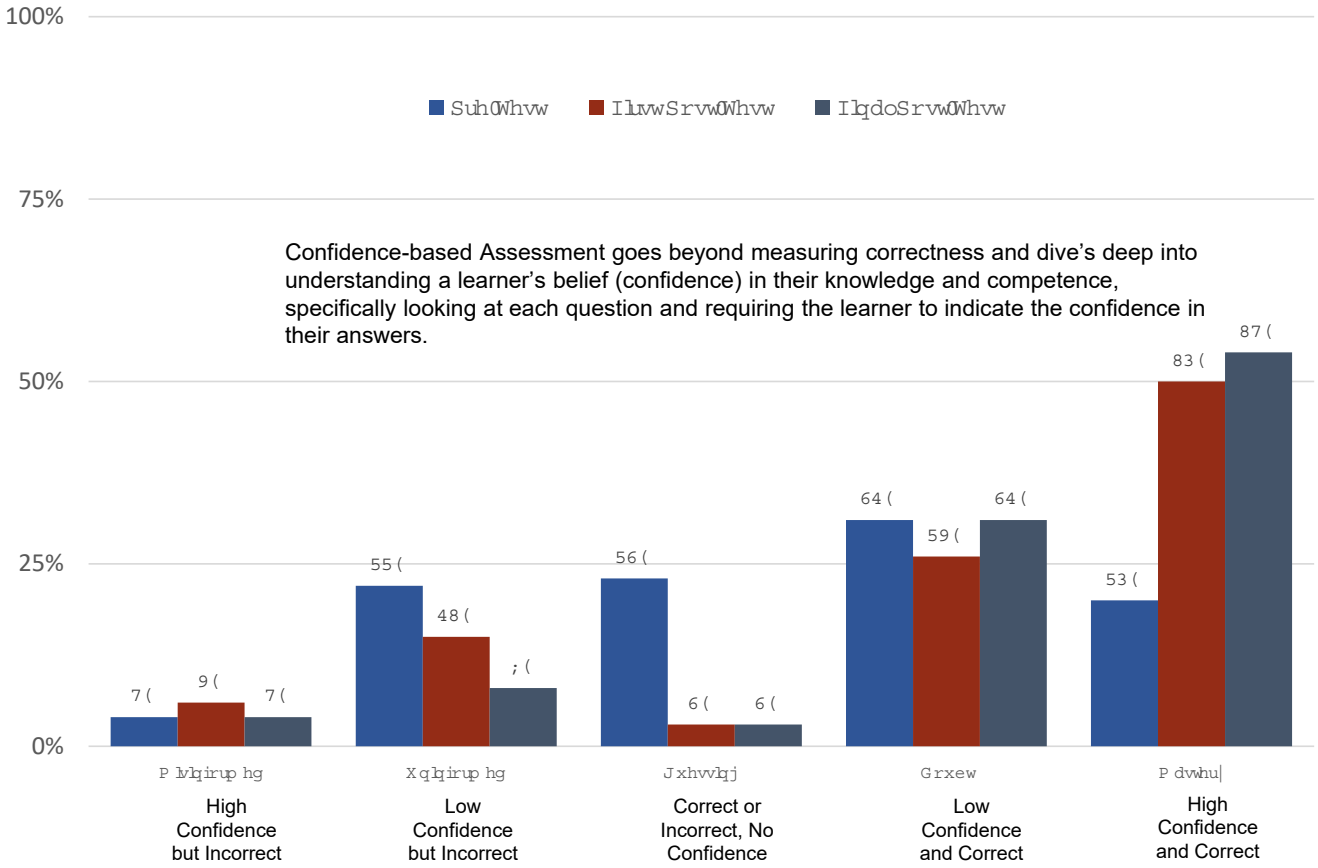
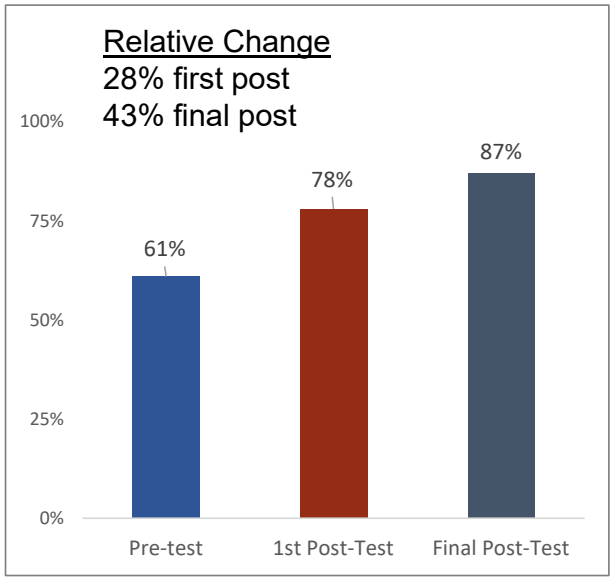
Final Outcomes Summary: Online Enduring

Level 3 & 4: Knowledge and Competence – Confidence-Based Assessment



n=409
Paired Tests

Aggregate Assessment Scores



154% — **Rise in Mastery**
Relative Increase in Learners who show **High Confidence** and **Correctness**

1.22 — **Average Number of Post-Test Attempts**

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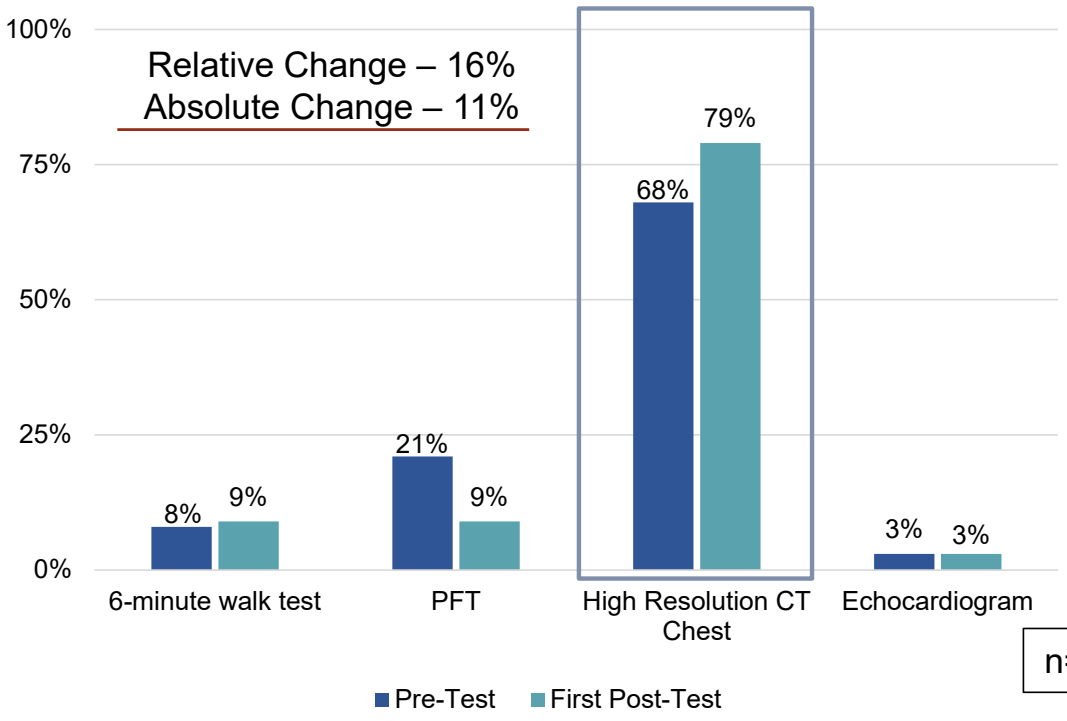
Final Outcomes Summary: Online Enduring

Level 3 & 4: Knowledge and Competence –Assessment Questions

Question 1: What is the most effective diagnostic strategy to identify and diagnose CF-ILD with progressive pulmonary fibrosis?

Learning Objective: Utilize effective diagnostic strategies to identify and diagnose CF-ILD with PPF



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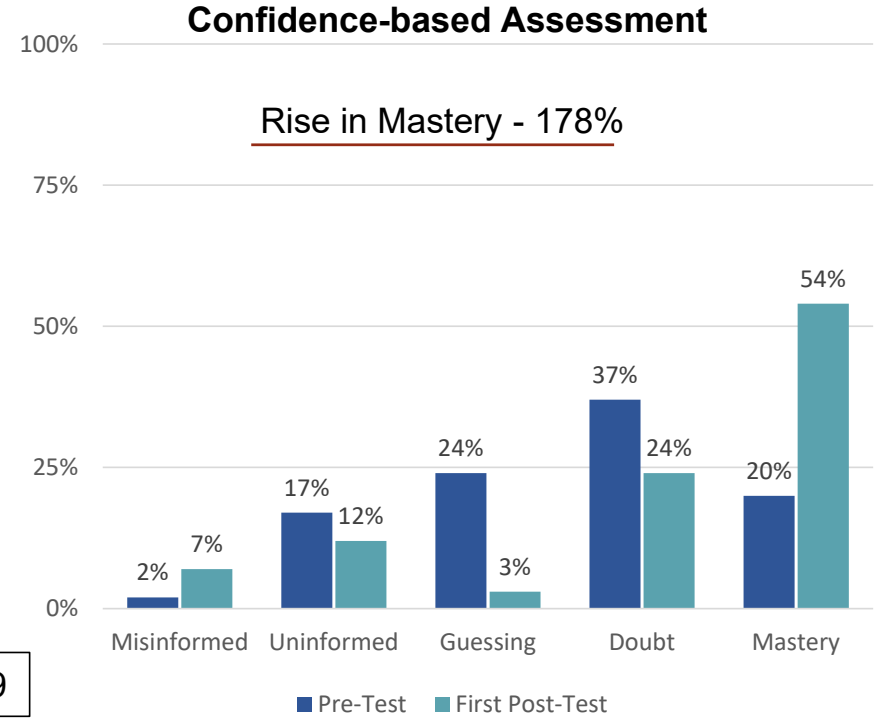

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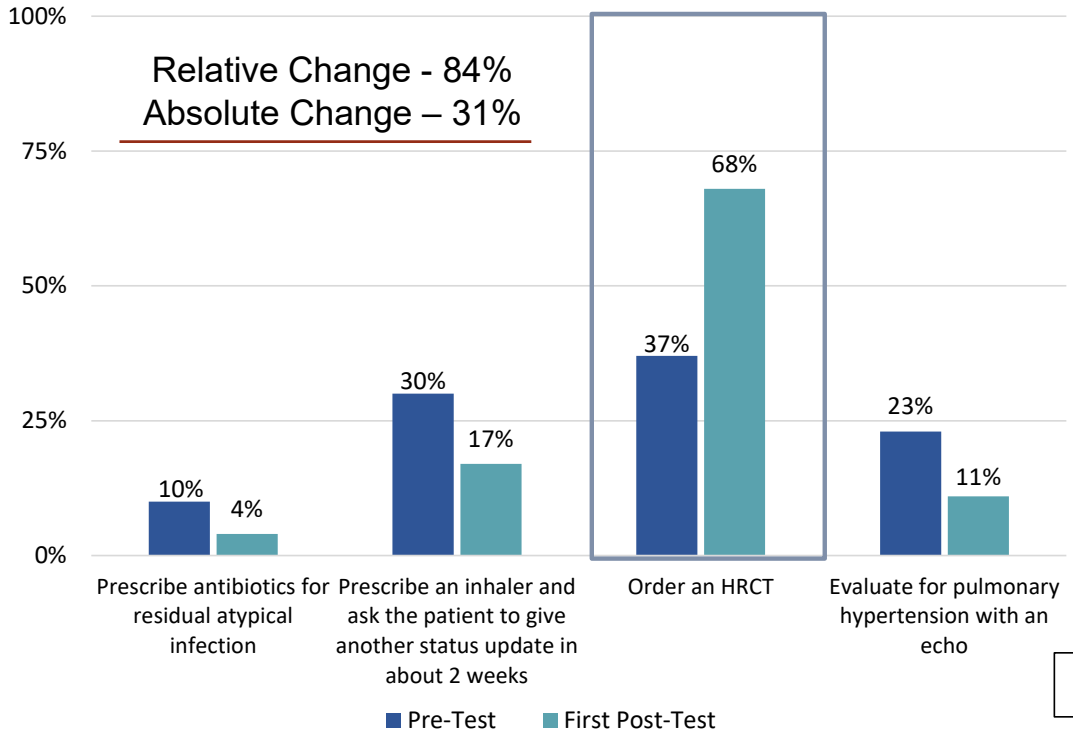
Final Outcomes Summary: Online Enduring

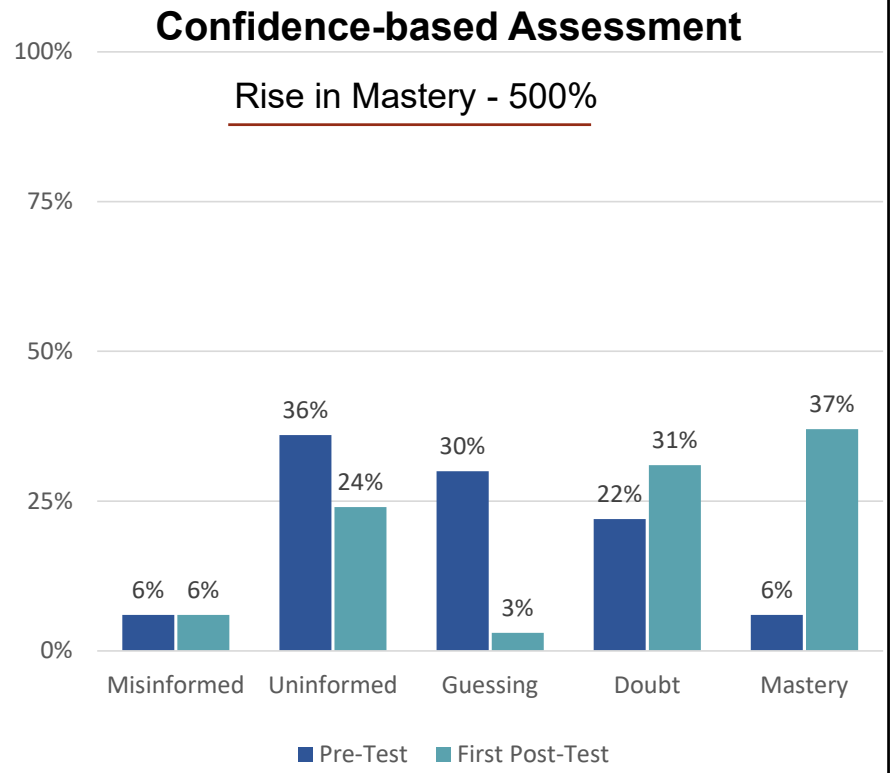
Level 3 & 4: Knowledge and Competence –Assessment Questions

Question 2: A patient with ILD calls into your office reporting three weeks of worsening shortness of breath. There is no current fever, but the patient feels like it started with "a cold." The patient has noticed lower oxygen levels with walking his dog for the past week. He denies other systemic symptoms. The air quality has been extremely poor, and the patient suspects that this may be affecting his breathing. Your next course of action should be:

Learning Objective: Identify signs, symptoms, risk factors, and the clinical characteristics associated with CF-ILD with PPF



n=409

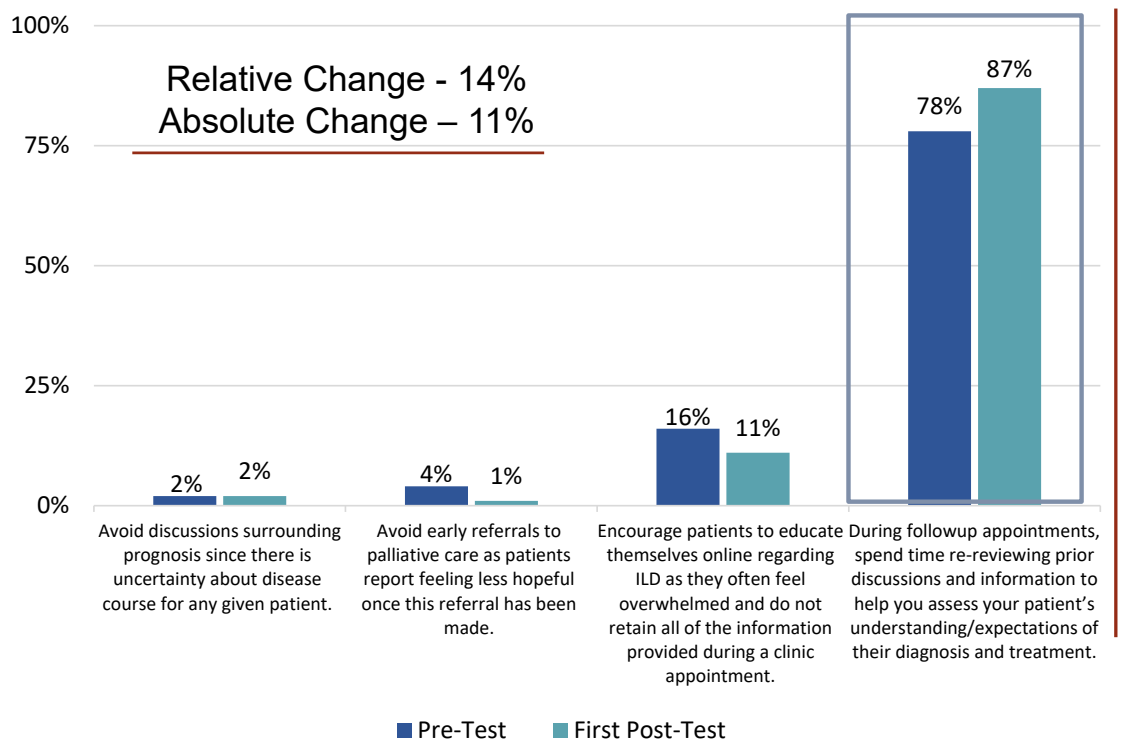


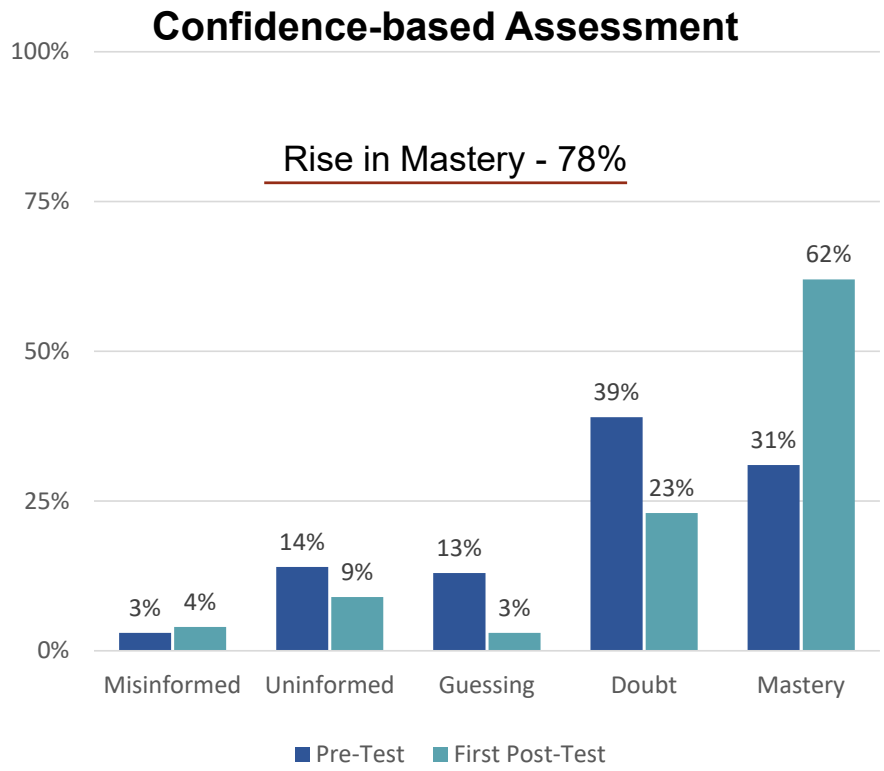
Final Outcomes Summary: Online Enduring

Level 3 & 4: Knowledge and Competence –Assessment Questions

Question 3: Which of the following statements reflects an effective strategy for communicating with a patient with CF-ILD?

Learning Objective: Apply effective communication strategies to improve healthcare provider and patient engagement





n=409

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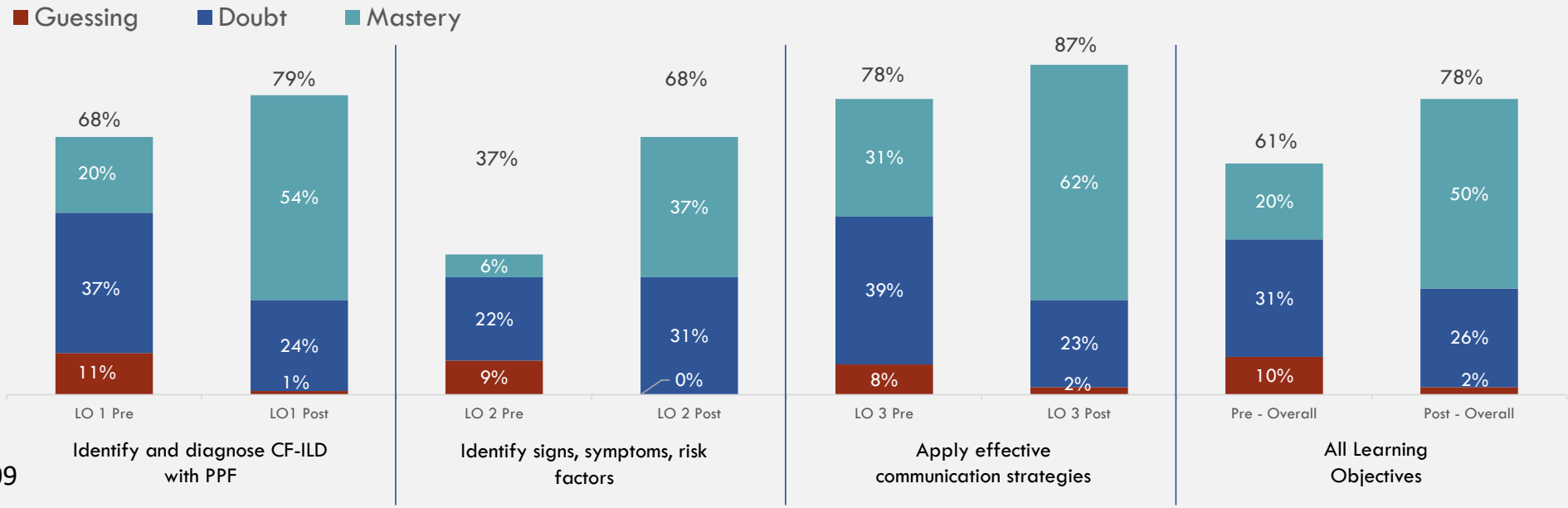
Final Outcomes Summary: Online Enduring

Level 3 & 4: Knowledge and Competence –CBA by Correctness



n=409

Insights

The chart shows changes in correctness and corresponding confidence-based assessment categories for each module and in total for the curriculum. All modules showed significant improvements in baseline pre- to first post-test as well as improvements in confidence across each module, with increases in Mastery (correctness with high confidence). One of the key elements in utilizing CBA is identifying learners who are guessing on the tests. These learners demonstrate a lack of knowledge or competence and can impact data significantly. For this initiative, there was a decrease for each learning objective on learners who were guessing, with the overall amount decreasing by 80%.

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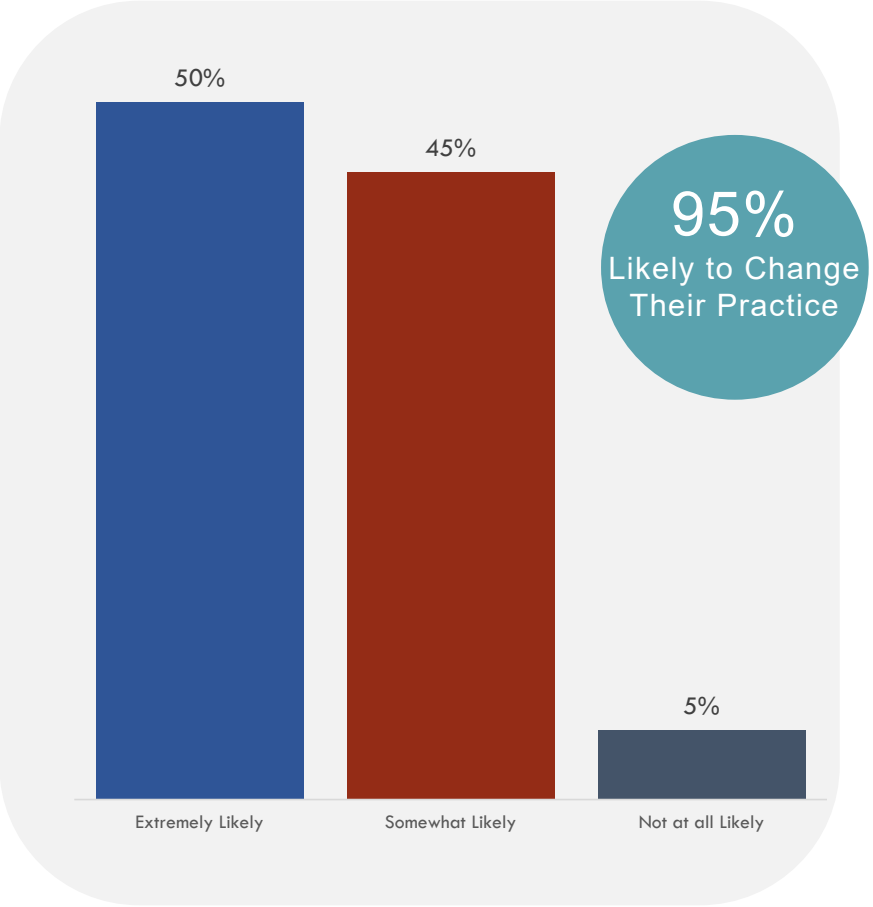
Final Outcomes Summary: Online Enduring

Level 4 Outcomes: Competence

How likely are you to make changes in your practice?



n=334

What changes will you incorporate into your practice as a result of what you learned?

- Consider this condition with progressive worsening with shortness of breath.
- Order high resolution CT scan sooner.
- More aggressive diagnostic screening/testing.
- Narrowing down my diagnosis specific to ILD.
- Dealing differently with acute exacerbation of CF-IPF and initial diagnostic approach.
- Making sure ILD patients follow up every 3 months. Ensuring they receive a 6MWT and PFTs every 3-4 months to assess for disease progression.
- Better communication with patients about their disease expectations.
- Incorporate more education during follow-up visits.
- More in-depth review of last visit, including radiographs or lab results.

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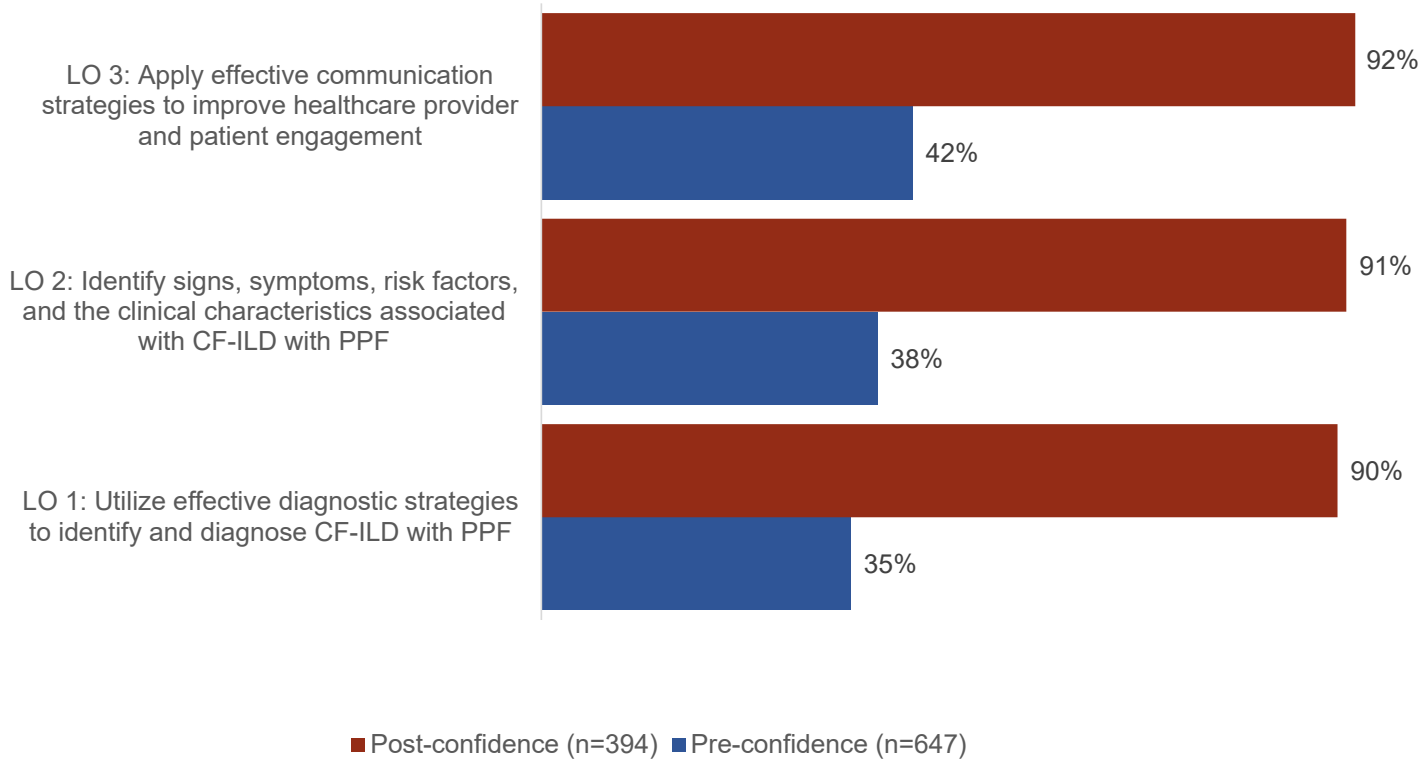
Final Outcomes Summary: Online Enduring

Level 4 Outcomes: Competence

After having participated in this activity, how confident are you in your ability to:
(% Very confident / Somewhat confident)



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Final Outcomes Summary: Live Webinars

Level 5 Outcomes: Performance

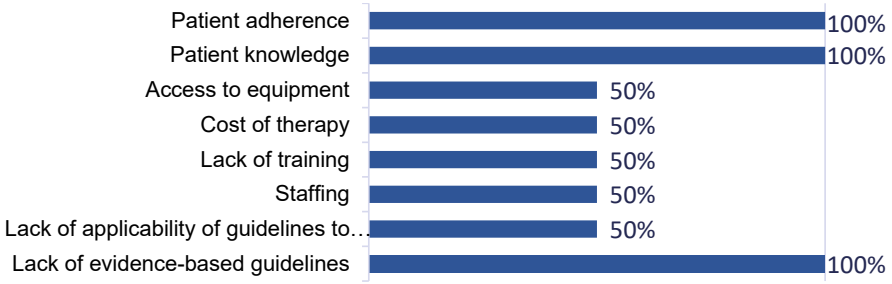
45-Day Follow-up Survey

While the response rate to the follow-up survey was low with only two respondents, their responses indicate that participation in the activity has made a positive impact on their practice and their patients.

What change(s) have you incorporated into practice as a result of this activity?

"Early detection of diagnosis."
"Initiate early treatment."

Barriers to optimal patient care encountered in practice since the activity



Reported their patients have benefited from the information they learned in the activity

The activity provided information, tools and resources to address the barriers to optimal patient care that I have faced since participating.

Final Outcomes Summary: Online Enduring

Evaluation Survey Results

Key Takeaways

- Communicating effectively and the importance of follow up and repeat testing to assess for progression of disease
- Close follow-up of patients and evaluation for progression of disease
- Evaluating for progression on a regular basis and obtaining a 6 MWT at each visit
- Importance of interdisciplinary approach to communicating with patients
- Looking for ground glass patterns on chest radiographs
- Strategies for communicating with patients
- Going over diagnosis and treatment plan each time you interact with patient

Future Topics

- HRCT features
- Different types of antifibrotic therapies and the risks/benefits of starting therapy
- More clinical case-based activities
- Radiological differences and treatment of ILD
- Anti-fibrotics in IPF and PPF
- Therapies on the horizon for ILD
- More guidance on educating patients

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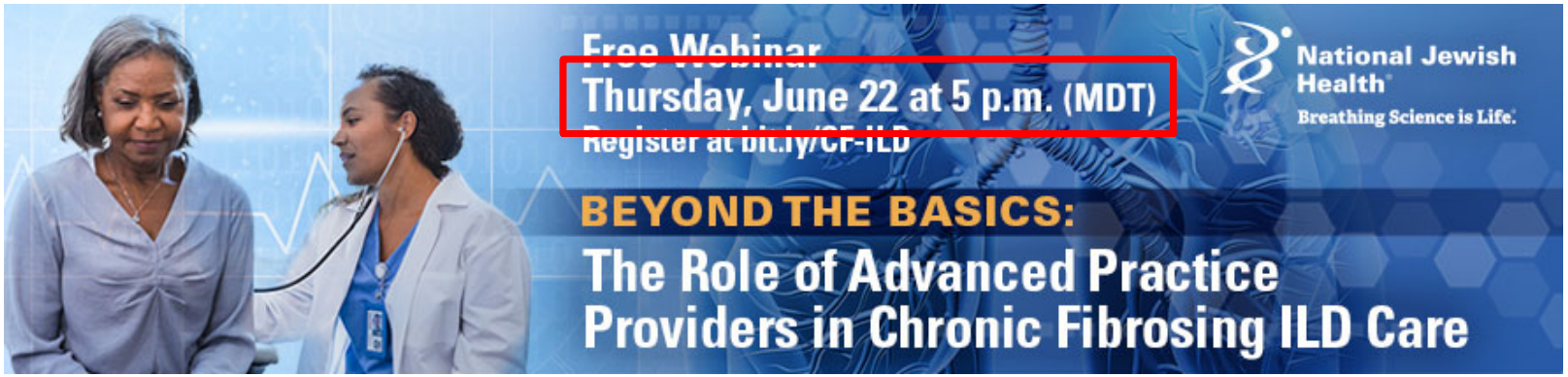
Final Outcomes Summary

Live Webinars



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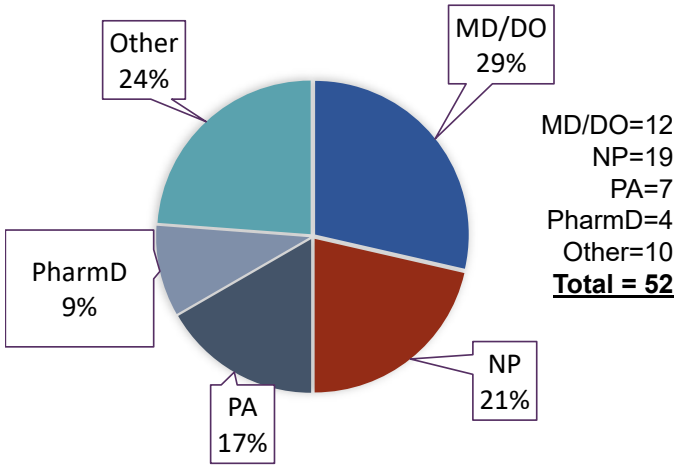
Final Outcomes Summary: Live Webinars

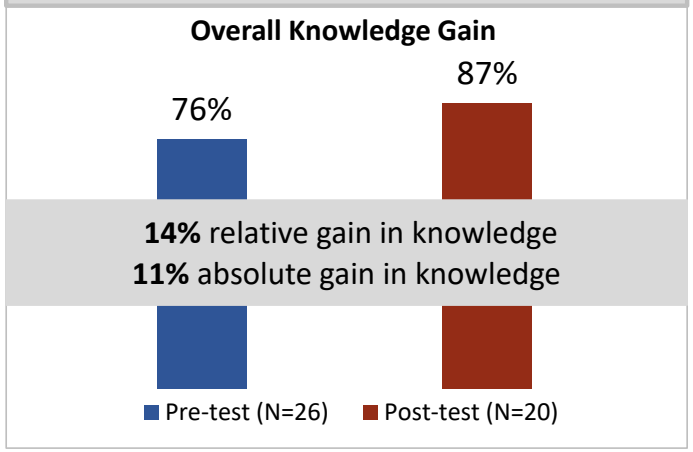
Educational Impact Summary

Participation



MD/DO=12
NP=19
PA=7
PharmD=4
Other=10
Total = 52

Learning Gain Across Objectives



Evaluation

Met their educational needs **(100%)**

Reinforced or improved current skills **(100%)**

N=20

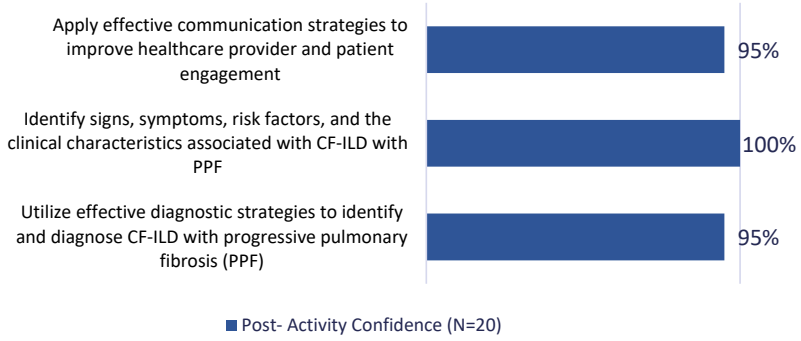
Improved ability to treat patients **(100%)**

90%

N=19

Evaluation respondents reported gaining strategies for overcoming barriers to optimal patient care

Confidence Across Objectives



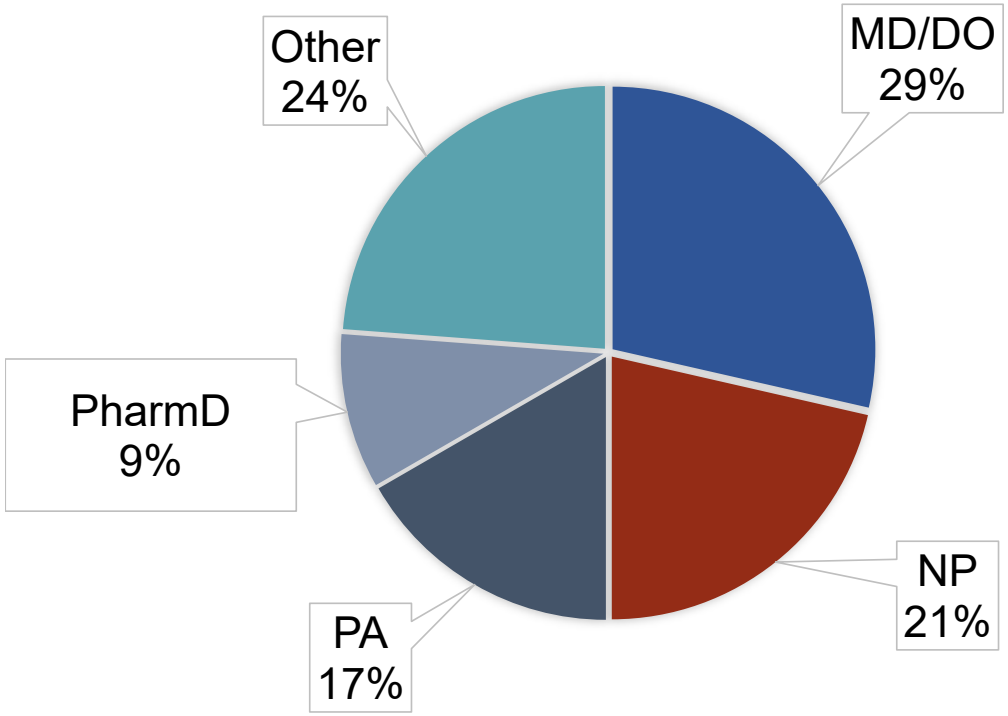
100%

N=19

Evaluation respondents intend to make changes to practice as a result of the activity

Final Outcomes Summary: Live Webinars

Level 1 Outcomes: Participation (Degree)



Degree	Total
MD/DO	12
NP	19
PA	7
PharmD	4
Other	10
Total Completers	**52**

73% of completers were physicians and advanced practice providers

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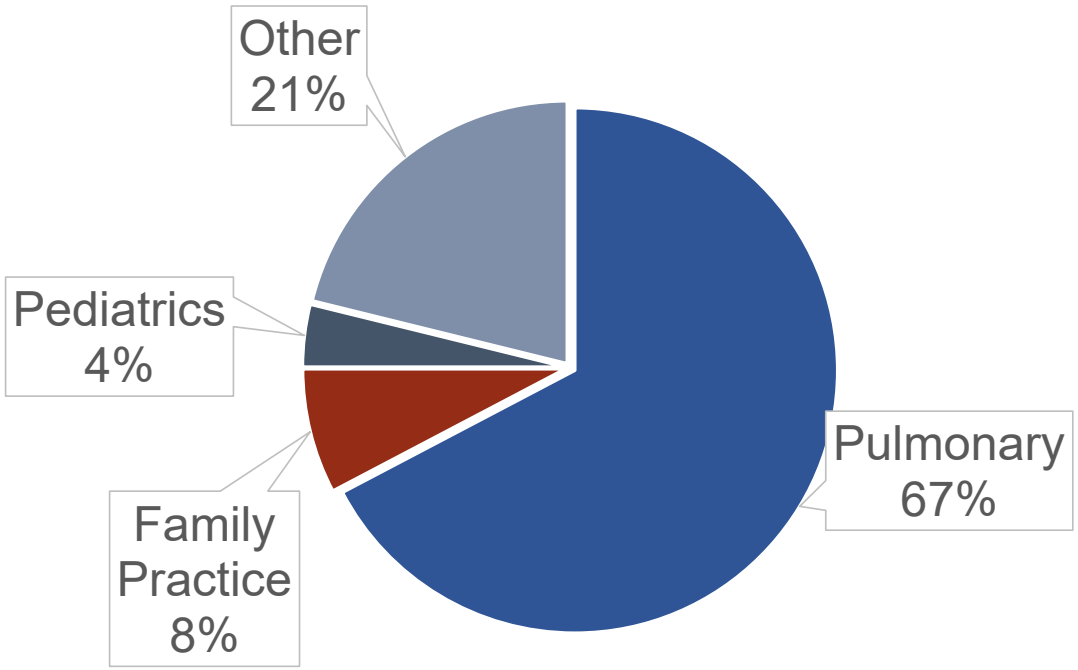
Final Outcomes Summary: Live Webinars

Level 1 Outcomes: Participation (Specialty)



Degree	Total
Pulmonary	35
Family Practice	4
Pediatrics	2
Other	11
Total Completers	**52**

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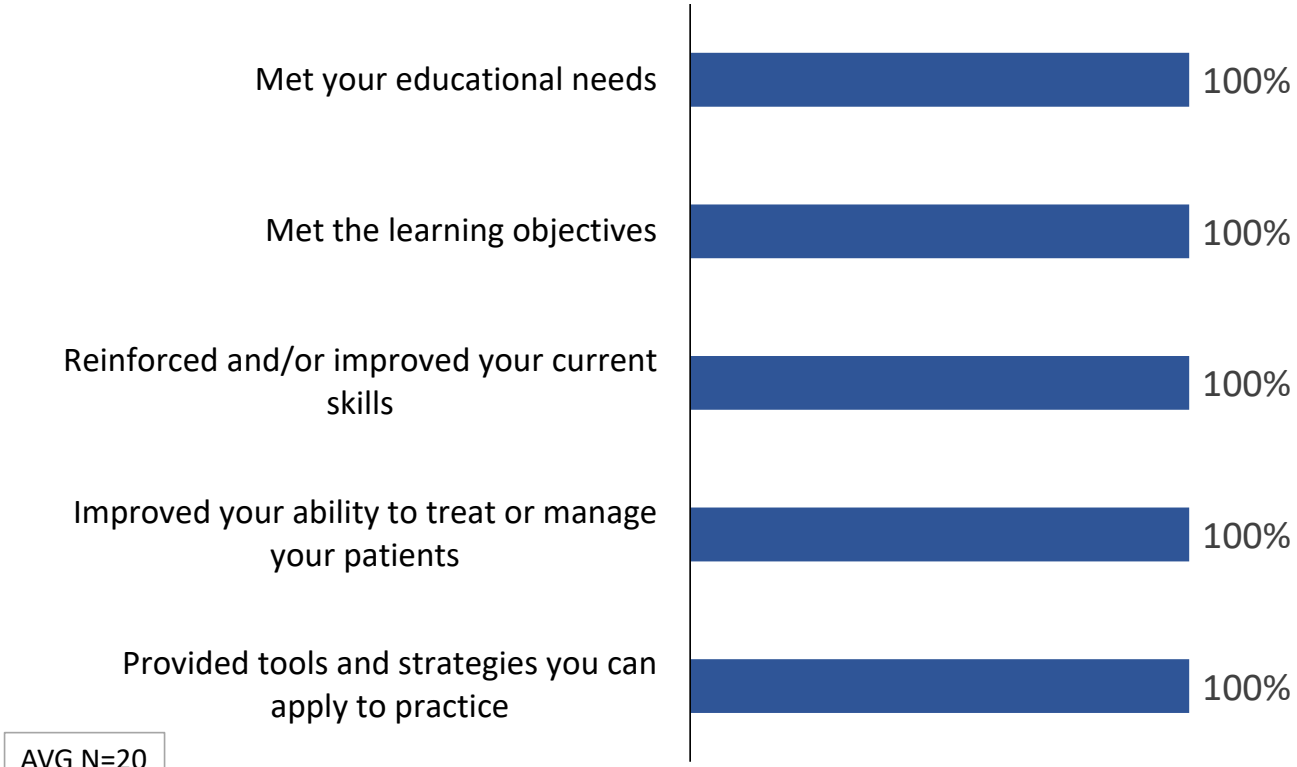
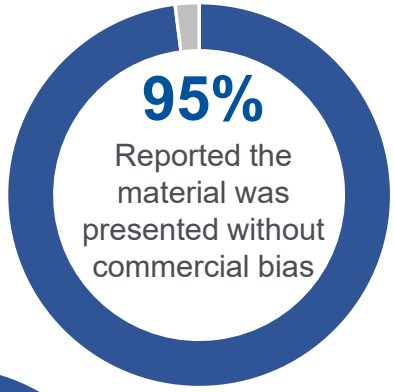
Final Outcomes Summary: Live Webinars

Level 2 Outcomes: Satisfaction

Evaluation respondents reported they "Strongly Agree" or "Agree" that the activity:



AVG N=20



N=20

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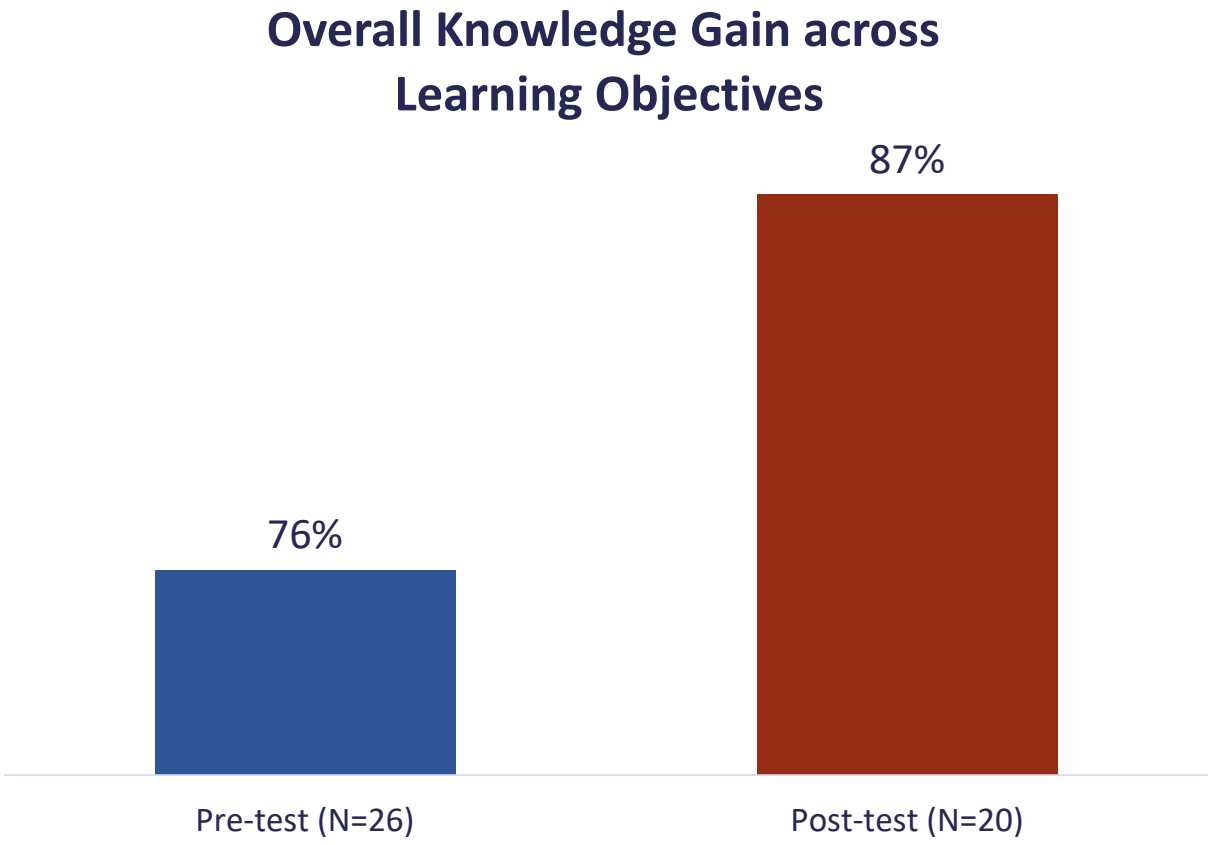
Final Outcomes Summary: Live Webinars

Level 3 & 4 Outcomes: Knowledge and Competence



14% Overall Relative Knowledge Gain

11% Overall Absolute Knowledge Gain

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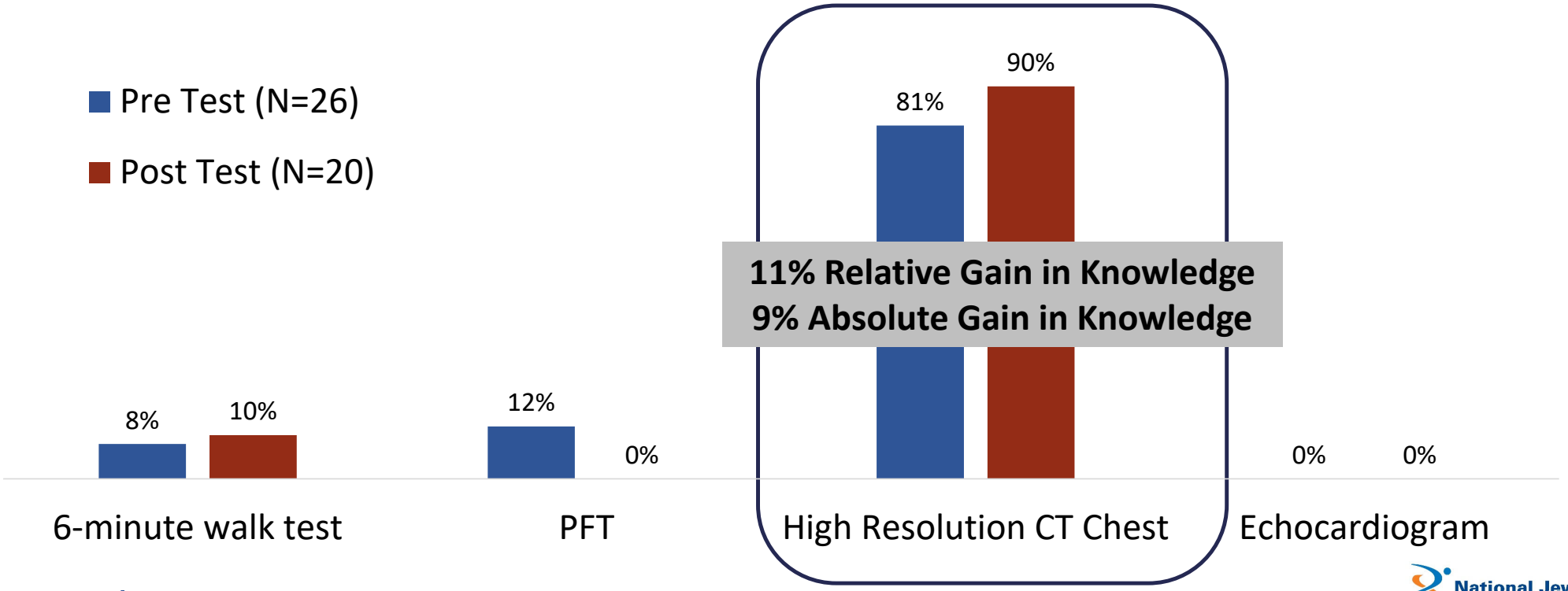
Final Outcomes Summary: Live Webinars

Level 3 & 4 Outcomes: Knowledge and Competence

Learning Objective: *Utilize effective diagnostic strategies to identify and diagnose CF-ILD with PPF.*

Question 1: What is the most effective diagnostic strategy to identify and diagnose CF-ILD with PPF?



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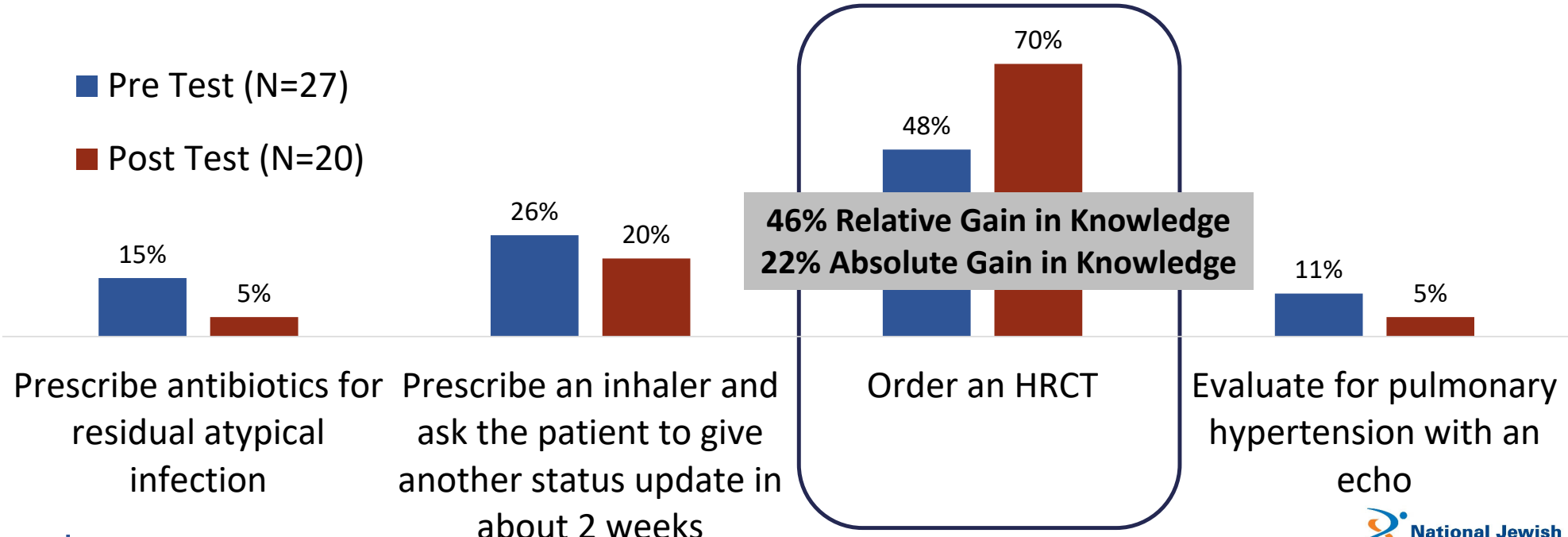
Final Outcomes Summary: Live Webinars

Level 3 & 4 Outcomes: Knowledge and Competence

Learning Objective: *Identify signs, symptoms, risk factors, and the clinical characteristics associated with CF-ILD with PPF.*

Question 2: A patient with ILD calls into your office reporting three weeks of worsening shortness of breath. There is no current fever, but the patient feels like it started with "a cold". The patient has noticed lower oxygen levels with walking his dog for the past week. He denies other systemic symptoms. The air quality has been extremely poor, and the patient suspects that this may be affecting his breathing. Your next course of action should be:



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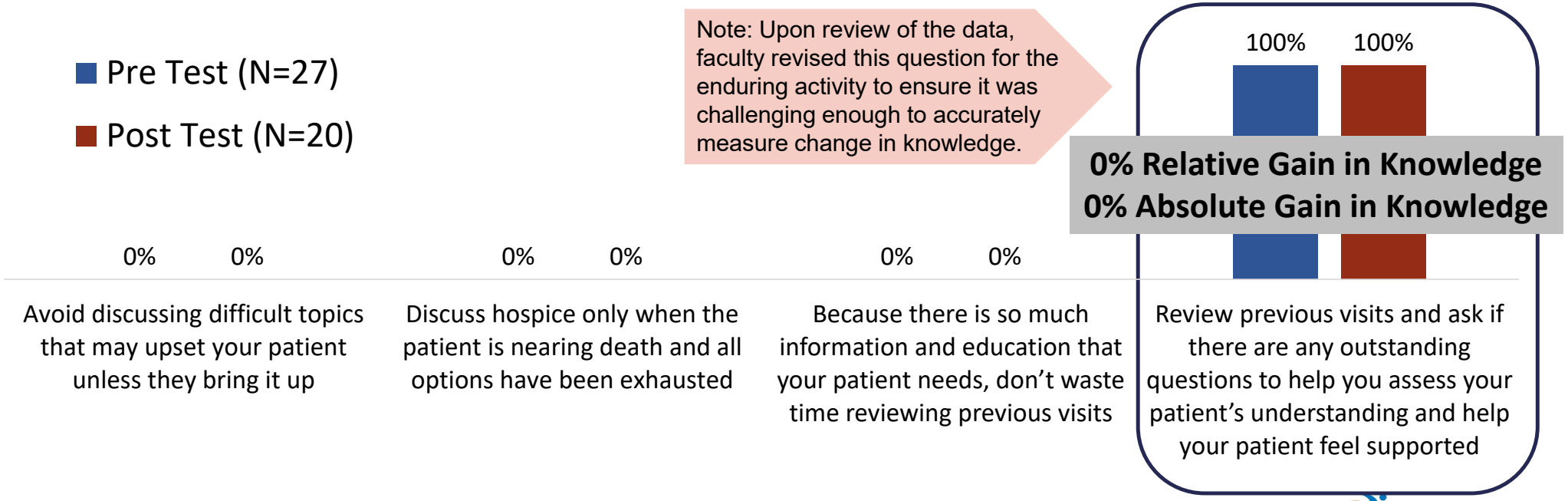
Final Outcomes Summary: Live Webinars

Level 3 & 4 Outcomes: Knowledge and Competence

Learning Objective: *Apply effective communication strategies to improve healthcare provider and patient engagement.*

Question 3: Which of the following is the most effective strategy for communicating with a patient with CF-ILD?



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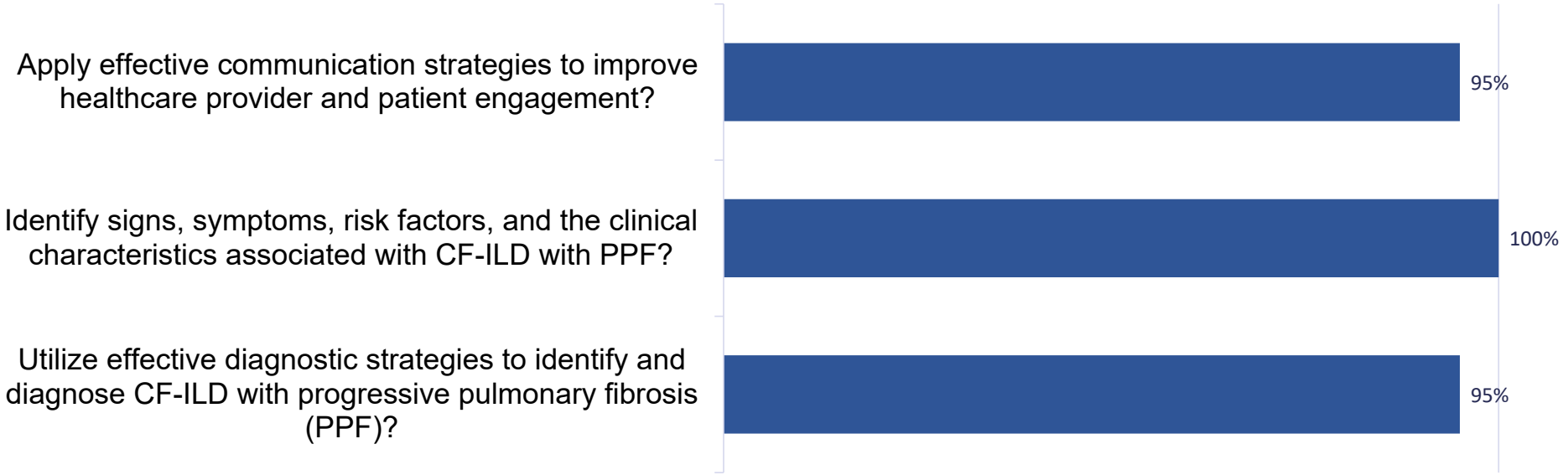
Final Outcomes Summary: Live Webinars

Level 4 Outcomes: Competence

Evaluation respondents reported their confidence as it relates to the learning objectives after the activity ("Very Confident" to "Somewhat Confident")



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Final Outcomes Summary: Live Webinars

Level 4 Outcomes: Competence

What change(s) will you incorporate into your practice as a result of what you learned in the activity?

- Identifying patients sooner
- Better understanding of CT Chest findings
- Earlier follow-up with HRCT for symptom change
- Order more HRCTs when appropriate
- Use more CT imaging
- Broadening of autoimmune testing
- Incorporating more 6MWT and autoimmune screening
- I plan on increasing my frequency of PFTs for CF-ILD patients
- I will follow evidence-based protocols for my patients
- Will change my management and intervention strategies
- Improving my discussion with patients

100%

N=19

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

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Final Outcomes Summary: Live Webinars

Level 5 Outcomes: Performance

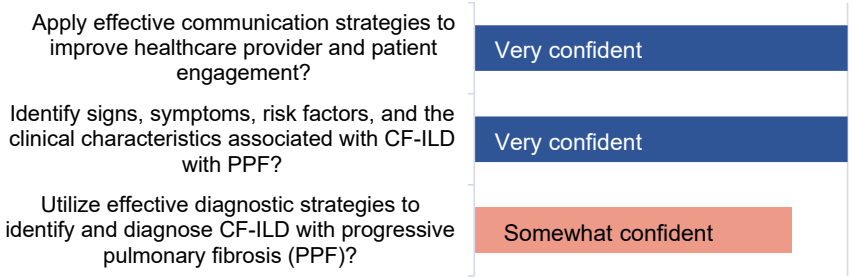
45-Day Follow-up Survey

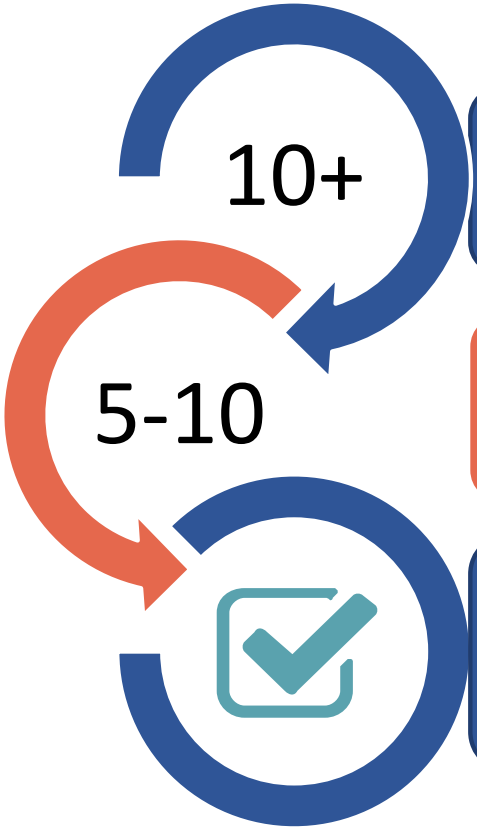
While the response rate to the follow-up survey was low with only one respondent, their responses indicate that participation in the activity has made a positive impact on their practice and their patients.

What change(s) have you incorporated into practice as a result of this activity?

"Incorporated different diagnostic strategies into patient evaluation."

Confidence as it relates to the learning objectives 45-days post-activity





Of my patients have benefited from the information I learned in the activity

Patients seen per week who are affected by CF-ILD

The activity provided information, tools and resources to address the barriers to optimal patient care that I have faced since participating.

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Final Outcomes Summary: Live Webinars

Evaluation Survey Results

Key Takeaways

- CT imaging is critical
- Follow evidence-based protocols
- Improvement in analyzing imaging
- Treatment strategies

Future Topics

- More ESG topics
- Rheumatological/Serological work up
- Terminal/hospice care
- Treatment options and when to start
- Treatment strategies

"This is a great lecture that is very informative. I really liked the interaction with the speakers. It made the topic more interesting."

- Learner Feedback

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Final Outcomes Summary

Accreditation Details

National Jewish Health is accredited with Commendation 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.

National Jewish Health designates the live and enduring activities for a maximum of 0.75 *AMA PRA Category 1 Credit*™.

ACCME™
ACCREDITED WITH COMMENDATION

National Jewish Health®