



39th

THE ANNUAL

NATIONAL JEWISH HEALTH

**PULMONARY AND ALLERGY
UPDATE**



**National Jewish
Health[®]**

Science Transforming Life[®]

**OUTCOMES SUMMARY
REPORT**

Executive Summary: Activity Details

February 1-4, 2017 Keystone, Colorado

The National Jewish Health Annual *The Pulmonary and Allergy Update* highlighted insights and recent advances in pulmonary medicine, asthma, allergy and immunology presented by faculty from the leading respiratory hospital in the nation. Participants had the opportunity to network with colleagues and nationally recognized experts, and learn the latest updates on management and treatment options for patients.

Features included:

- ✓ Workshops and small-group sessions provided great opportunities to discuss key issues and interesting cases with colleagues and National Jewish Health faculty and staff
- ✓ Interactive didactic presentations
- ✓ Case-based learning
- ✓ Automated Response System (ARS)

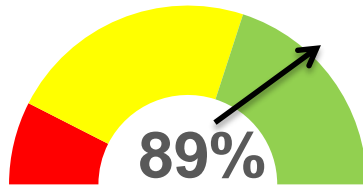


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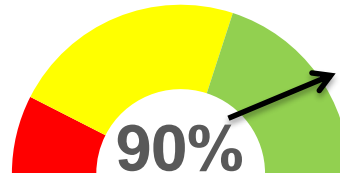
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PULMONARY AND ALLERGY UPDATE

Dashboard: Activity Impact

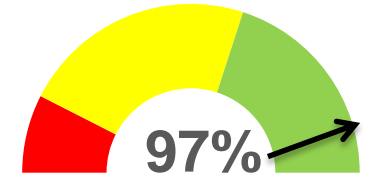
Improved Ability to Treat and Manage Patients



Enhanced Ability to Apply Learning Objectives to Practice



Intend to Make Changes to Practice



127

Learners



75%

Prescribers

14%



Nursing

Overall relative knowledge gain from pre- to post-activity



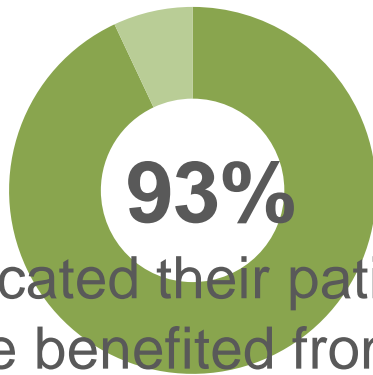
39%



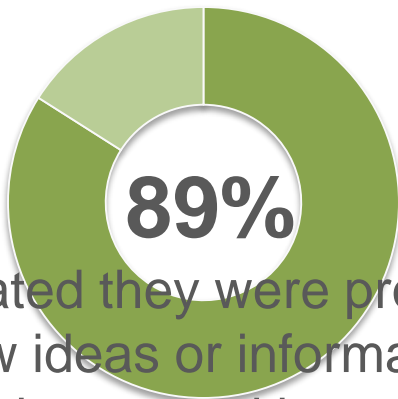
Estimated # of patients seen per month by participants

3200+

Overview: Self-Reported Performance (45-Day Survey Results)



indicated their patients have benefited from the information learned



indicated they were provided new ideas or information they have used in practice

The **top three changes** respondents have made or intend to make (for those that had not seen any patients in that target therapeutic area within the 45-day time period) are:

- ✓ Change my screening/prevention practice
- ✓ Incorporate different diagnostic strategies into patient evaluation
- ✓ Modify treatment plans

Key Lessons Learned

- Advent of biologics to treat disease.
- Newer treatment options for severe asthma.
- Asthma treatments and identifying phenotypes/pathway.
- Testing for alpha one antitrypsin deficiency.
- Importance of patient management using an individualize approach.



Needs for Further Education

- ILD workup and management
- Immunotherapy for asthma
- Oxygen therapy in COPD
- Pulmonary fibrosis
- Hereditary Angioedema

What Attendees are Saying

“Love the format!”

“Thank you for everything. Very well organized, well rounded, excellent conference. I will return!”

“Great session. I look forward to coming back next year.”

“Great experience.”

“The format works well and the meeting is very well organized.”

Learning Objectives: Asthma

1. Discuss current approaches to the management of asthma, including inhaled medication delivery.
2. Describe the characteristics of asthma that differentiate it from severe/difficult to treat asthma.
3. Describe the role of biologics as an emerging therapy, including appropriate patient profiles.
4. Outline mechanisms for patients and caregivers to use in managing asthma, including technology resources.



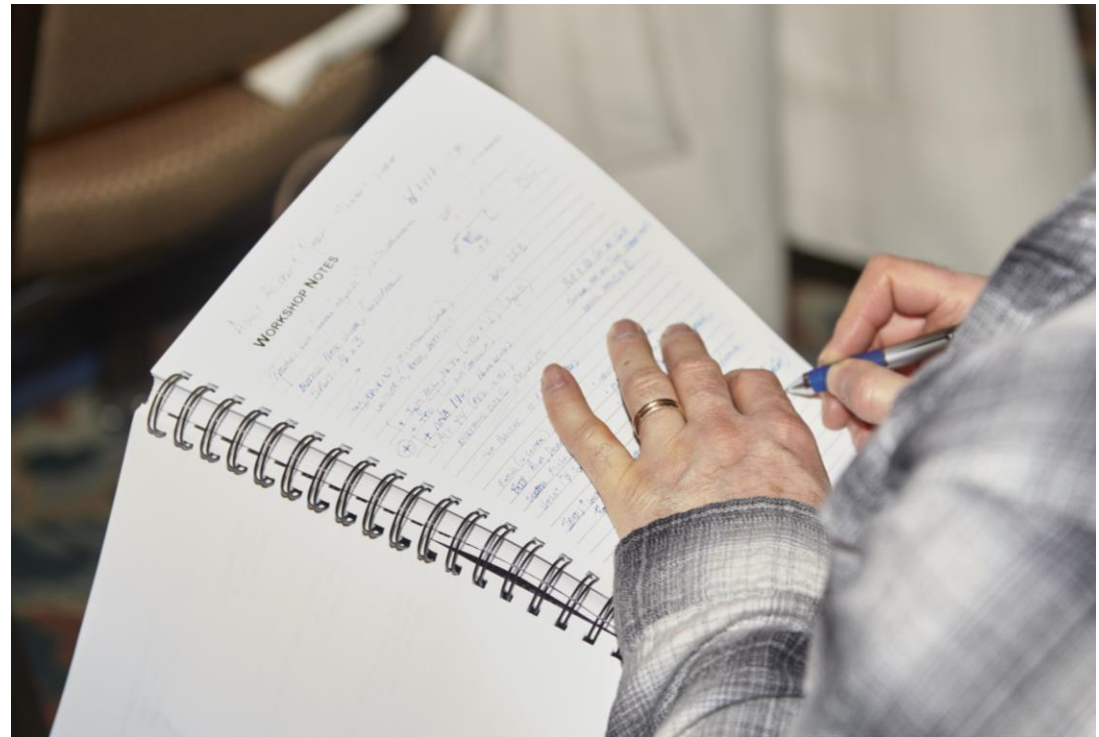
Learning Objectives: Atopic Dermatitis

1. Review therapeutic options for patients with atopic dermatitis.
2. Discuss strategies for educating patients and families on important issues related to atopic dermatitis.



Learning Objectives: COPD

1. Discuss approaches to recognition and management of COPD and Alpha-1 Antitrypsin.
2. Describe strategies to prevent exacerbations in patients with COPD.



Learning Objectives: Rheumatoid Arthritis

1. Apply recent clinical practice guidelines to the treatment of patients with rheumatoid arthritis.
2. Summarize the clinical features and laboratory findings associated with rheumatoid arthritis.
3. Determine strategies for reducing time to diagnosis and time to initiation of treatment in patients with rheumatoid arthritis.
4. Appraise the arguments and evidence for aggressive treat-to-target strategies in early rheumatoid arthritis.
5. Analyze the advantages and disadvantages of a team-based approach for the management of patients with rheumatoid arthritis.



Learning Objectives: Smoking Cessation

1. Discuss pharmacologic options for tobacco cessation.
2. Review safety considerations for e-cigarette and hookah use.



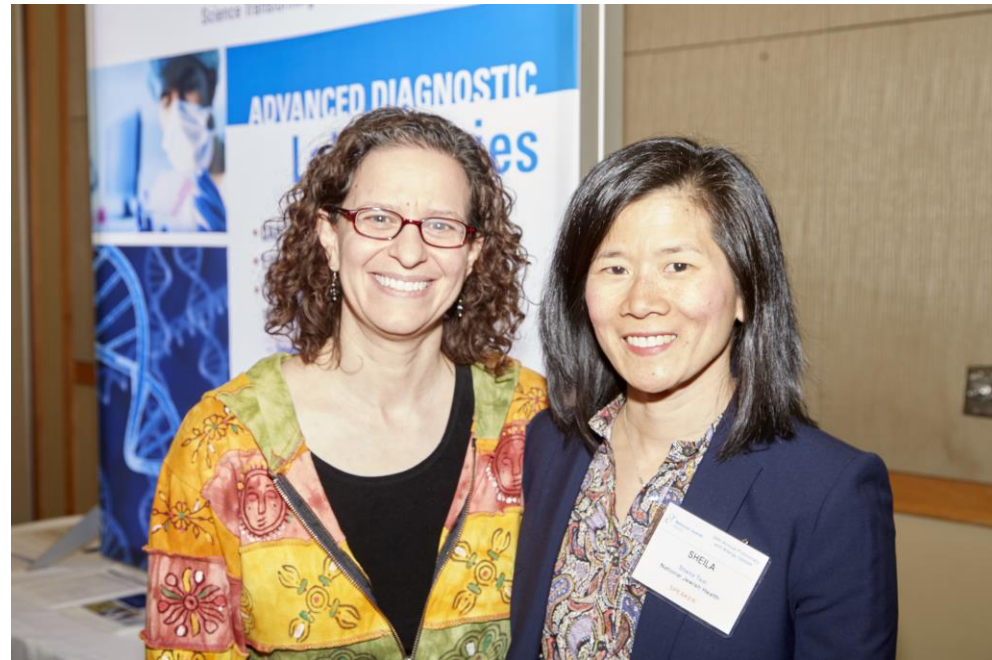
Learning Objectives: Food Allergy/Anaphylaxis

1. Discuss evaluation and management of food allergies including identification and treatment of anaphylaxis.
2. Discuss current research and controversies related to food allergies.



Learning Objectives: Sleep

1. Identify the social, functional, and clinical implications of untreated sleep disorders in adult and pediatric patients, including sleep apnea.
2. Recognize the symptoms that would benefit from a sleep center evaluation.
3. Discuss the diagnosis and management strategies for adult and pediatric sleep disorders, including sleep apnea.



Outcomes Strategy

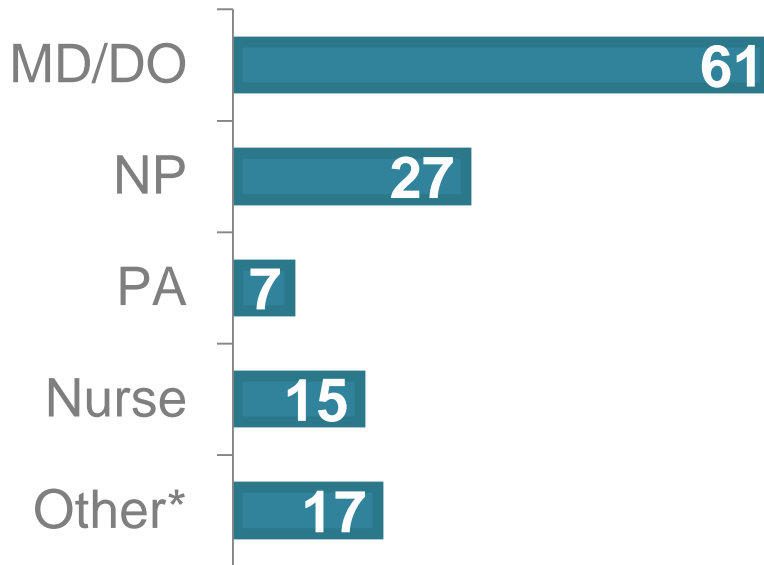
Strategies to measure participants' knowledge and competence:

- ✓ Pre-tests, post-tests
- ✓ ARS questions throughout the activity
- ✓ Evaluations
- ✓ 45-day follow up surveys



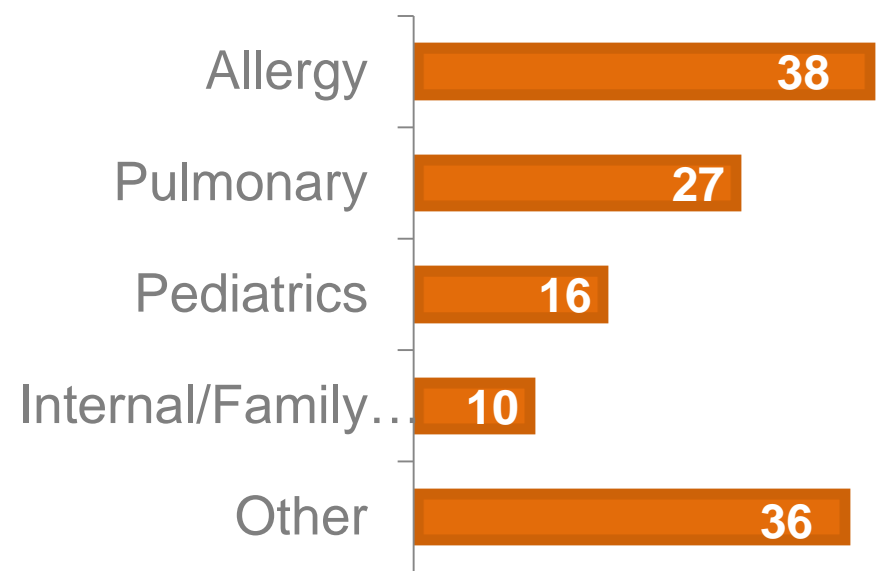
Level 1 Outcomes: Participation

ATTENDEE DESIGNATION



*Other: BA, MBA, PharmD, PhD, RD, etc.

ATTENDEE SPECIALTY

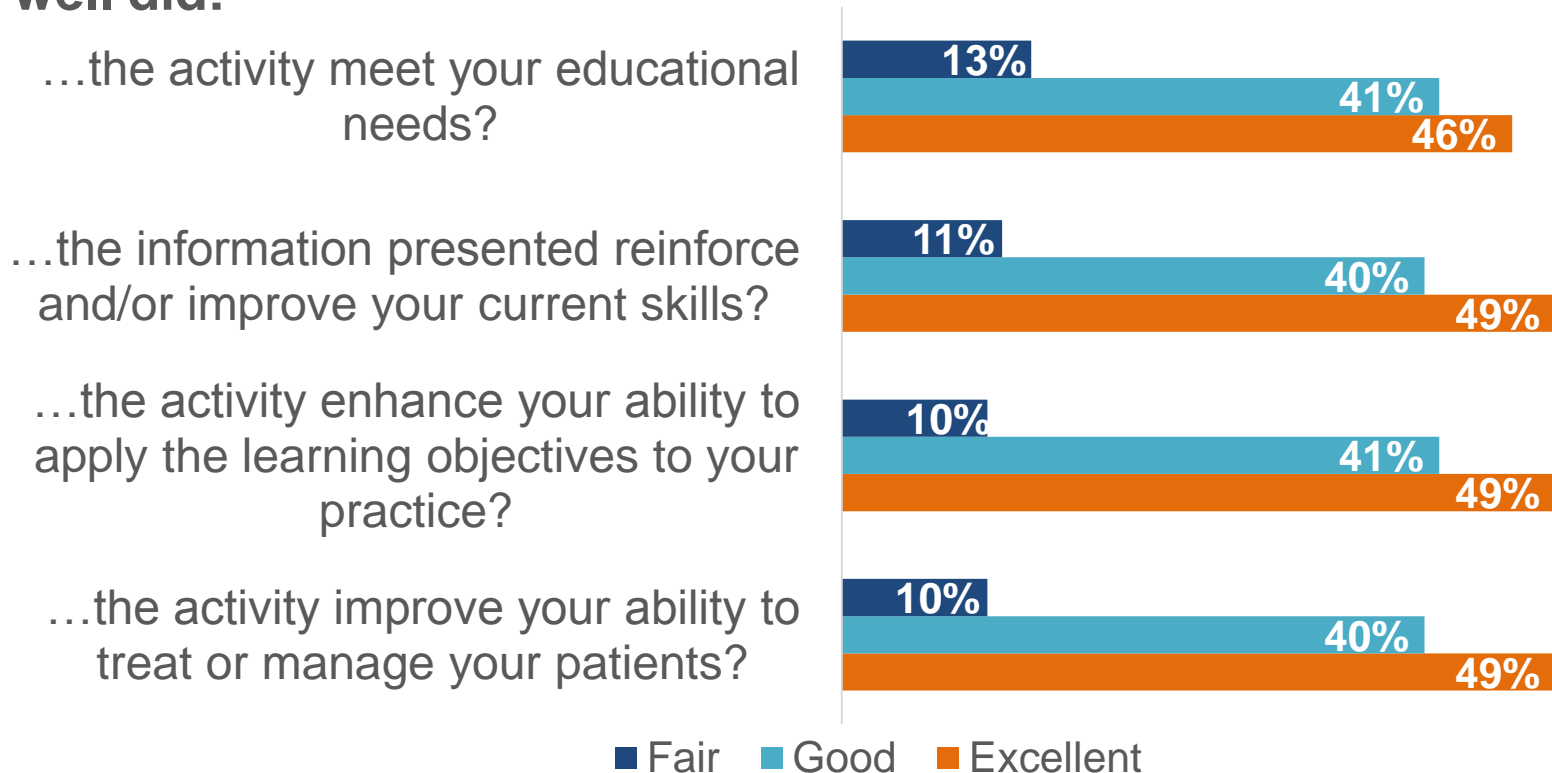


*Other: Acute Care, Critical Care and ENT

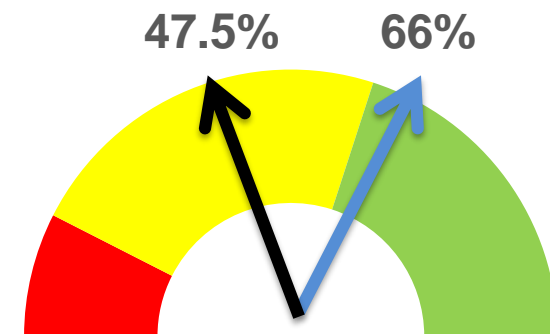
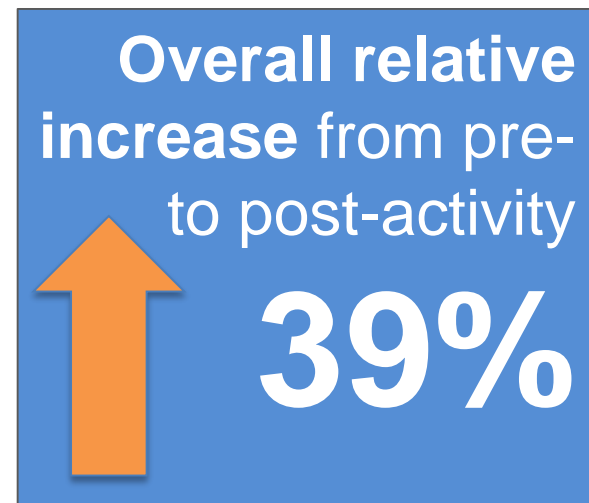
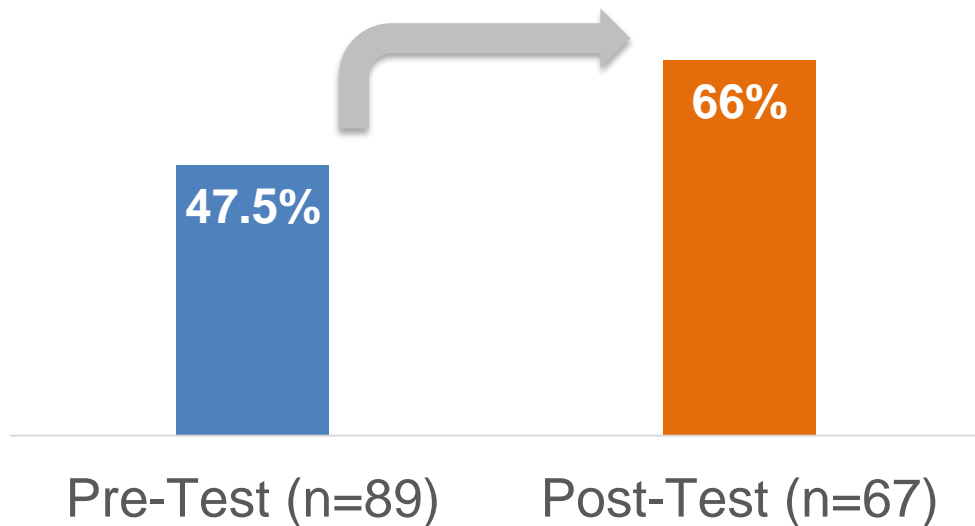
Level 2&3 Outcomes: Satisfaction/Learning

Analysis of participants responses related to educational needs

How well did:



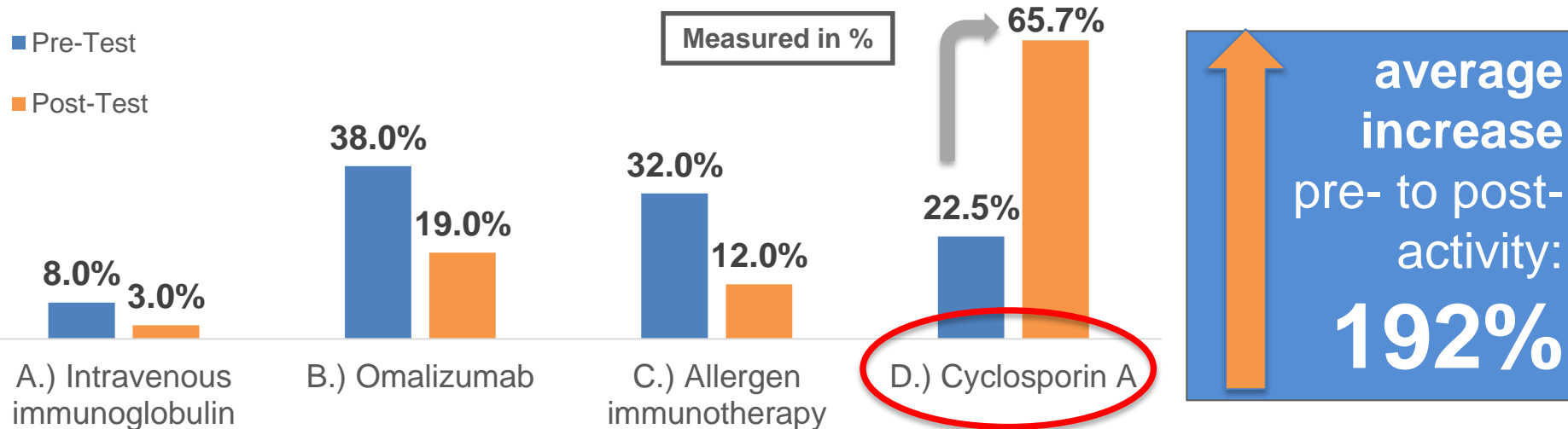
Level 3 & 4 Outcomes: Learning (Knowledge/Competence)



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

Pre/Post Test Comparison: (Addresses AD Learning Objective)

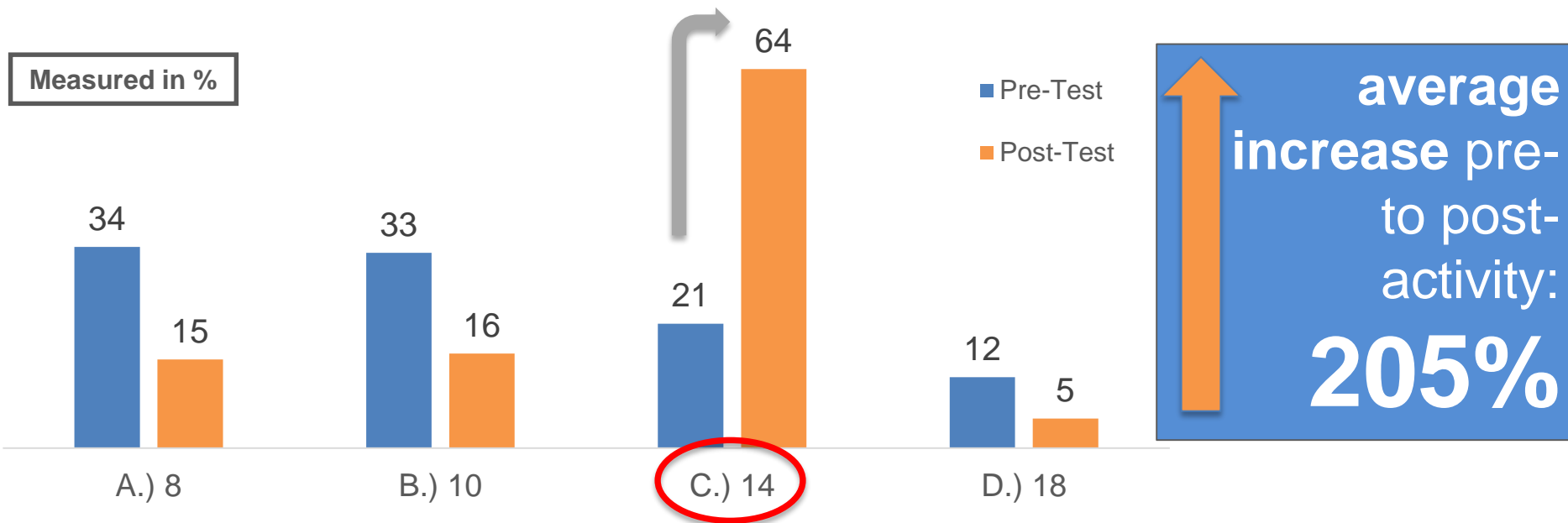
You are asked to consult on a 26 year old male veterinary student who has severe atopic dermatitis, complicated by MRSA skin infections, animal allergies and serum IgE 1100 IU/ml. In discussing therapeutic options for atopic dermatitis, the systemic therapy with the highest strength of recommendation would be:



***Best answer: D (Cyclosporin A),** For treatment of atopic dermatitis, CsA strength recommendation is A, allergen immunotherapy is B and omalizumab and intravenous immunoglobulin are considered investigational.

Pre/Post Test Comparison:(Addresses COPD Learning Objective 1)

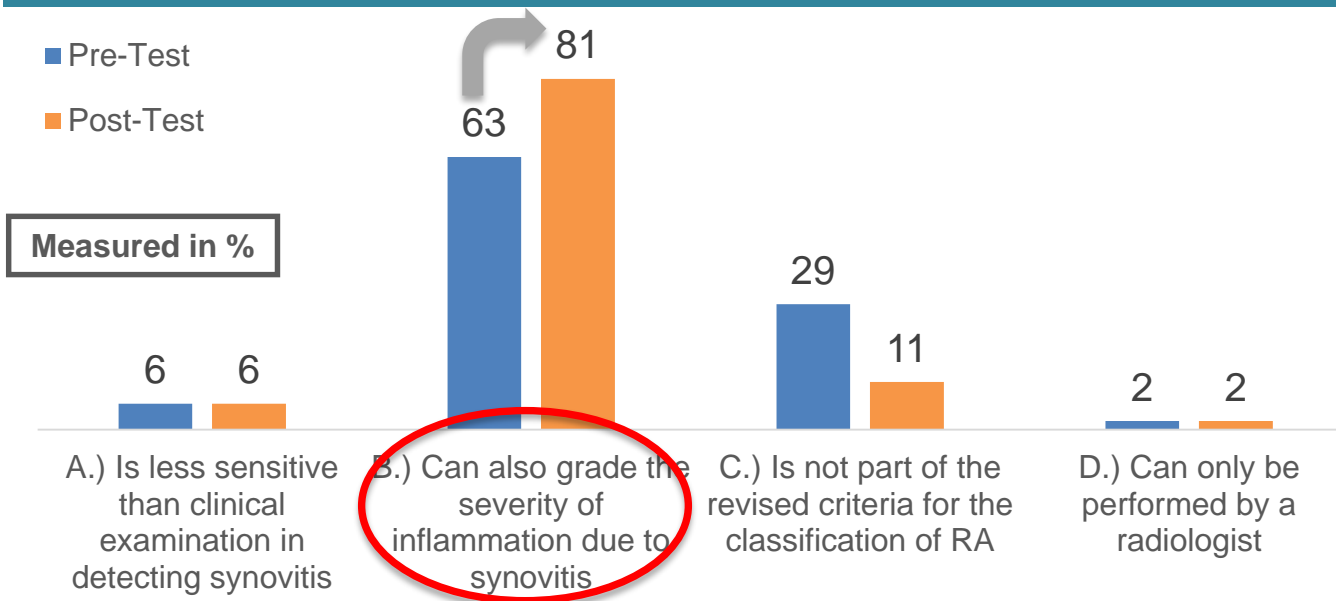
How many different brands of inhaled long-acting medications (single or combination) are approved for COPD?



***Best answer: C (14),** *There are many newer medications and many different delivery devices.*

Pre/Post Test Comparison:(Addresses RA Learning Objective 3)

Ultrasound detection of synovitis in RA:

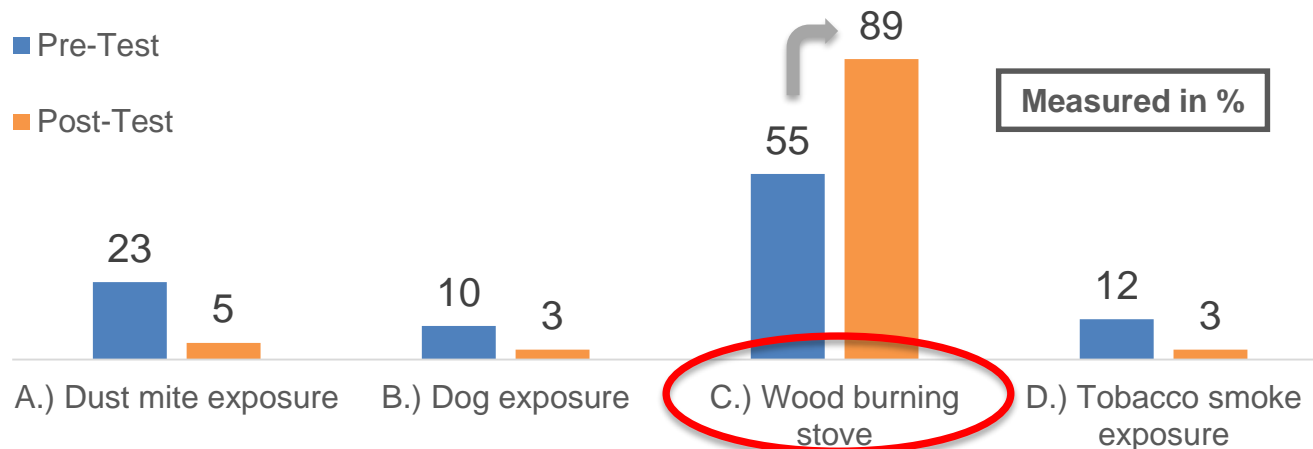


↑
average increase pre- to post-activity: 29%

Best Answer: B (Can also grade the severity of inflammation due to synovitis). *There is now a standard scoring criteria (gray Scale and by power Doppler scale) which is very sensitive for detecting active inflammation using ultrasound which is more sensitive than standard techniques such as clinical examination. Active joint swelling is a criteria for diagnosing RA and using a more sensitive technique such as ultrasound, patients can now be diagnosed earlier and started on disease modifying therapy much sooner resulting in better patient outcomes; less pain, improved function and a reduction in irreversible joint damage.*

Pre/Post Test Comparison:(Addresses Asthma Learning Objective 4)

You are seeing a 12 year old male with severe asthma. He continues to require numerous systemic steroid courses despite being on Step 5 NAEPP treatment with good adherence. He is sensitized to cockroaches, grass pollen, and cats. You start asking about environmental exposures. His grandfather smokes outside on the porch and he visits his grandfather around once per month. The family has a dog. He does not have a mattress cover or pillow case cover. The family uses an old wood burning stove as the main heat source. Of the following, which of the exposures is most likely contributing to his poorly controlled asthma?

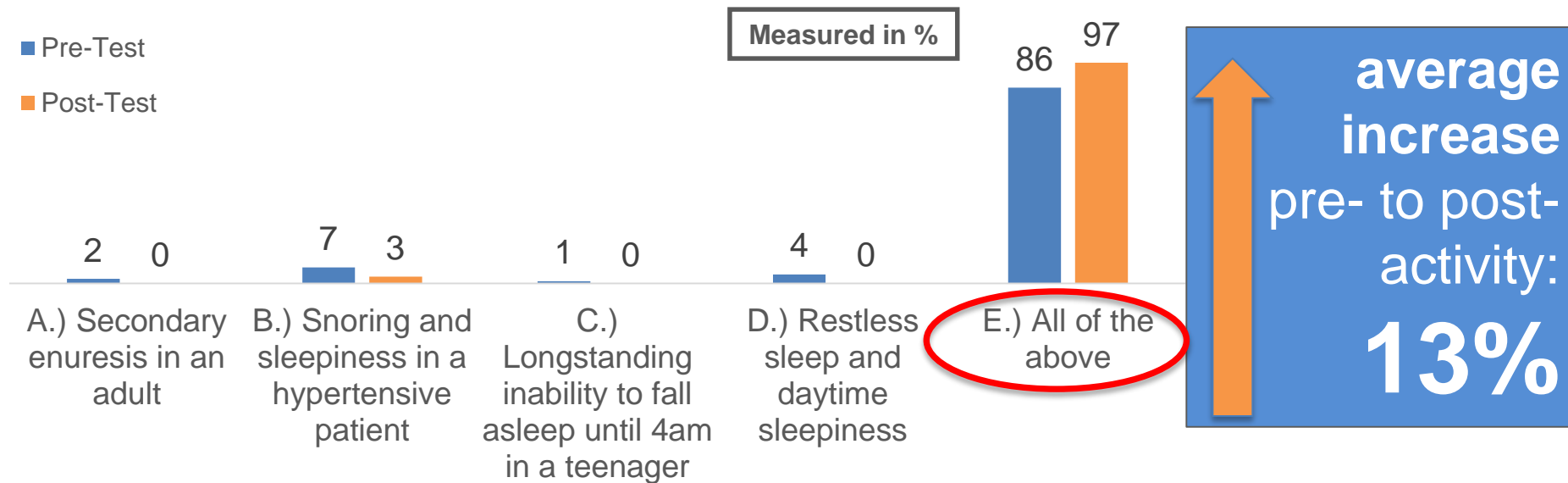


↑
average increase pre- to post-activity: 62%

Best Answer: C (Wood burning stove), especially older ones not meeting newer EPA regulations, are a large source of indoor air-pollution. Therefore, exposure to a wood burning stove is the most likely contributing factor as it is the family's main heat source.

Pre/Post Test Comparison:(Addresses Sleep Learning Objective 2)

Which of the following symptoms should prompt a sleep clinical evaluation?

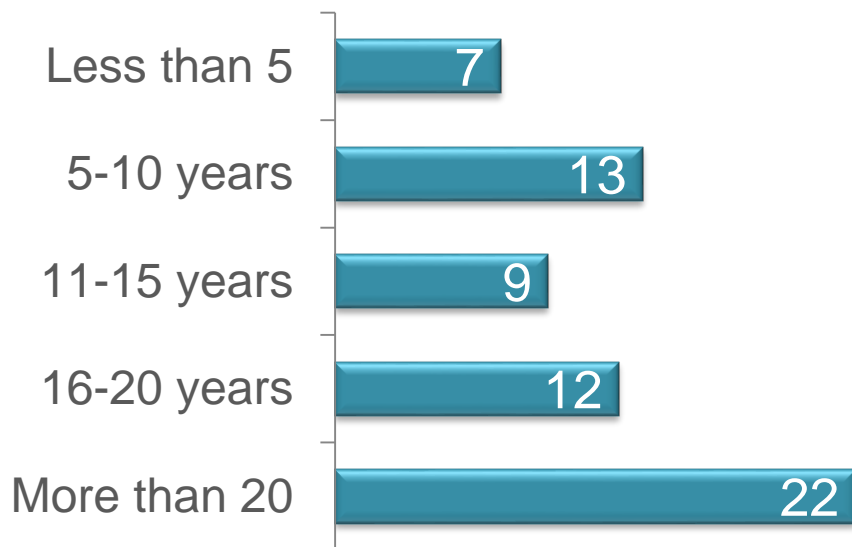


***Best Answer: E (All of the Above),** A sleep clinical evaluation may significantly benefit the patient in all the situations above. Secondary enuresis in an adult may be seen in patients with untreated obstructive sleep apnea. Snoring and sleepiness in a hypertensive patient is suggestive of untreated sleep apnea. Longstanding inability to fall asleep until 4 am in a teenager may be consistent with circadian rhythm abnormality-delayed sleep phase type, chronic insomnia, and/or poor sleep hygiene. Restless sleep and daytime sleepiness should prompt an evaluation for a sleep disorder and possibly a sleep study to look for a sleep disruptor such as periodic limb movement disorder or sleep apnea.

Level 4 Outcomes: Competence

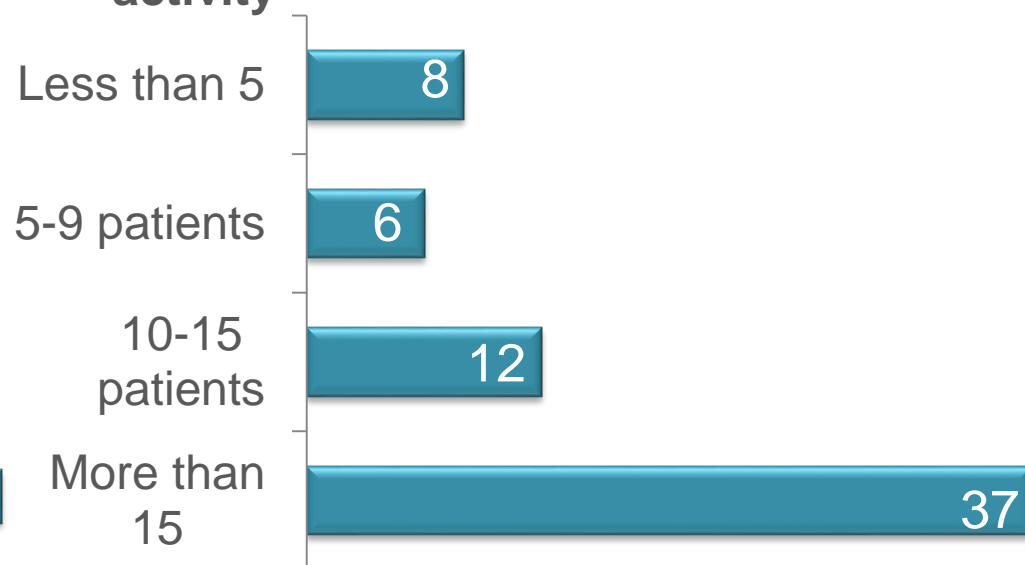
N=63

Learners' Average Years in practice



Average number of years in practice: **14**

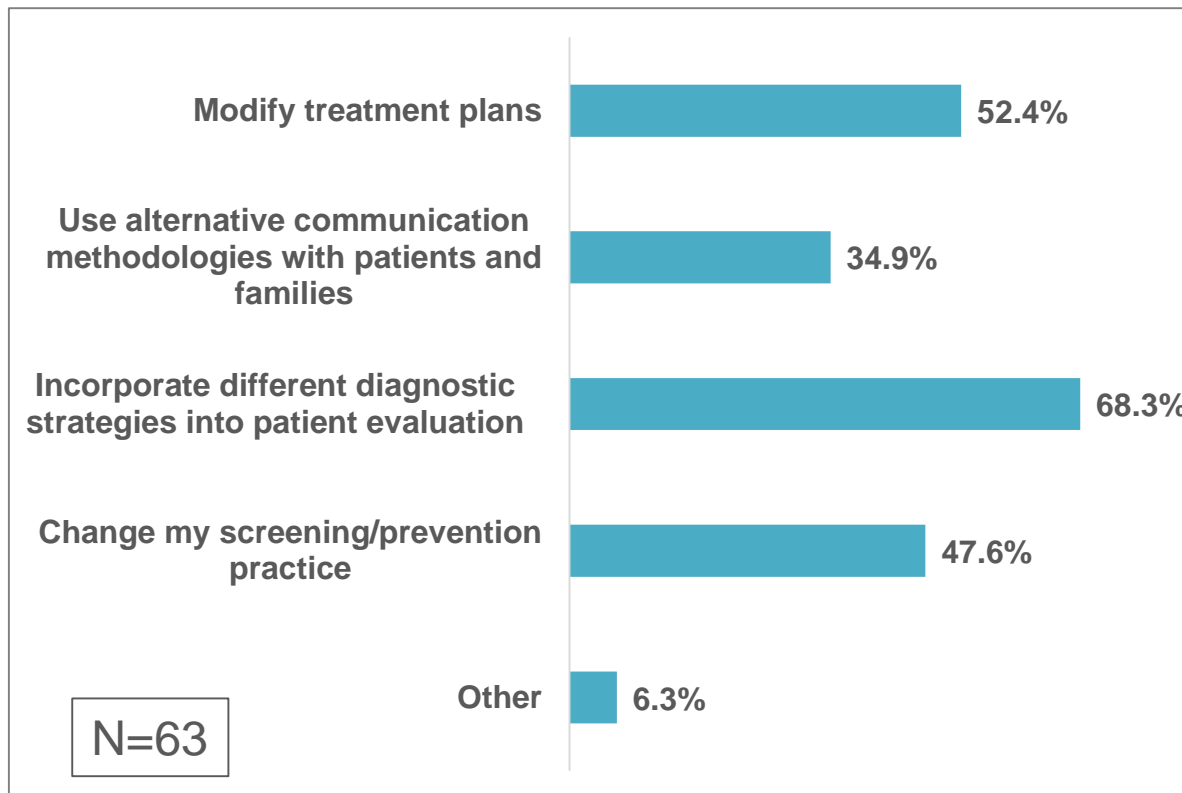
Average # of patients learner treats per week with conditions discussed in this activity



Estimated number of patients impacted per month: **3200+**

Level 4 Outcomes: Competence

97% of respondents report they **intend to make changes to practice** as a result of the activity. The changes **I intend to make** in my practice include:

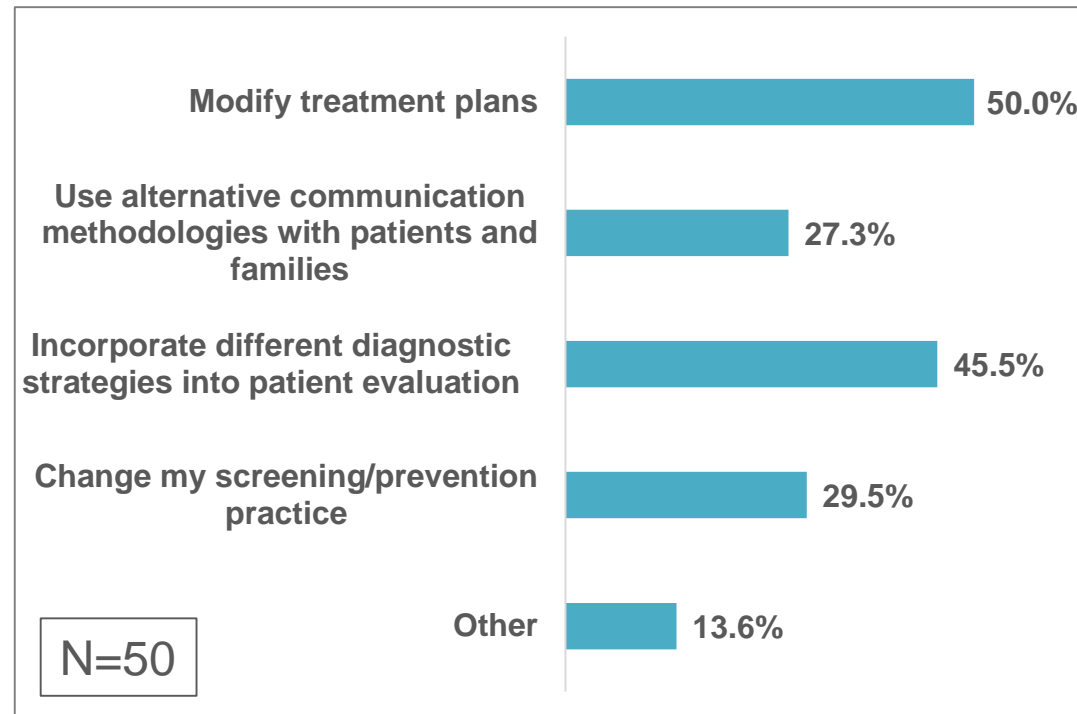


Level 5 Outcomes: Self-Reported Performance

➤ **89%** of respondents to a 45 day follow-up survey report that the activity provided **new ideas or information** they have used in practice

➤ **93%** indicated their patients have already benefited from the information learned in the activity

Changes in practice reported to date:



**Other: Ideas for spirometry screening; general awareness; discussions with students and families about treatments*

Evaluation Results

- **100%** of respondents report the content was **evidence based and clinically relevant**
- **97%** of respondents report they **intend to make changes to practice** as a result of the activity
- **95%** report the activity **addressed strategies for overcoming barriers** to optimal patient care
- **88%** of respondents report that the information presented **reinforced and/or improved their current skills**
- **88%** of respondents report that the educational activity **improved their ability to treat or manage patients**

Overall Activity Impact

Based on the educational content delivered at the *Pulmonary and Allergy Update*, participants demonstrated a **39% increase in knowledge and competence**. Additionally, participants report that they have **changed their screening and prevention practices (29.5%)**, have **incorporated different diagnostic strategies into patient evaluation (45.5%)**, have **modified treatment plans (50%)** and are **using alternative communication methods (27.3%)** with their pulmonary, allergy, and immunology patients as a result of the activity.

The *Pulmonary and Allergy Update* fulfills National Quality Strategy Priorities in making care safer for patients with asthma, COPD, atopic dermatitis and other pulmonary and allergy conditions, as well as promoting the most effective treatment and prevention practices for these disease states.



Executive Summary: Certification

National Jewish Health is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians and by the California Board of Registered Nursing to provide nursing contact hours for nurses.



National Jewish Health designated this live activity for a maximum of 14.75 *AMA PRA Category 1 Credits*[™] and a maximum of 15 nursing contact hours.

About National Jewish Health

- ✓ 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.
- ✓ 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.
- ✓ 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.

