
neuroscience CME
Risky Business: Understanding and Attenuating Risk Associated with Disease-Modifying Therapy in Relapsing-Remitting Multiple Sclerosis
Final Outcomes Report

# Physician Self Reported Impact

- *"I have worked with our NP to ensure she has a discussion with patients and their family about the MOA of treatment options….Patients have said they feel well-informed and more empowered"*
- *"I have added patient goal to our checklist so that we make sure we document the goal of the patient at each visit. Very easy tip. Thank you"*
- *"I have shared the education webcast with our residency director and now our residents are required to be proficient in discussing treatment options with patients. Feedback by residents and patients has been positive."*
- *"We have taken clips of your education and created patient teaching tools and this is part of our quality reporting. Thank you so much for allowing us to use the videos."*

# Educational Initiative

- WEGO Health Patient Leader interviews to shape content
- Live and On Demand webcast
  - Live 60-minute webcast
  - Bonus live 30-minute Q&A
- Enduring
  - 90-minute video webcast
  - 3 x 30-minute video webcasts
- Supplemental distribution via myCME

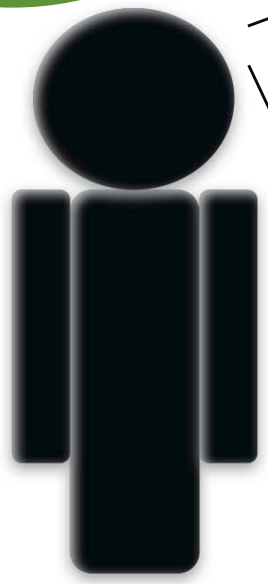

# Content Shaped by WEGO Health Patient Leader Interviews

- Live and On Demand webcast included WEGO Health MS Patient Leader interviews


- Qualitative data from Patient Leaders aligned with learning objectives
- Audio clips of interviews, insights, concerns and feedback integrated into the content
- Incorporates the “patient voice” into the educational content

# WEGO Patient Leader Interview Example Question and Responses

Example question: What factors most influence people's decisions in weighing risk versus benefit?

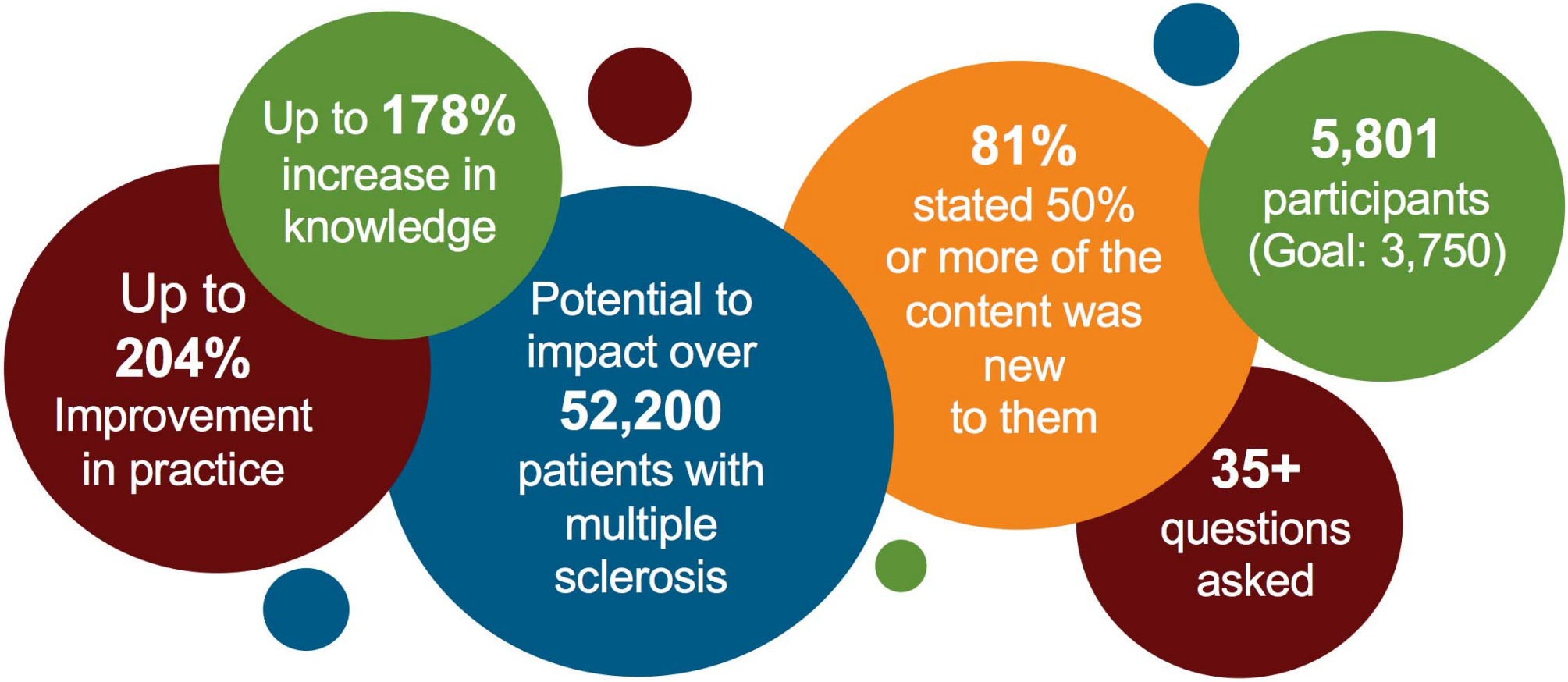


*"Is it worth it? Is being sick constantly better than the disease progressing? Are the risks worth the benefits? I felt as if I was having the flu three days a week and I didn't notice any stop in my disease progression, so that was not worth it to me."*

*"A lot of people have stayed away from any of the DMT because of risks. And so I think that that is something that needs to be addressed in the future, as far as medications for the MS community."*

*"When people are deciding on which course to take, they are usually very skeptical about the risks. But the people who are more disabled with the more progressive type are more willing to take the chance to reap any benefits that they can."*

# Snapshot of Educational Effectiveness



# Faculty

## Michael K. Racke, MD

- Wexner Medical Center at The Ohio State University

## Patricia K Coyle, MD, FAAN, FANA

- MS Comprehensive Care Center, Stony Brook University Medical Center

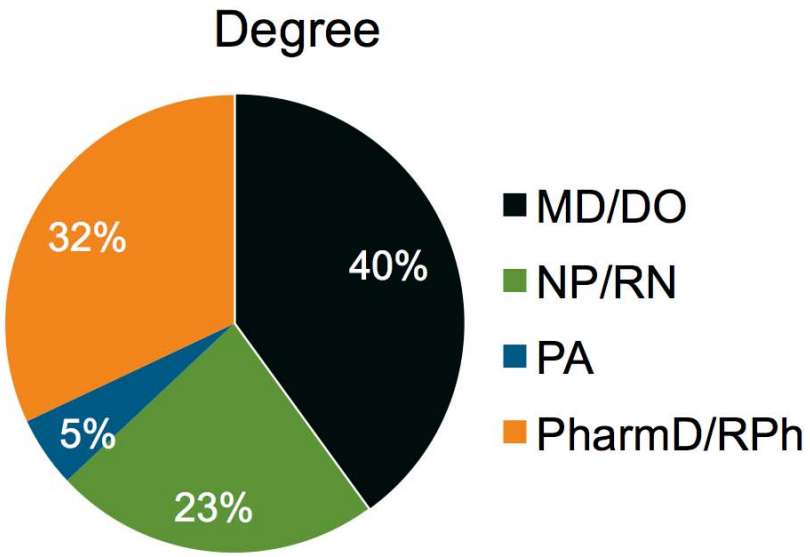
## Brant J. Oliver, PhD, MS, MPH, APRN-BC

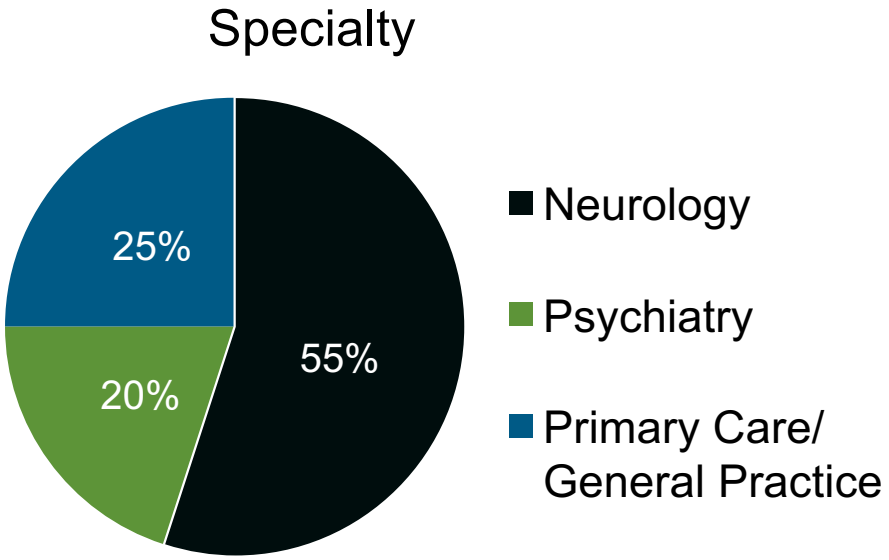
- School of Nursing, MG Institute of Health Professions

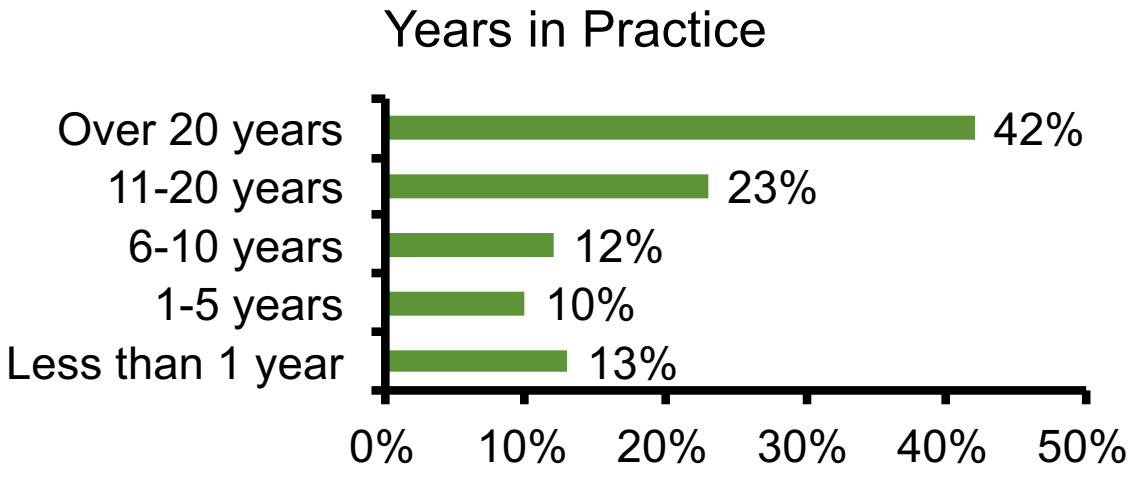
# Learning Objectives

1. When selecting disease-modifying therapy for a specific patient, include the mechanism of action of each agent and its safety profile into the decision-making process.
2. Identify factors that are of primary importance as targets of treatment in collaboration with your patients with MS.
3. Incorporate a point-of-care decision tool that can be used to explain individual risk and to identify factors that may affect a patients' risk tolerance as part of a patient-centered approach to care.

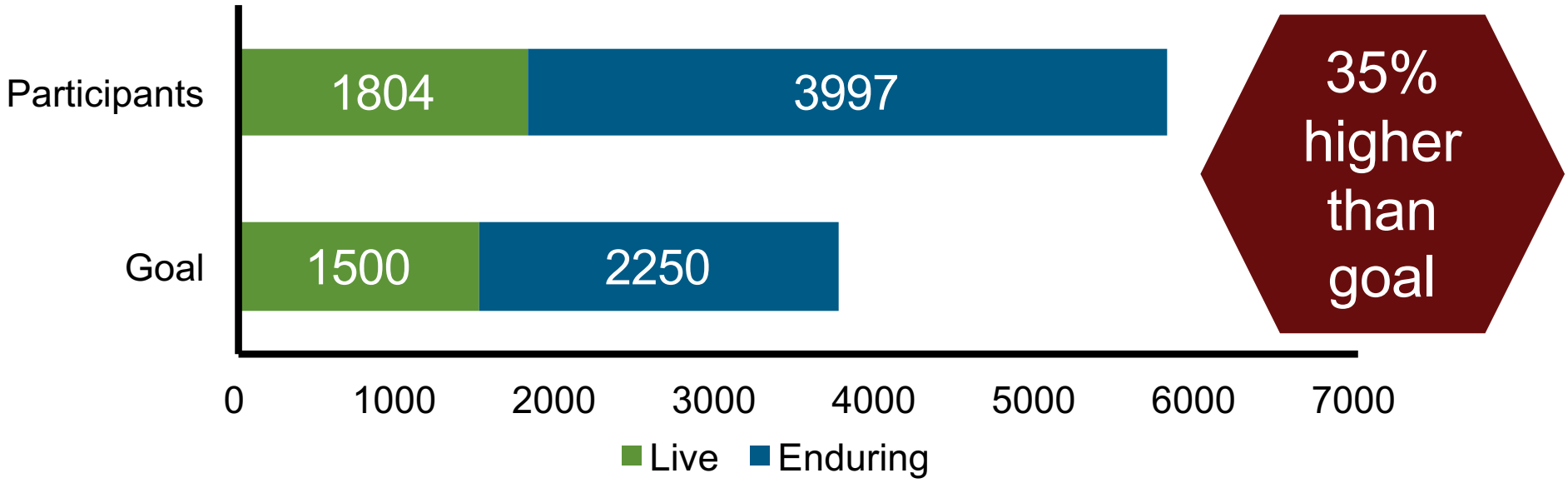
# Learner Demographics



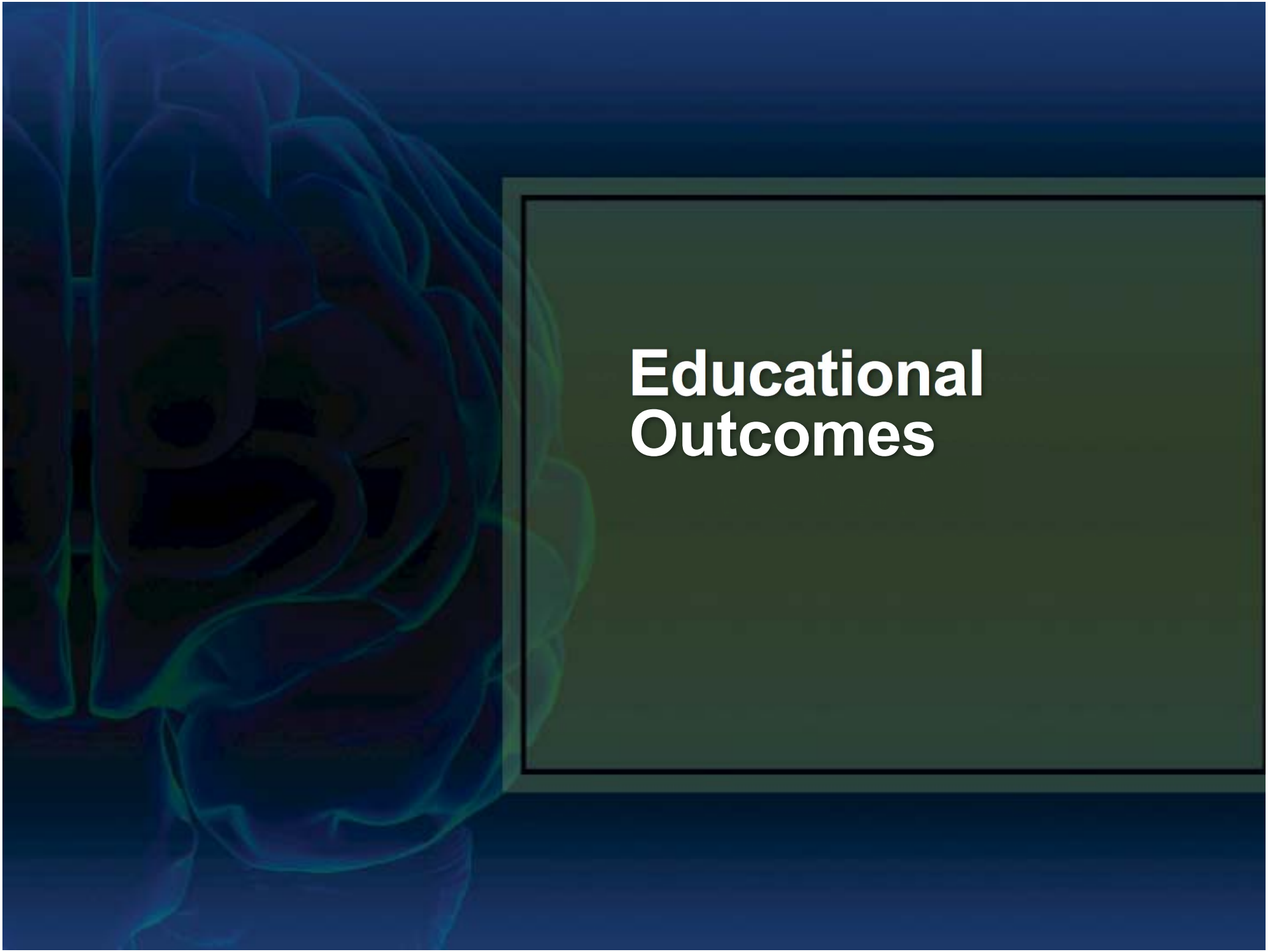



# neuroscienceCME Live and On Demand Metrics




- CME certificates = 482
- Learners reported seeing an average of 19 patients/month with multiple sclerosis, offering the opportunity to impact 52,200+ patients from the education


Educational
Outcomes

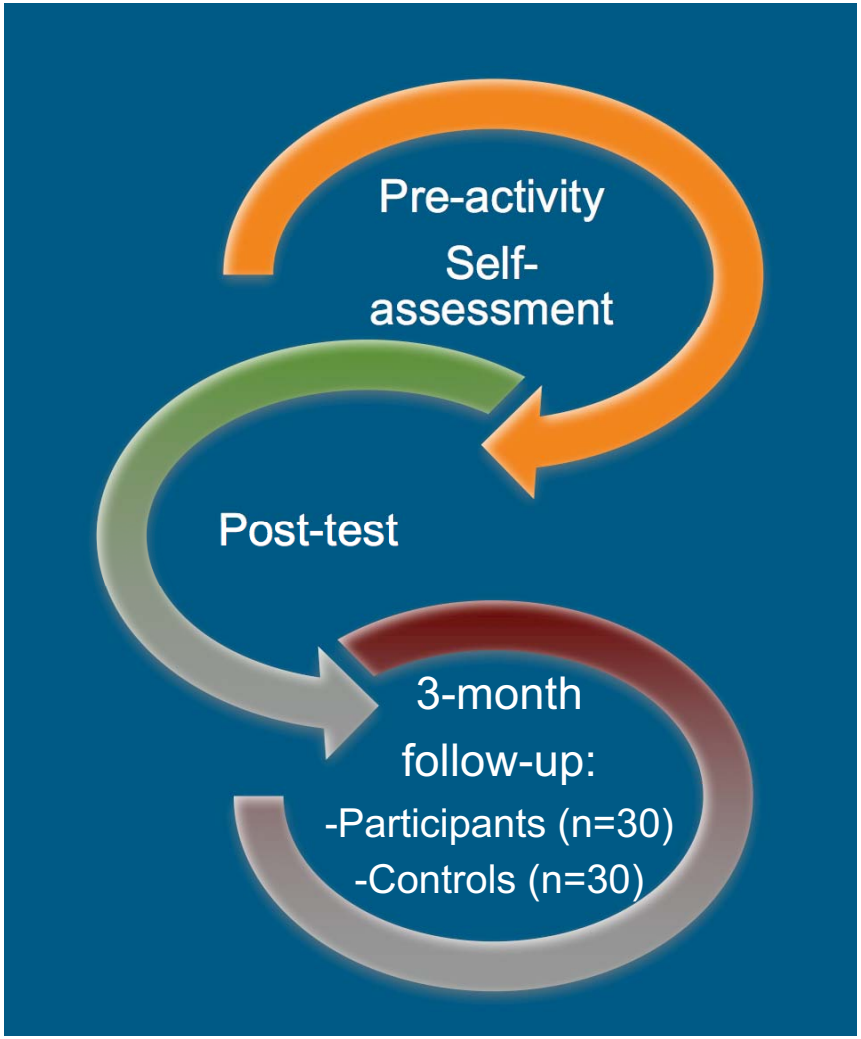
# Educational Outcomes: Methods

**Knowledge**
- Level 3

**Competence**
- Level 4

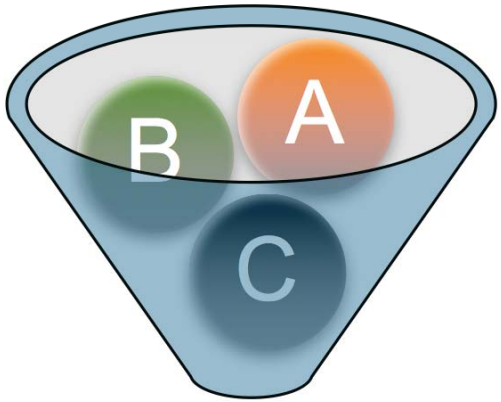
**Performance**
- Level 5

**Confidence**



# Educational Outcomes: Analysis

Multiple-choice responses:




Coded as dichotomous (e.g., Correct/Incorrect)

**McNemar's**
- Pre/post
- Pre/follow-up
- Post/follow-up

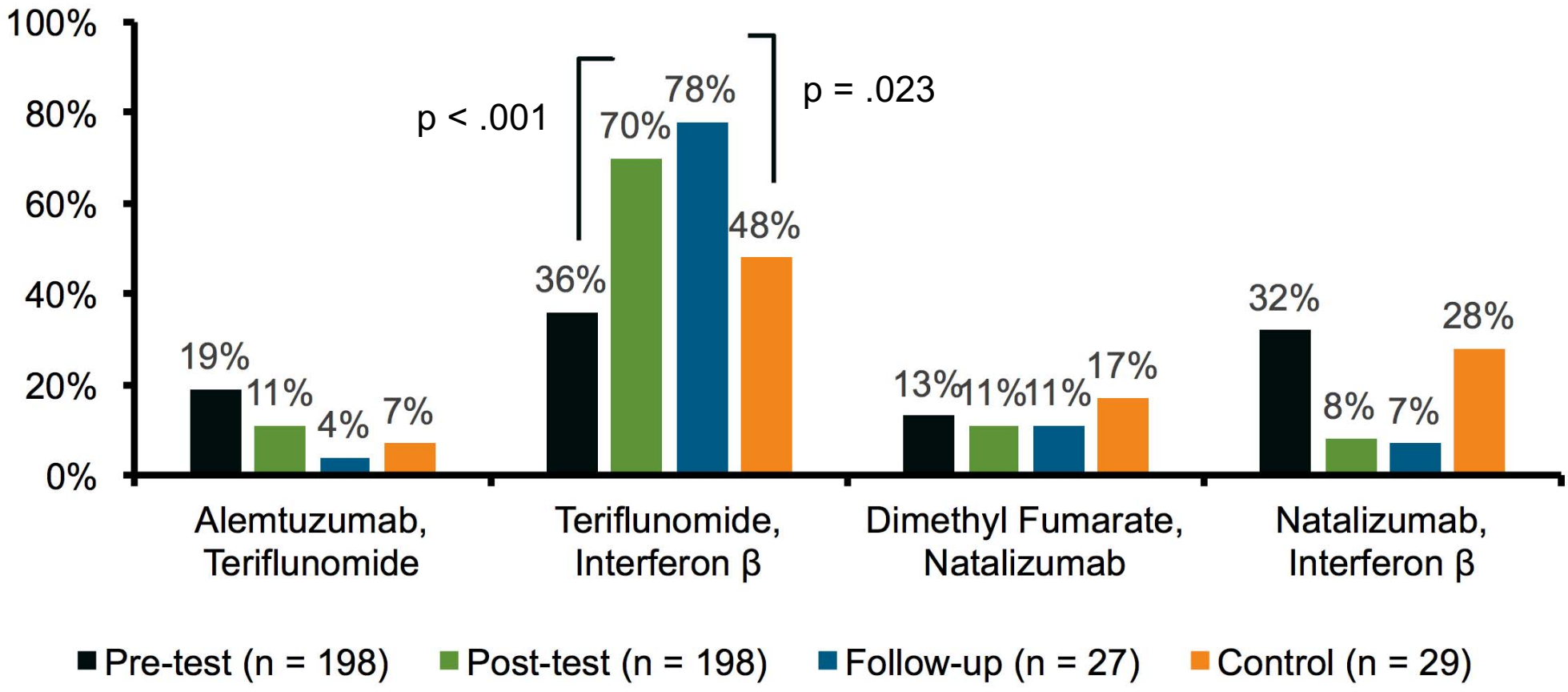
**Chi-square**
- Follow-Up/controls

Activity effect size:
- Cohen's *d*

Relative percentage difference calculation: (e.g., [Follow-up% – Control%]/Control%)


Educational
Outcomes Level 3:
Knowledge

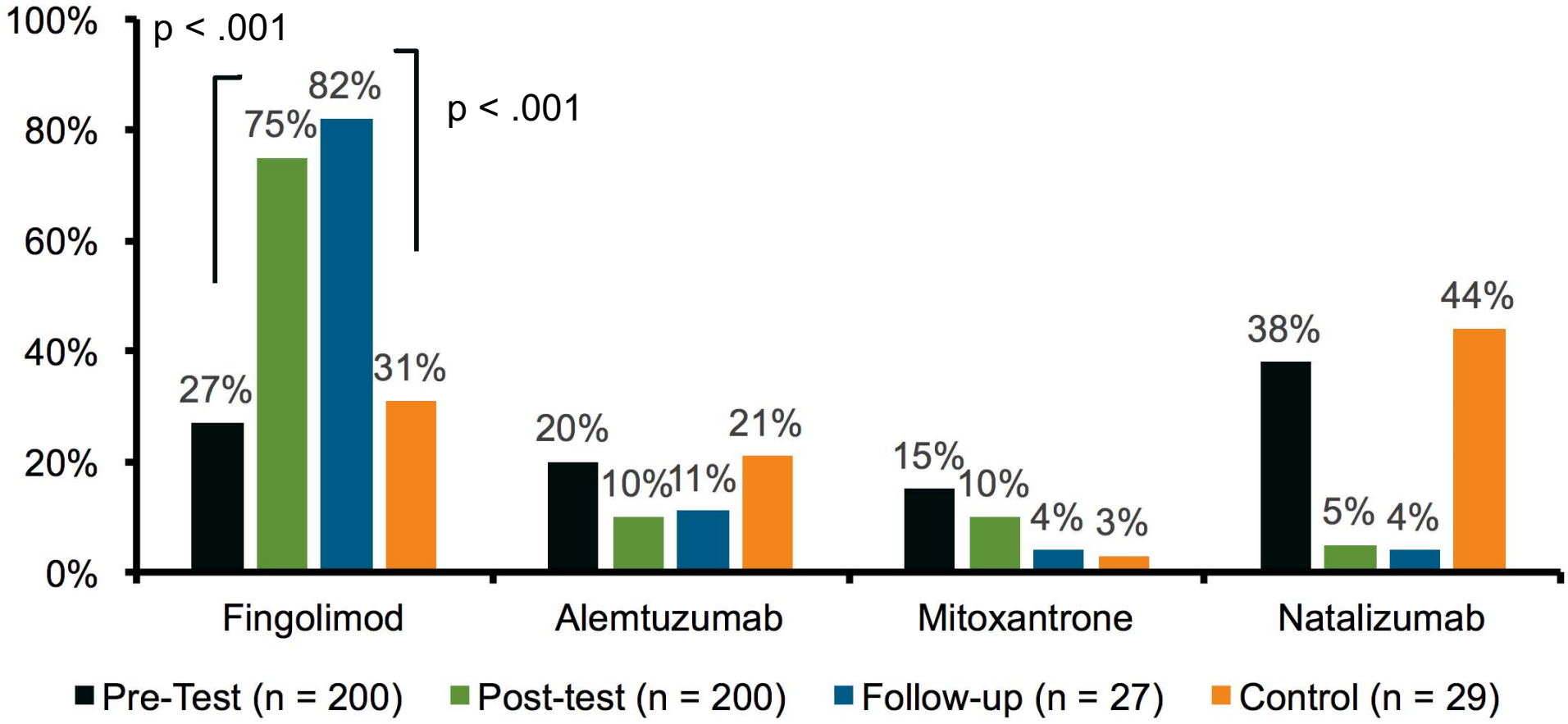
# Results: 94% More Participants Able to Identify Agents Effective in RRMS




Participants increased their knowledge of effective therapeutic agents for RRMS by 94% after the activity ($p < .001$) and retained their knowledge after 3 months, outperforming controls by 62.5% ($p = .023$).

Take-Away: Both pre-survey and control groups had limited knowledge of effective agents. Expanding education to a wider audience will benefit patients with MS.

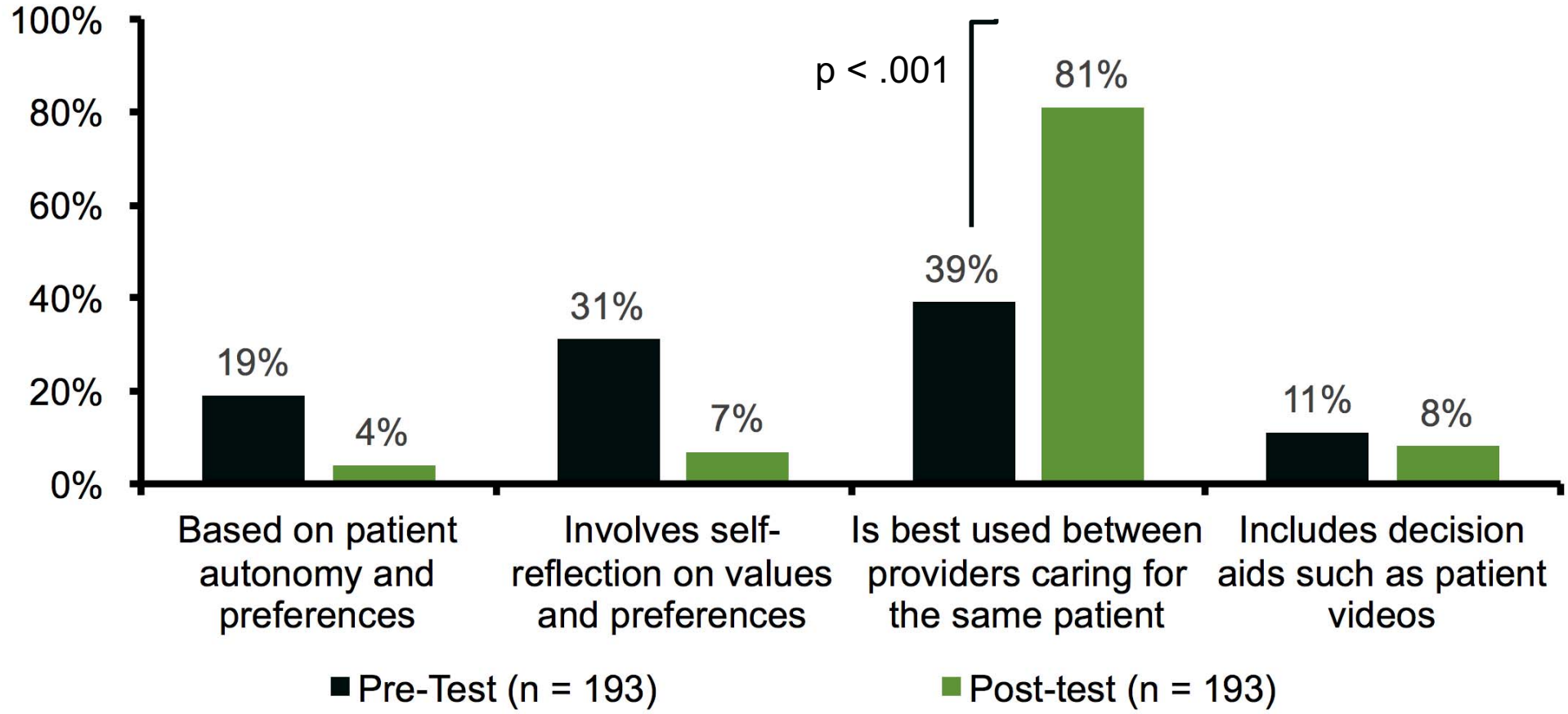
# Results: 178% More Participants Identified Agent with Excellent Impact on Brain Volume Loss




The education resulted in a 178% relative increase in knowledge of fingolimod's impact on brain volume loss compared to pre-activity ($p < .001$). Participants retained their knowledge after 3 months, outperforming controls by 165% ($p < .001$).

**Take-Away**: Despite the activity's success, low performance pre-activity and by controls indicates further education on therapeutic agents in MS is needed.

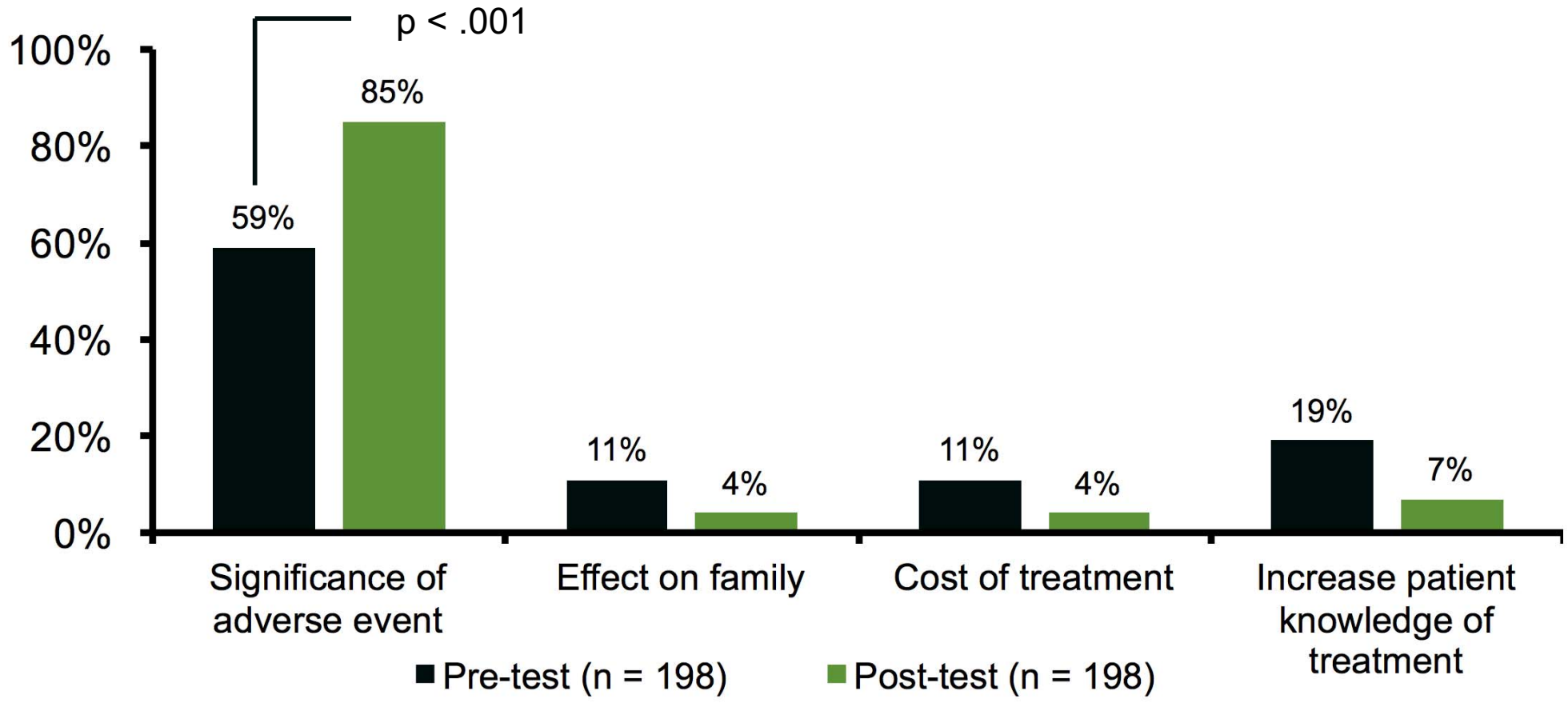
# Quality Measure: 108% More Participants Understood Which Element Was Not Important in Shared Decision-Making




The education was effective in integrating patient-centered care and shared decision-making priorities of the Institute for Healthcare Improvement (IHI) Triple Aim and the National Quality Strategy (NQS) ($p < .001$) into the content.

**Take-Away**: Despite activity success, continuing efforts to address IHI and NQS quality standards are needed.

# Quality Measure: 44% More Participants Identified Adverse Events as an Important Topic When Communicating Risk




The education had a positive impact on encouraging patient-centered care and communication, part of the IHI Triple Aim and 6 priorities of the NQS ($p < .001$).
**Take-Away**: Despite activity success, continuing efforts to address IHI and NQS quality standards are needed.

# Most Useful Information Learned

- *"Include the mechanism of action of MS agents when making my decision about treatment and communicate risks to patient"* (LO 1)
- *"This was a very good presentation of new medications and current treatments of relapsing-remitting MS"* (LO 1)
- *"Importance of including patient and their caregivers in all stages of decision-making"* (LO 2)
- *"I gained a broader insight into what patients consider important in partnering in their care, and useful strategic tools to facilitate that care"* (LO 2, 3)
- *"AAN guide on shared decision-making, point-of-care decision tools, and factors that determine shared decision-making"* (LO 2, 3)


Educational
Outcomes Level 4:
Competence

# Competence Demonstrated in Case Scenario

Molly Clifford is 37 years old. She is self-employed, travels via her own vehicle regularly for work, and is the primary caregiver of her two adolescent children.

At her initial visit 2 weeks ago, Ms. Clifford reported having bilateral hand numbness and ascending numbness and dysesthesia in both legs. She described herself as “clumsy” and having difficulty “knowing where her feet are” when walking. She reported having diplopia and a visual field defect (indicative of a central scotoma).

Neurologic examination revealed bilateral upper extremity hyperreflexia and slight paraparesis and reduced vibration and proprioception in hands and feet. She had mild asteriognosis and denied bowel or bladder difficulty, depression, or alterations in mentation or mood, but does have heat intolerance.

Today, you are going to share the results of her T2-weighted MRI, which showed 3 white matter lesions, including 1 periventricular lesion, and CSF analysis, which showed oligoclonal bands. You have diagnosed her with RRMS.

# Sample Case Scenario Responses

*“Ms. Clifford would be offered high dose steroids first and then disease modifying treatment such as immunomodulatory agents - includes use of natalizumab, fingolimod, and teriflunomide. Use of immunomodulatory agents has been shown to result in a decreased relapse rate and slower accumulation of visible lesions on MRI of the brain. MS is usually less inflammatory and more degenerative in the later stages of the disease.”*

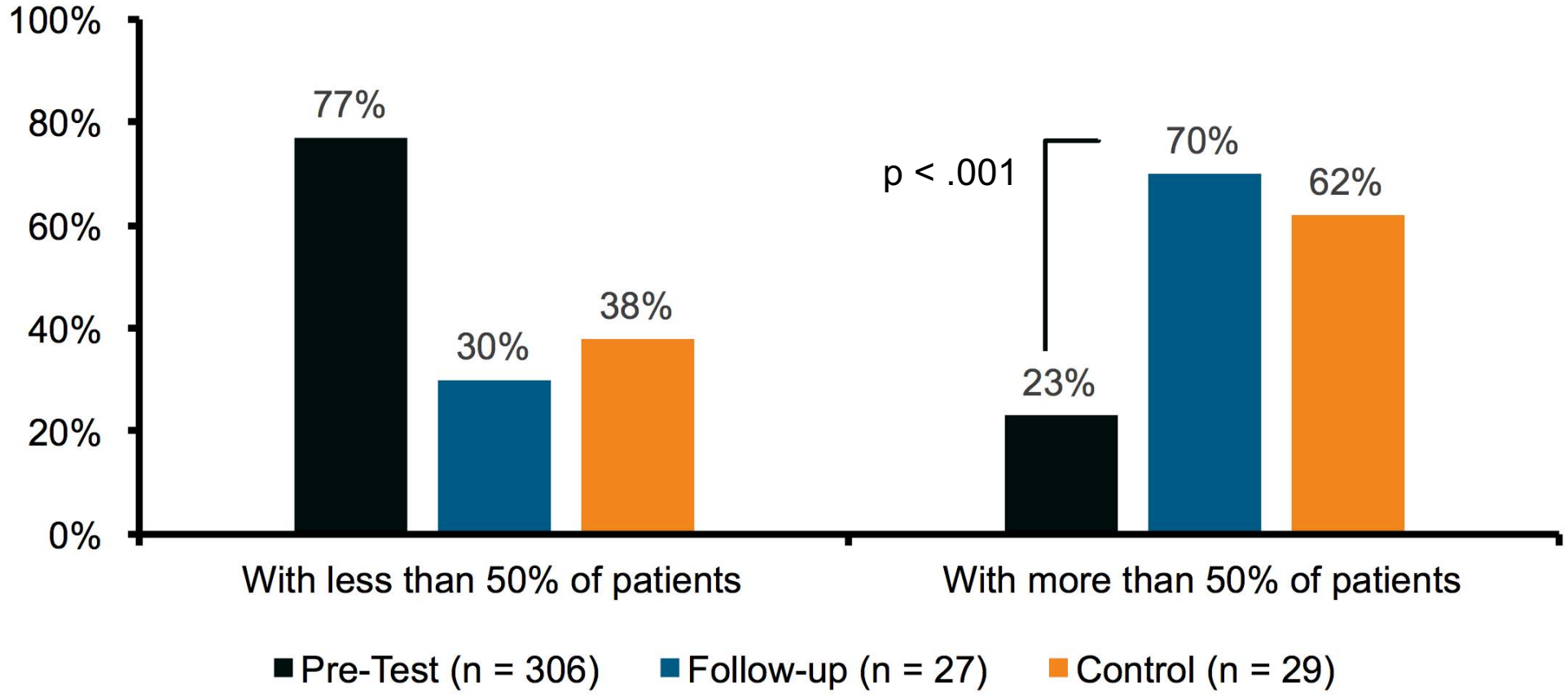
*“I would explain the role of DMT therapies and discuss different treatment options for her. I would also refer her to physical therapy for a gait and balance assessment. We would make a decision together about starting a DMT therapy."*

*“I would generally start with injectable medication like Copaxone. If she is adamantly against self injections then I would discuss oral medication options. Copazone can reduce the inflammatory response and act as a decoy to divert the immune system away from myelin. Has a good safety profile. Injection options are from daily to 3 days a week.”*

Participants demonstrated competence based on their responses to the case scenario question (Peabody et al. 2000; 2004).


Educational
Outcomes Level 5:
Performance

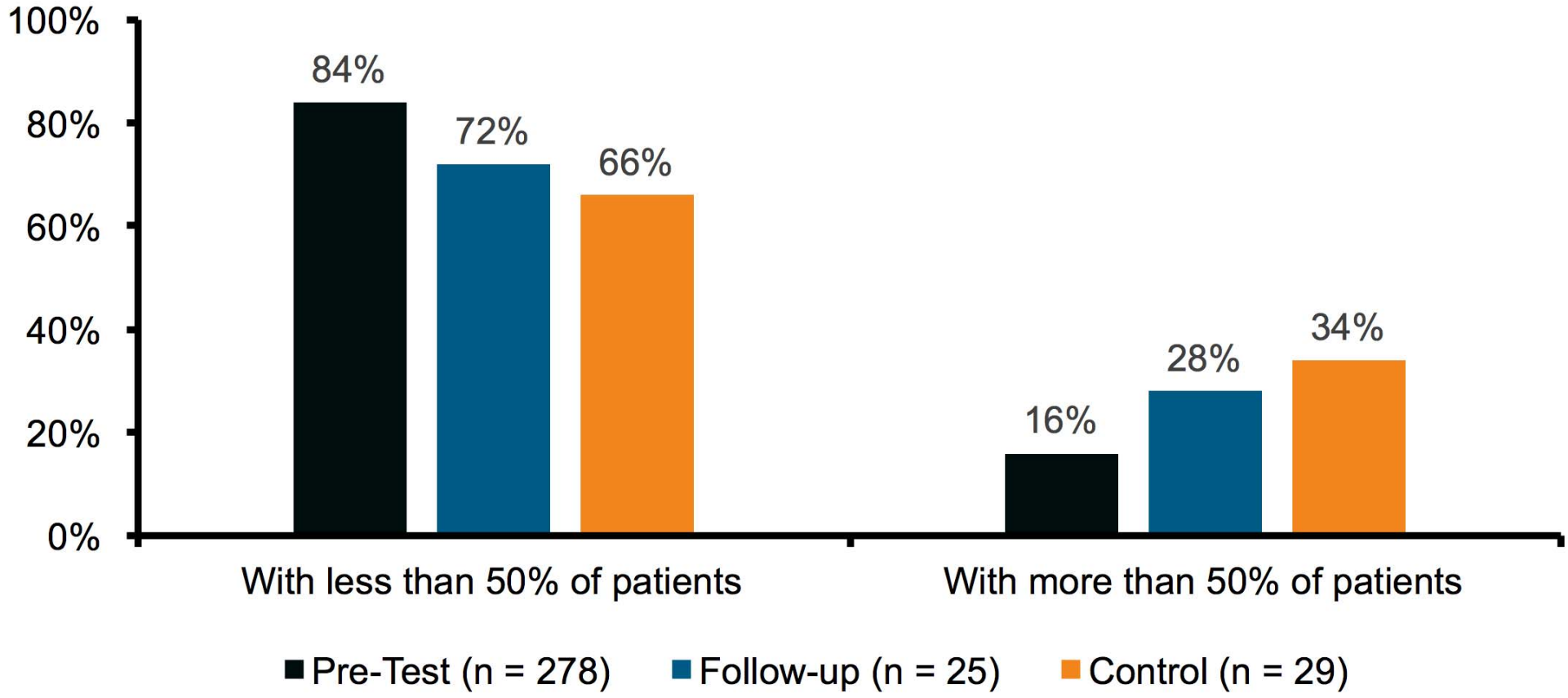
# Results: 204% More Participants Incorporating Mechanism of Action in Treatment Decisions




After the education, participants increased their performance by 204% in selecting a DMT that includes MOA for their patients with MS ($p < .001$).

**Take-Away**: The education led to positive intended behavior changes in treating patients with MS. Further education on MOA is still needed.

# Quality Measure: Education Resulted in 75% More Participants Utilizing Point-of-Care Decision Tools




Despite the increase in the number of participants planning to use point-of-care decision tools, there were no significant differences between groups.

**Take-Away**: The education appears to have led to positive changes in utilizing point-of-care decision tools, which aligns with IHI and NQS strategy. The low percentages in all groups indicates additional education is needed.

# Participant Examples of Shared Decision-Making

70% of participants (n = 27) reported using shared decision-making with their patients at least 50% of the time since the education. They were asked how they have used shared decision-making with their patients at follow-up.

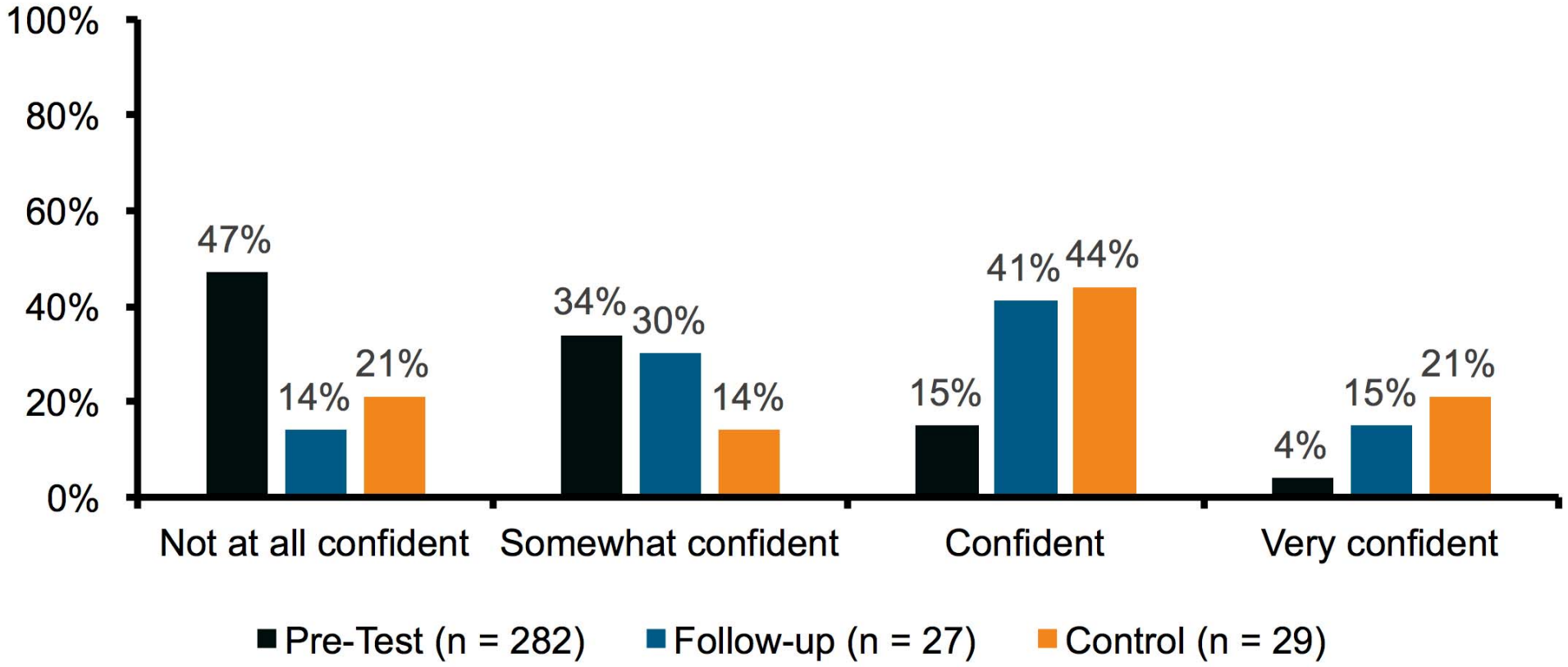
*"I am really starting the treatment decision discussion with that question, what goals do you have or what side effect is bothering you most. My last patient even commented that they really appreciate me asking me what they want. I think it will make a real change for patients. I would suggest you do more programs on topic of individualizing and SDM in the real world setting with case examples."*

*"I discuss the MOA, risks, benefits, and common side effects with each patient. I give them my clinical impression of the medication as well. We discuss their disease course and lifestyle to jointly determine which medication would best fit their needs as well as which medication they would be most compliant with taking."*

*"When changing DMT I review choices, stats, MOA, RvsB, SE and have a discussion, answer questions and concerns. Then together decide what would be the best therapy and patient most comfortable switching to."*


Educational
Outcomes:
Confidence

# Quality Measure: Education Resulted in 211% Increase in Confidence in Identifying Factors of Importance to Their Patients

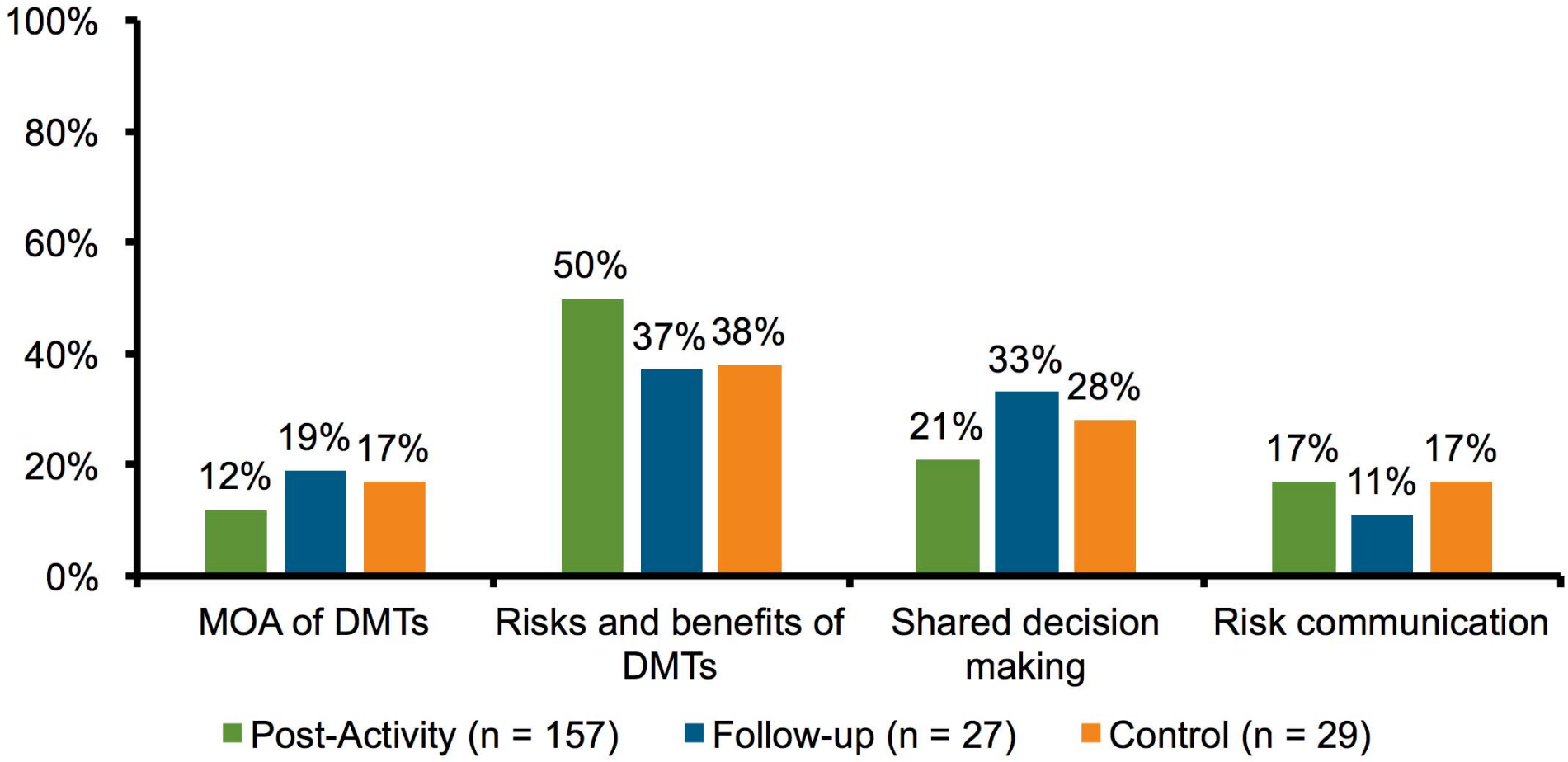



After the activity, 211% more learners were confident or very confident in their ability to recognize what was most important to their patients with RRMS ($p < .001$).

**Take-Away**: The education was successful in improving participant confidence related to IHI and NQS goals for promoting effective communication.


Future
Educational
Direction

# Areas Identified for Future Education




Both Participants and controls indicated risks and benefits of disease-modifying therapies (DMTs) as the top area in which they need more education.

# Participant Suggested Topics

Advancements in treating MS and future of MS diagnosis

Deciding when to change treatments for MS patients

Improving adherence with MS patients

Multiple sclerosis and pregnancy concerns

# Participant Feedback

*"Our team watched this program online and we all were very impressed with the patient survey responses and how you interwove them into the education as it gave the program a very patient focused feel. Very well done!"*

*"Very good education and very different! It wasn't focused on drug treatment, but overall care. The incorporation of the patient audio was very good."*

*"I found this education very useful and am going to have our care coordinator participate and work on incorporating SDM in our process and documenting it in the EMR."*

# Physician Self Reported Impact

- *"I have worked with our NP to ensure she has a discussion with patients and their family about the MOA of treatment options….Patients have said they feel well-informed and more empowered"*
- *"I have added patient goal to our checklist so that we make sure we document the goal of the patient at each visit. Very easy tip. Thank you"*
- *"I have shared the education webcast with our residency director and now our residents are required to be proficient in discussing treatment options with patients. Feedback by residents and patients has been positive."*
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# Conclusions and Future Directions

- This CME Outfitters initiative had a positive impact on knowledge:

  Effect size = 1.11 (large = .8)

- Improvements in several measures related to Institute for Healthcare Improvement Triple Aim and National Quality Standard priorities were observed as a result of the education.

- Additional education on the following topics is warranted to reach a broader audience and address HCP concerns:
  - Point-of-care decision tools to explain risk tolerance
  - Risks and benefits of DMTs
  - Shared decision-making


Thank you for your continued support!


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