

Emerging Challenges in Primary Care: 2020 Conversations in Primary Care: 2020

Do the Right Thing for the Right Patient: Individualizing OAB Care



Final Outcomes Report


January 7, 2021

Astellas MED-OVE-5236378


Emerging Challenges in Primary Care and Conversations in Primary Care: 2020

This curriculum focused on identification and management of Overactive Bladder (OAB)


Participation



5,323*
Total
Attendees



**5 Virtual
Sessions**



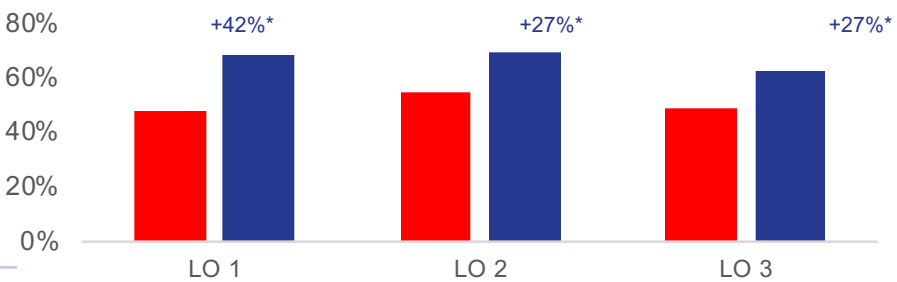
**2,077 certificates
issued to date**

This education has the potential to impact **1,229,941** Patients with OAB on an annual basis.

19,321–27,985 Patients Weekly

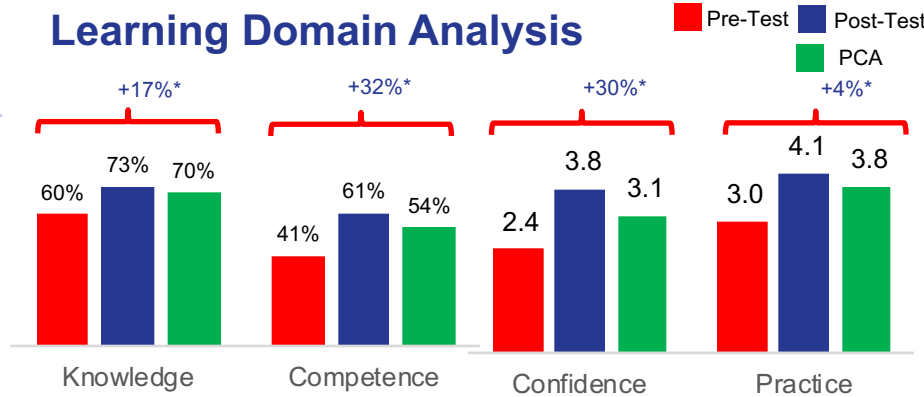
2020 Session	Date	Attendees
Conversations in Primary Care, Episode 4	5/16/20	2,412
Conversations Episode 4, Rebroadcast	5/23/20	587
Emerging Challenges in Primary Care, Episode 7 <i>St. Louis: Missouri, Iowa, Nebraska, Kansas, Oklahoma, Arkansas, Illinois</i>	6/20/20	743
Emerging Challenges in Primary Care, Episode 8 <i>Virtual: National audience</i>	6/27/20	1,323
Emerging Challenges Episode 8, Rebroadcast	7/11/20	258
Total		5,323

Learning Gains Across Objectives



- LO 1, 42%* Improvement:** Identify patients with OAB, while simultaneously excluding other potential disorders that explain the patient's symptoms
- LO 2, 27%* Improvement:** Discuss behavioral and pharmacologic treatment strategies available for patients with OAB, while also recognizing the benefits and risks of various approaches
- LO 3, 27%* Improvement:** Individualize the approach to managing patients with OAB, considering the patient's symptom severity, comorbidities, and cognitive status

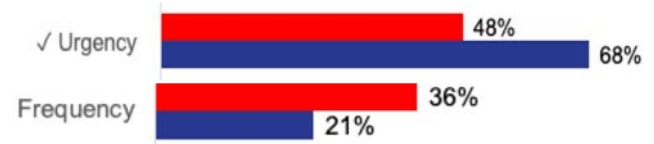
Learning Domain Analysis



- In each of the four curriculum learning domains, substantial and significant gains were achieved from Pre- to Post-Test
- The strongest improvements, from lowest Pre-Test scores, were measured in Competence in selecting therapy for patients with OAB
- Practice strategy, to consider patient characteristics such as age when prescribing pharmacotherapy for OAB, increased to high average ratings (4.4) at Post-Test
 - Despite these high ratings, low learner Confidence (3.4) measured at Post-Test suggests learner awareness of outstanding gaps in proficiency

Persistent Learning Gaps/Needs

Differentiating symptoms associated with OAB
Although improved from pre-test scores, learners continued to incorrectly identify symptoms more likely associated with OAB v. prostate disease



Selecting appropriate first line therapy

41% of post test learners failed to recognize the appropriate first line therapy for a competence question for a patient with OAB, while 32% of learners persisted in selecting combination therapy as most appropriate for the case presented



Treatment selection when behavioral therapy is unsuccessful

Despite improvements in score on a Competence question for a patient experiencing symptoms despite behavioral therapy, learners struggled to correctly identify the optimal agent for managing his OAB



Astellas MED-OVE-5236378



Curriculum Patient Impact

In the Post-Test, learners (N = 2,153) were asked to report how many patients with OAB they see per week in any clinical setting by selecting a range. The resulting distribution of learner responses was then extrapolated to reflect the total number of learners who have attended the sessions.

The findings reveal that this education has the potential to impact

1,229,941
patients on an annual basis.

19,321–27,985 patients on a weekly basis

19,321–
27,985

Course Director

Matt T. Rosenberg, MD

Director, Mid-Michigan Health Centers
Jackson, MI

Activity Planning Committee

Gregg Sherman, MD

Michelle Frisch, MPH, CHCP

Sandy Bihlmeyer, M.Ed.

Sheila Lucas, CWEP

Daniela Hiedra

Joshua F. Kilbridge

Cedric Nazareth, MBBS

Deborah Paschal, CRNP

Faculty

Matt T. Rosenberg, MD

Director, Mid-Michigan Health Centers
Jackson, MI

David R. Staskin, MD

Associate Professor of Urology
Tufts University School of Medicine
Director, Center for Male and Female Pelvic Health
St. Elizabeth's Medical Center
Boston, MA

Commercial Support

The Emerging Challenges in Primary Care: 2020 and Conversations in Primary Care: 2020 series of CME activities were supported through educational grants or donations from the following companies:

- Amgen
- Astellas Pharma Global Development, Inc.
- AstraZeneca Pharmaceuticals LP
- Bayer Healthcare Pharmaceuticals Inc.
- Esperion Therapeutics, Inc.
- Ferring Pharmaceutical, Inc.
- Gilead Sciences, Inc.
- Grifols
- Kaneka Pharma America LLC
- Lilly USA, LLC
- Novartis Pharmaceuticals Corporation
- Novo Nordisk, Inc.
- Sanofi US
- Takeda Pharmaceuticals U.S.A., Inc.

Overview

Learning Objectives

- Identify patients with OAB, while simultaneously excluding other potential disorders that explain the patient's symptoms
- Discuss behavioral and pharmacologic treatment strategies available for patients with OAB, while also recognizing the benefits and risks of various approaches
- Individualize the approach to managing patients with OAB, considering the patient's symptom severity, comorbidities, and cognitive status

Curriculum Overview

**3 Accredited Live Virtual Symposia with
2 Rebroadcasts: May – June 2020**



Clinical Highlights eMonograph

eMonograph, containing key teaching points from the CME activity, was distributed 1 week after the meeting to all attendees.

**EMERGING CHALLENGES
in PRIMARY CARE** NACE
Live Virtual Conferences

2020 Clinical Highlights

Do the Right Thing for the Right Patient: Individualizing OAB Care

Faculty

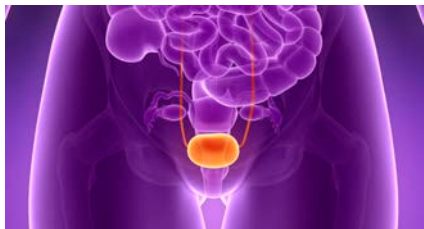
Matt T. Rosenberg, MD
Section Editor
Urology, International Journal
of Clinical Practice

- Common symptoms of overactive bladder (OAB) include frequency, urgency, nocturia, and urge urinary incontinence
- In general, urgency is the most bothersome symptom to patients
- The prevalence of OAB symptoms increases with age; OAB is more common among women, especially at younger ages

Enduring CME Symposium Webcast

Available at: <https://www.naceonline.com/courses/do-the-right-thing-for-the-right-patient-individualizing-oab-care>

Do the Right Thing for the Right Patient:
Individualizing OAB Care



COURSE SUMMARY

Cost: Free

Start Date: 06/30/2020

Expiration Date: 06/29/2021

Target Audience: Primary Care Providers

Format: Webcast

Estimated Time To Complete CME Activity: 1.0 hour

Credit(s):

1.0 AMA PRA Category 1 Credit™

1.0 AANP Contact hour which includes 1.0
pharmacology hour

Hardware/Software Requirements: Any web browser

Speaker



Matt T. Rosenberg, MD

Section Editor

Urology, International Journal of Clinical Practice

Director, Mid-Michigan Health Centers

Jackson, MI



Outcomes Methodology

Learning outcomes were measured using matched Pre-Test and Post-Test scores for Knowledge, Performance, Confidence, and practice strategy and across all of the curriculum's Learning Objectives.

Outcomes Metric	Definition	Application
Percentage change	This is how the score changes resulting from the education are measured. The change is analyzed as a relative percentage difference by taking into account the magnitude of the Pre-Test average.	Differences between Pre-Test, Post-Test, and PCA score averages
P value (p)	This is the measure of the statistical significance of a difference in scores. It is calculated using dependent or independent samples t-tests to assess the difference between scores, taking into account sample size and score dispersion. Differences are considered significant for when $p \leq .05$.	Significance of differences between Pre-Test, Post-Test, and PCA scores and among cohorts
Effect size (d)	This is a measure of the strength/magnitude of the change in scores (irrespective of sample size). It is calculated using Cohen's d formula, with the most common ranges of d from 0-1: $d < .2$ is a small effect, $d = .2-.8$ is a medium effect, and $d > .8$ is a large effect.	Differences between Pre-Test and Post-Test score averages
Power	This is the probability (from 0 to 1) that the "null hypothesis" (no change) will be appropriately rejected. It is the probability of detecting a difference (not seeing a false negative) when there is an effect that is dependent on the significance (p), effect size (d), and sample size (N).	Differences between Pre-Test and Post-Test score averages
Percentage non-overlap	This is the percentage of data points at the end of an intervention that surpass the highest scores prior to the intervention. In this report, it will reflect the percentage of learners at Post-Test who exceed the highest Pre-Test scores.	Differences between Pre-Test and Post-Test score averages

Participation

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Participation



5,323*
Total Attendees



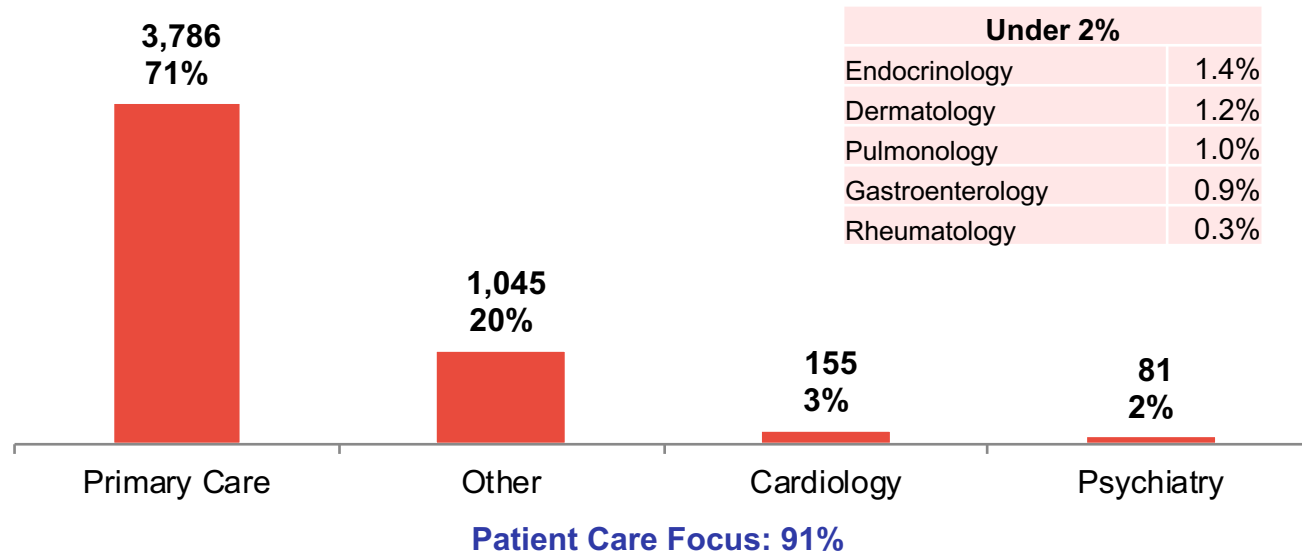
5 Virtual Sessions

1,667 Follow-up Participants
31% Rate of follow-up engagement

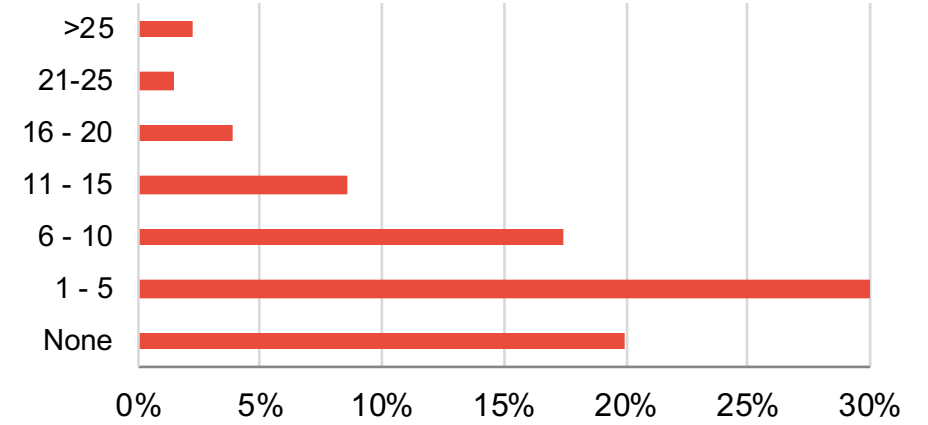
*These numbers represent the total number of attendees, irrespective of assessment participation

Level 1: Demographics and Patient Reach

Specialty

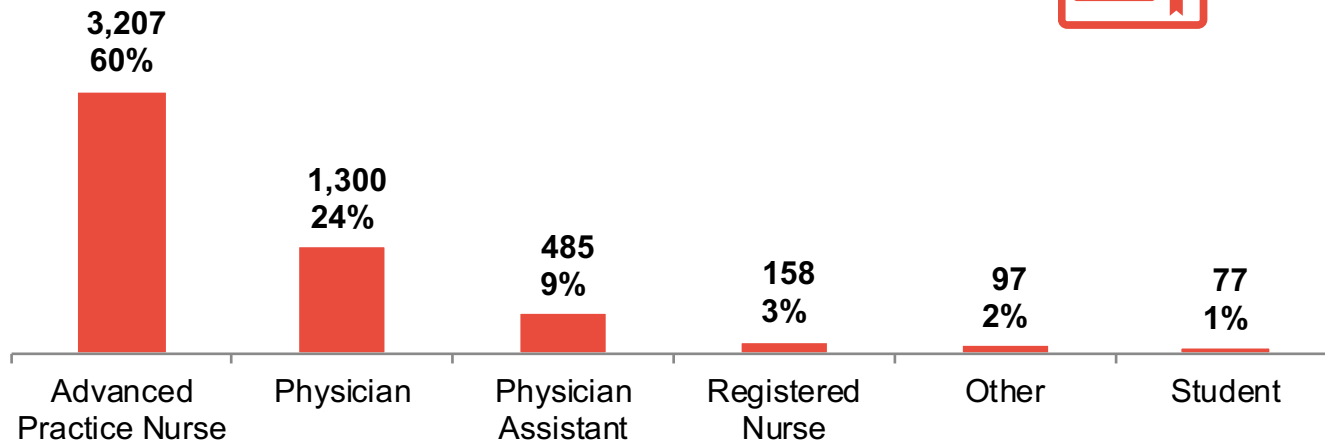


Patients with OAB seen each week, in any clinical setting:

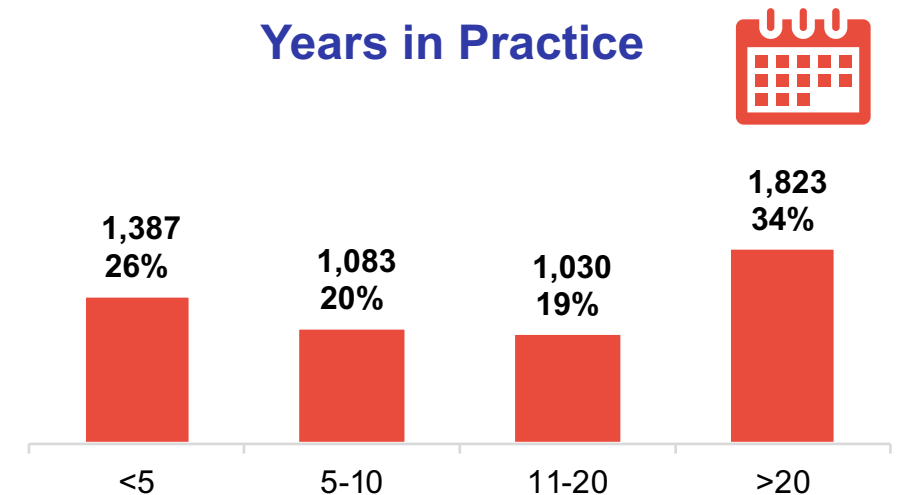


Average number of OAB patients seen each week per clinician: 6

Profession



Years in Practice

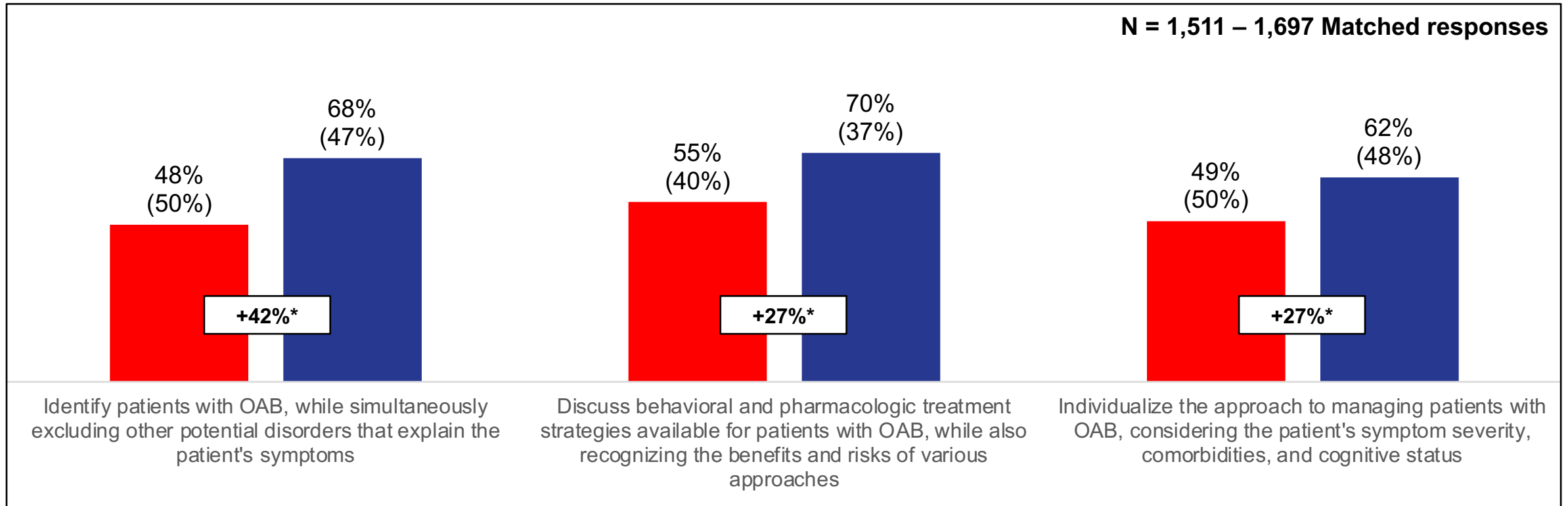




**Level 2-5:
Outcomes Metrics**

Learning Objective Analysis

Pre-Test
Post-Test



- Across all three curriculum Learning Objectives, substantial and significant improvements were measured from low scores at Pre-Test (< 56%) to moderate scores at Post-Test (62% to 68%)
- The strongest gains were measured on identification of patients with OAB while excluding other potential disorders that explain symptoms
- Scores on the Objective addressing behavioral and pharmacologic treatment strategies for patients with OAB were driven down by a case-based item on first line therapy for a newly diagnosed patient with OAB, with higher scores on an item on combining behavioral and pharmacologic therapy

Learning Objective Analysis

Cohort comparison by profession

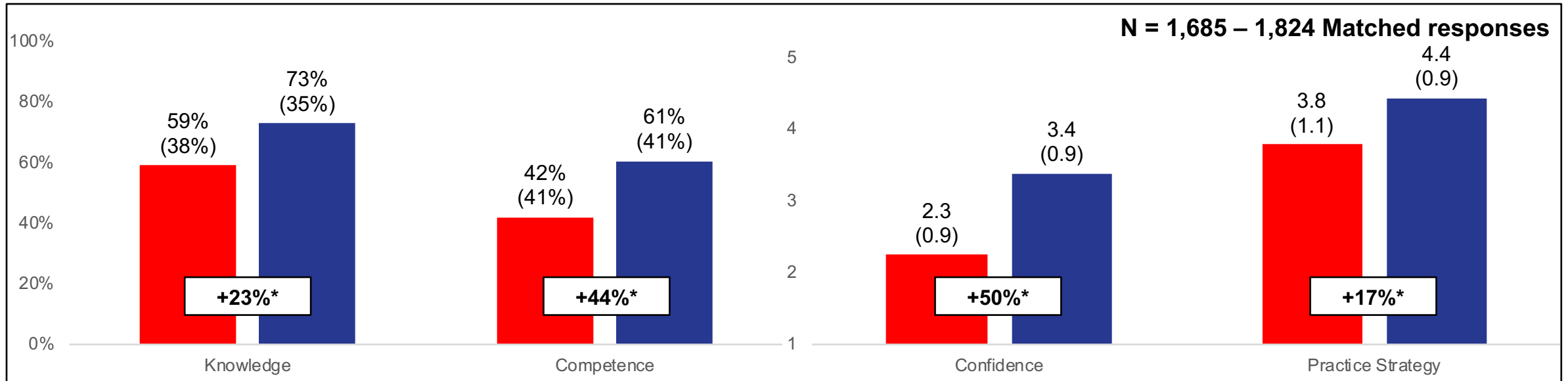
Matched data, * indicates significance, $p < 0.05$

Learning Objective	Advanced Practice Nurses				Physicians			
	N	Pre-Test	Post-Test	Change	N	Pre-Test	Post-Test	Change
Identify patients with OAB, while simultaneously excluding other potential disorders that explain the patient's symptoms	492	43% (50%)	65% (48%)	+50%*	206	67% (47%)	76% (43%)	+14%*
Discuss behavioral and pharmacologic treatment strategies available for patients with OAB, while also recognizing the benefits and risks of various approaches	502	59% (40%)	72% (37%)	+21%*	216	64% (40%)	70% (39%)	+10%
Individualize the approach to managing patients with OAB, considering the patient's symptom severity, comorbidities, and cognitive status	459	52% (50%)	67% (47%)	+28%*	193	52% (50%)	61% (49%)	+17%

- For both advanced practice nurses and physicians, gains were measured from Pre- to Post-Test on each of the three curriculum Learning Objectives
- Across all three Objectives, advanced practice nurses achieved stronger improvements compared to physicians
- Despite these stronger gains, physicians had higher Pre- and Post-Test scores in identification of patients with OAB, while advanced practice nurses higher Post-Test scores in behavioral and pharmacologic treatment strategies, and individualizing therapy

Learning Domain Analysis

Pre-Test
Post-Test



- In each of the four curriculum learning domains, substantial and significant gains were achieved from Pre- to Post-Test
- The strongest improvements, from lowest Pre-Test scores, were measured in Competence in selecting therapy for patients with OAB
- Practice strategy, to consider patient characteristics such as age when prescribing pharmacotherapy for OAB, increased to high average ratings (4.4) at Post-Test
 - Despite these high ratings, low learner Confidence (3.4) measured at Post-Test suggests learner awareness of outstanding gaps in proficiency

Learning Domain Analysis

Matched data, * indicates significance, $p < 0.05$

Cohort comparison by profession

Learning Domain	Advanced practice nurses				Physicians			
	N	Pre-Test	Post-Test	% Change	N	Pre-Test	Post-Test	% Change
Knowledge	509	57% (36%)	71% (34%)	+25%*	217	72% (35%)	77% (34%)	+8%
Competence	501	47% (42%)	65% (42%)	+38%*	216	47% (45%)	56% (44%)	+21%*
Confidence	520	2.14 (0.87)	3.37 (0.82)	+58%*	222	2.50 (1.03)	3.49 (0.88)	+39%*
Practice	521	3.78 (1.11)	4.48 (0.81)	+19%*	226	3.98 (1.01)	4.43 (0.87)	+11%*

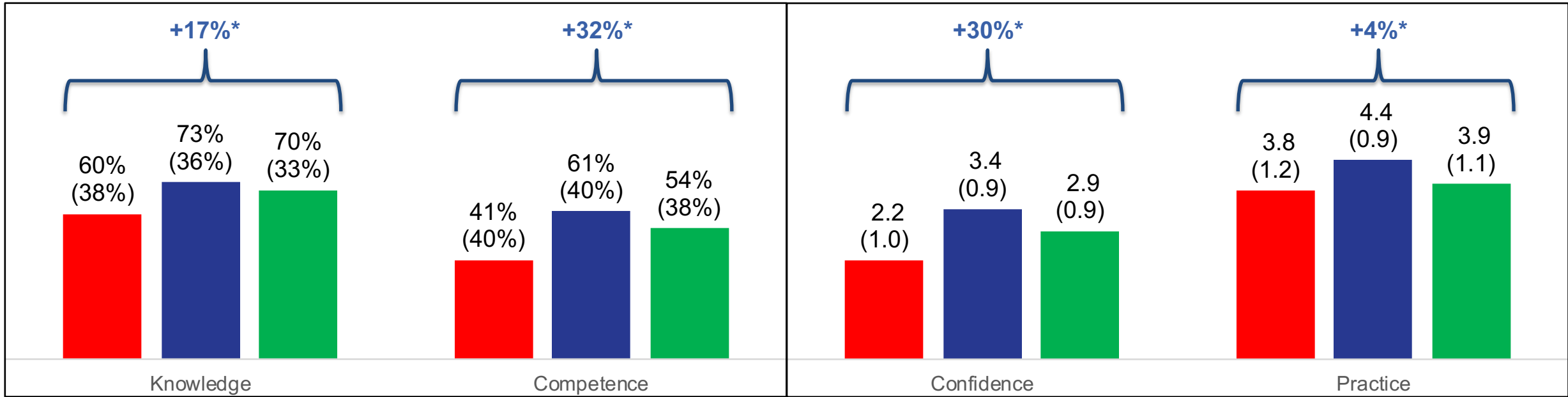
- When comparing the scores of advanced practice nurses and physicians by learning domain, both groups achieved gains from Pre- to Post-Test, across all four domains
 - Except for physicians in Knowledge, improvements across all domains for both groups were statistically significant
- In all four learning domains, advanced practice nurses achieved stronger gains compared to physicians from Pre- to Post-Test
- Though they had stronger gains from Pre- to Post-Test, advanced practice nurses had lower Pre- and Post-Test scores compared to physicians in Knowledge and Confidence, with higher scores in Competence and practice strategy

4-Week Retention Analysis

By Learning Domain

Pre-Test Post-Test PCA

N = 799 – 856 Matched responses



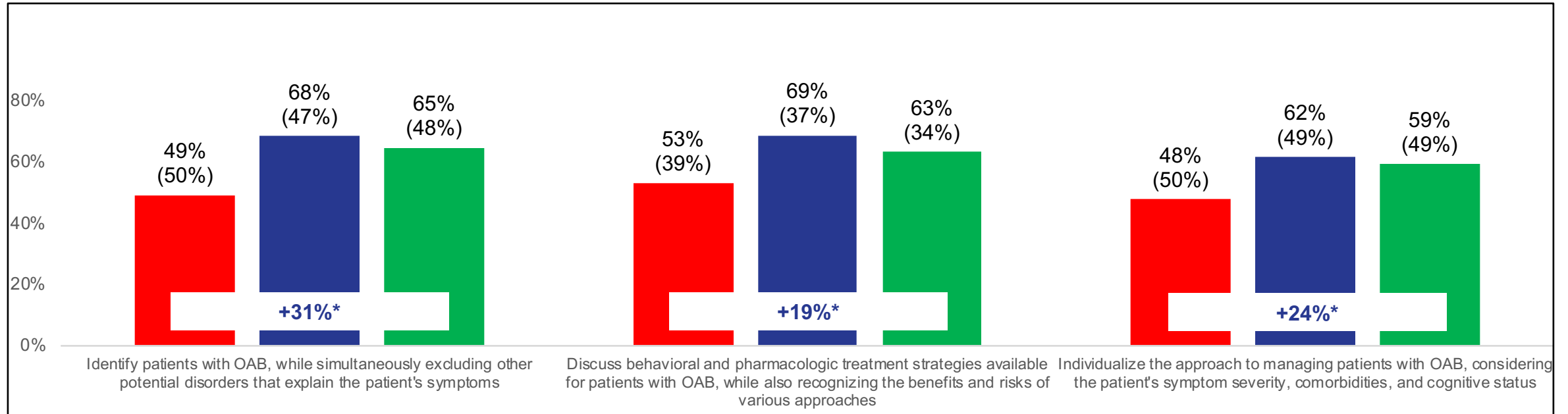
- Four to six weeks following their engagement in one of the curriculum sessions, learners were prompted to complete a brief Post Curriculum Assessment (PCA), which repeated items from each of the four curriculum learning domains
- In each of the four curriculum learning domains, substantial and significant net gains were achieved from Pre-Test to PCA measurements
 - Despite these gains, some score slippage was seen from Post-Test to PCA in all domains

4-Week Retention Analysis

By Learning Objective

■ Pre-Test ■ Post-Test ■ PCA

N = 728 – 806 Matched responses

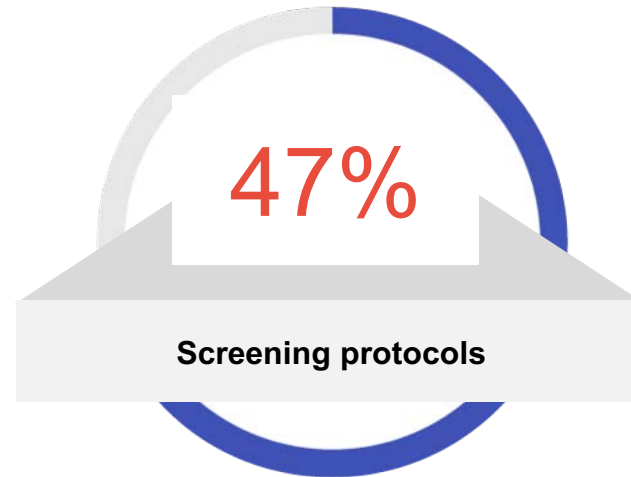
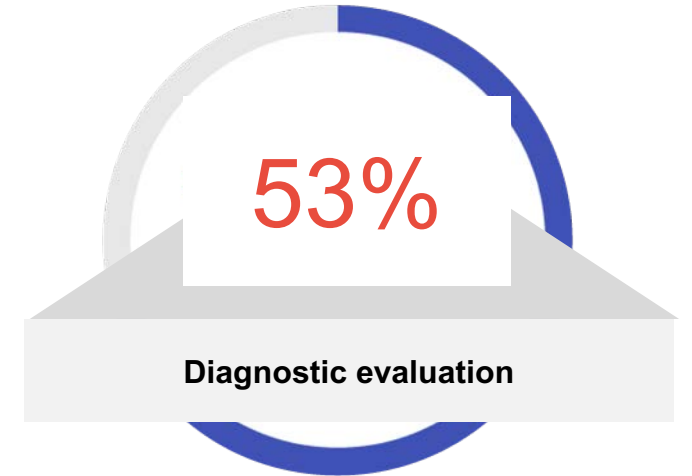
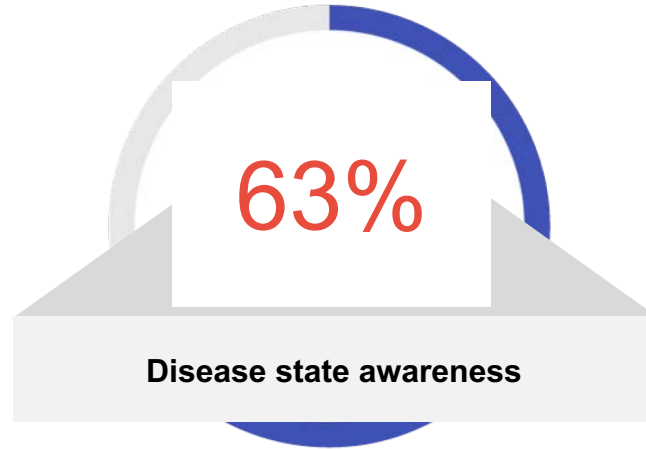
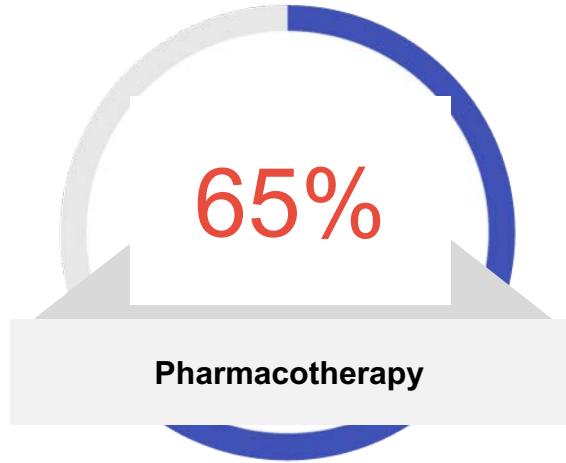


- When examining results by Learning Objective, substantial and significant net gains were achieved from Pre-Test to PCA measurements on each of the three Objectives, with some score slippage from Post-Test to follow-up
- The strongest gains, from the lowest Pre-Test scores, were measured in identification of patients with OAB, while excluding other potential disorders that explain symptoms
- Similarly low follow-up scores (59% to 65%) highlight opportunities for further reinforcement in this area

(4-week Post Assessment)

Please select the specific areas of *skills, or practice behaviors*, you have improved regarding the treatment of patients with OAB since this CME activity. (Select all that apply.)

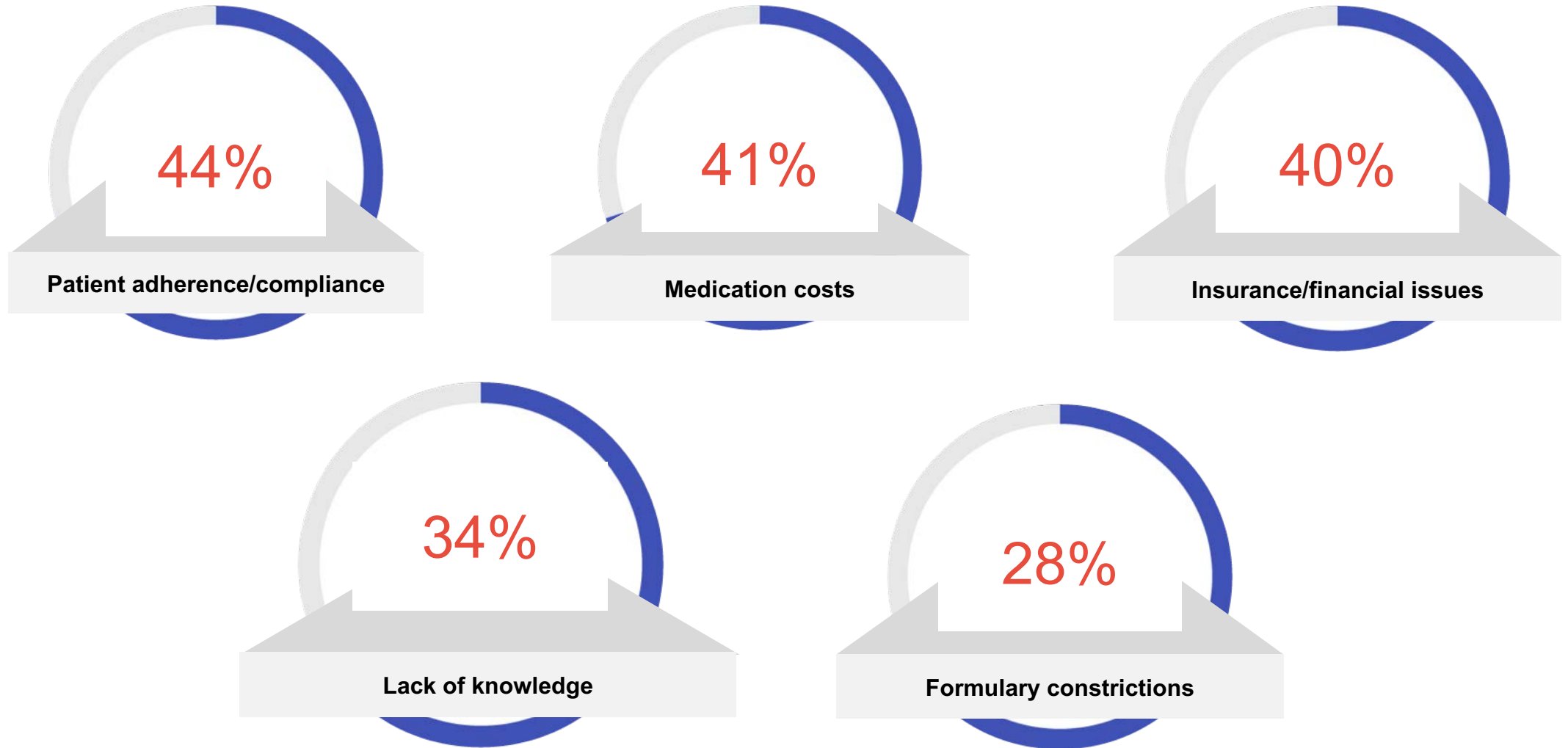
N = 1,607



(4-week Post Assessment)

What specific *barriers* have you encountered that may have prevented you from successfully implementing strategies for patients with OAB since this CME activity? (Select all that apply.)

N = 1,607



Identified Learning Gap:

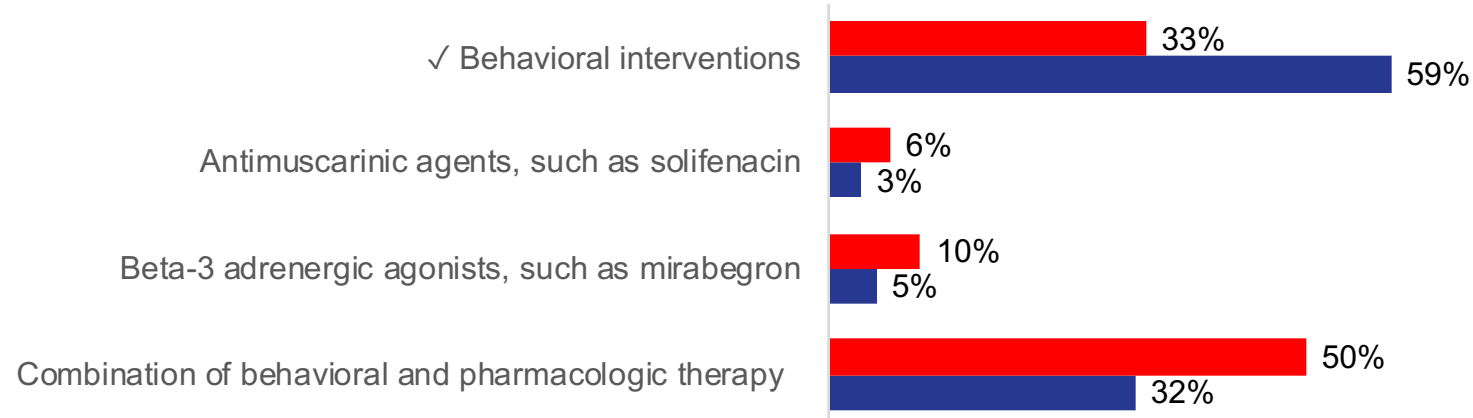
Selecting between behavioral and drug therapies for OAB patients

Despite improvements in score on a Competence item presenting the case of a patient in need of OAB management, learners struggled at Post-Test to correctly select between behavioral and drug therapies

51 y/o woman presents complaining of urinary frequency, nocturia, urgency, and occasional urinary incontinence. Physical exam is unremarkable; urinalysis and other labs are WNL. She has no history of recurrent UTI or other urogenital conditions. You diagnose OAB. Which of the following is recommended as first-line therapy for this patient?

Results:

- At PCA, 59% of learners correctly answered: “Behavioral interventions”



Identified Learning Gap:

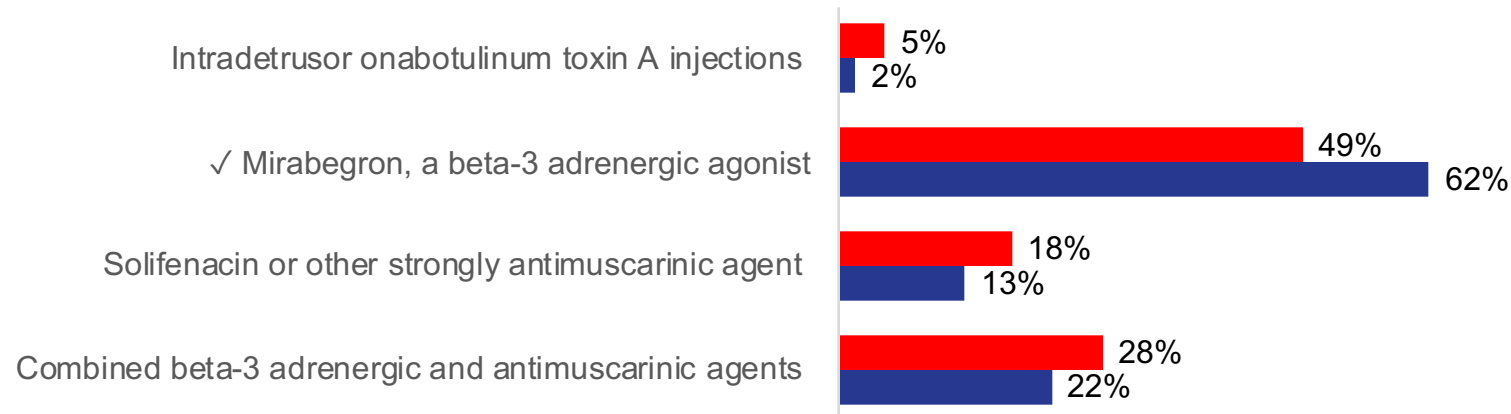
Treatment selection when behavioral therapy is unsuccessful

Despite improvements in score on a Competence item presenting the case of a patient still experiencing symptoms despite behavioral therapy, learners struggled to correctly identify the optimal agent for managing his OAB

71 y/o man with a history of OAB managed with behavioral therapies complains of persistent urinary symptoms. Medical Hx: Hypercholesterolemia, early osteoarthritis in right hip. Current meds: Atorvastatin 20 mg qd, ibuprofen 200 mg prn. Workup: Physical exam, prostate exam, and labs WNL. Which of the following might be the best pharmacologic therapy for this patient?

Results:

- At PCA, 62% of learners correctly answered: “Mirabegron, a beta-3 adrenergic agonist”



Identified Learning Gap:

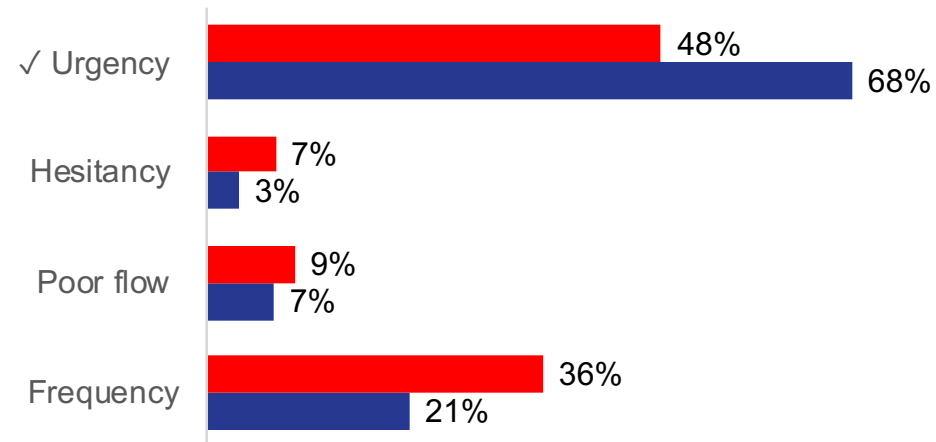
Symptoms differentiating OAB from prostate disease

Though strong improvements were made from Pre-Test, low Post-Test scores were measured on a Knowledge item addressing symptoms suggestive of OAB but not prostate disease

Which of the following lower urinary tract symptoms in a man is the most suggestive of overactive bladder (OAB), rather than prostate disease?

Results:

- At PCA, 68% of learners correctly answered: "Urgency"

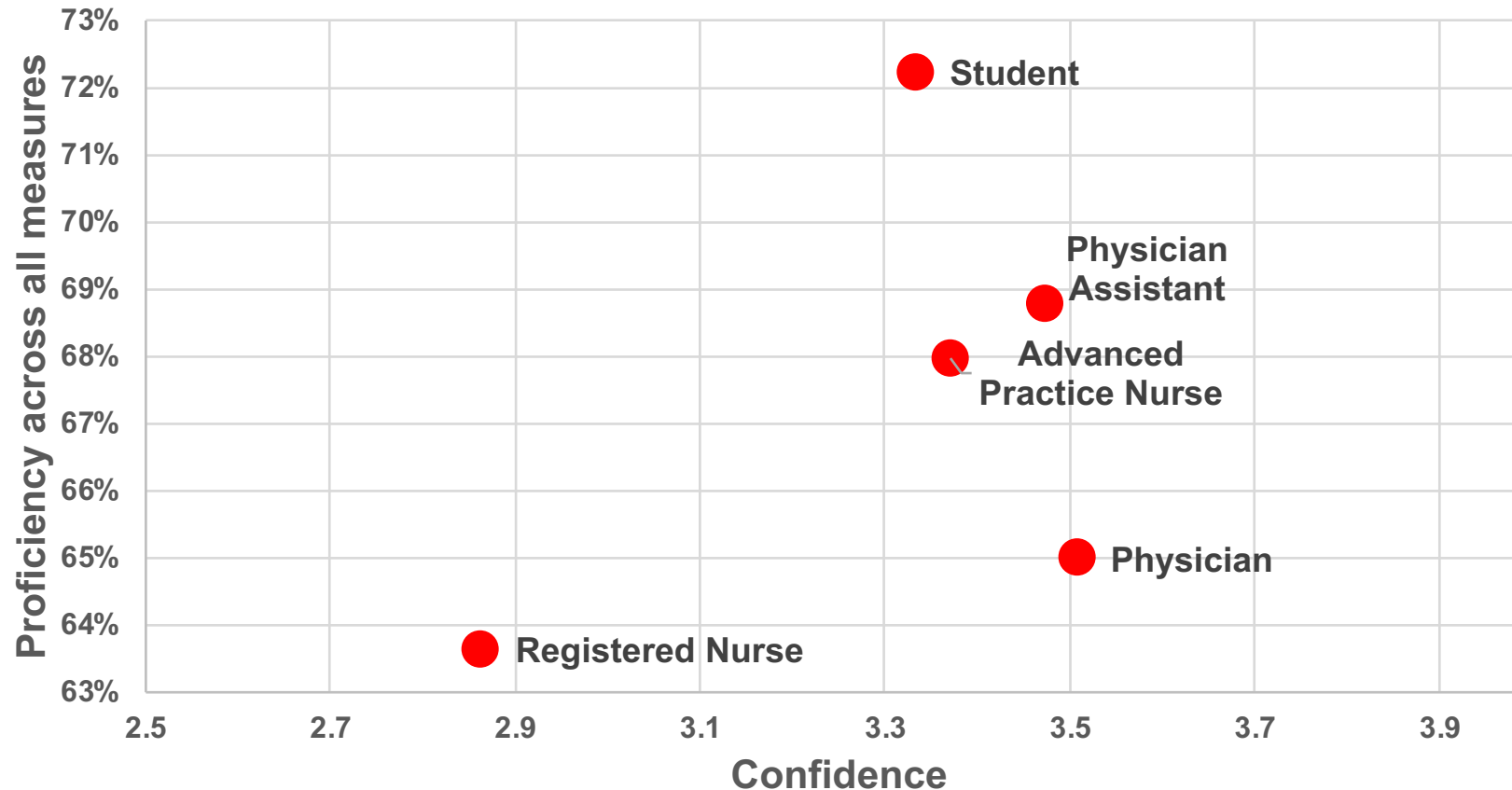


Overall Educational Impact

- Substantial, significant improvements were seen across all four curriculum learning domains, from Pre- to Post-Test (Knowledge, Competence, Confidence, and practice strategy)
 - These gains were stronger for advanced practice nurses compared to physicians across all domains, though physicians achieved higher scores in Knowledge and Confidence
 - These gains were seen across all individual Knowledge and Competence items, with improvements ranging from 12% to 77%
- When examining any relationship between Confidence and Proficiency (Knowledge and Competence), physicians were found to be relatively more confident but less proficient compared to other learners
- Significant improvements ranging from 27% to 42% were measured across all Learning Objectives, with all Post-Test scores between 62% and 70%
- Though practice strategy ratings (to consider patient characteristics like age when prescribing OAB treatments) were high at Post-Test, more moderate Post-Test Confidence ratings suggest learner awareness of gaps in Knowledge and Competence
- The analysis of the Knowledge and Competence domains identified three **opportunities for further education in the management of patients with OAB**
 - Though strong gains were measured on a Competence item presenting the case of a newly diagnosed patient with OAB, learners struggled at Post-Test in **selecting between behavioral and drug therapies**
 - Despite improvements on a Competence item on a patient still experiencing symptoms, learners were challenged by **treatment selection when behavioral therapy is unsuccessful**
 - Despite gains on a Knowledge item addressing clinical presentation of OAB, learners struggled at Post-Test in identifying **symptoms differentiating OAB from prostate disease**

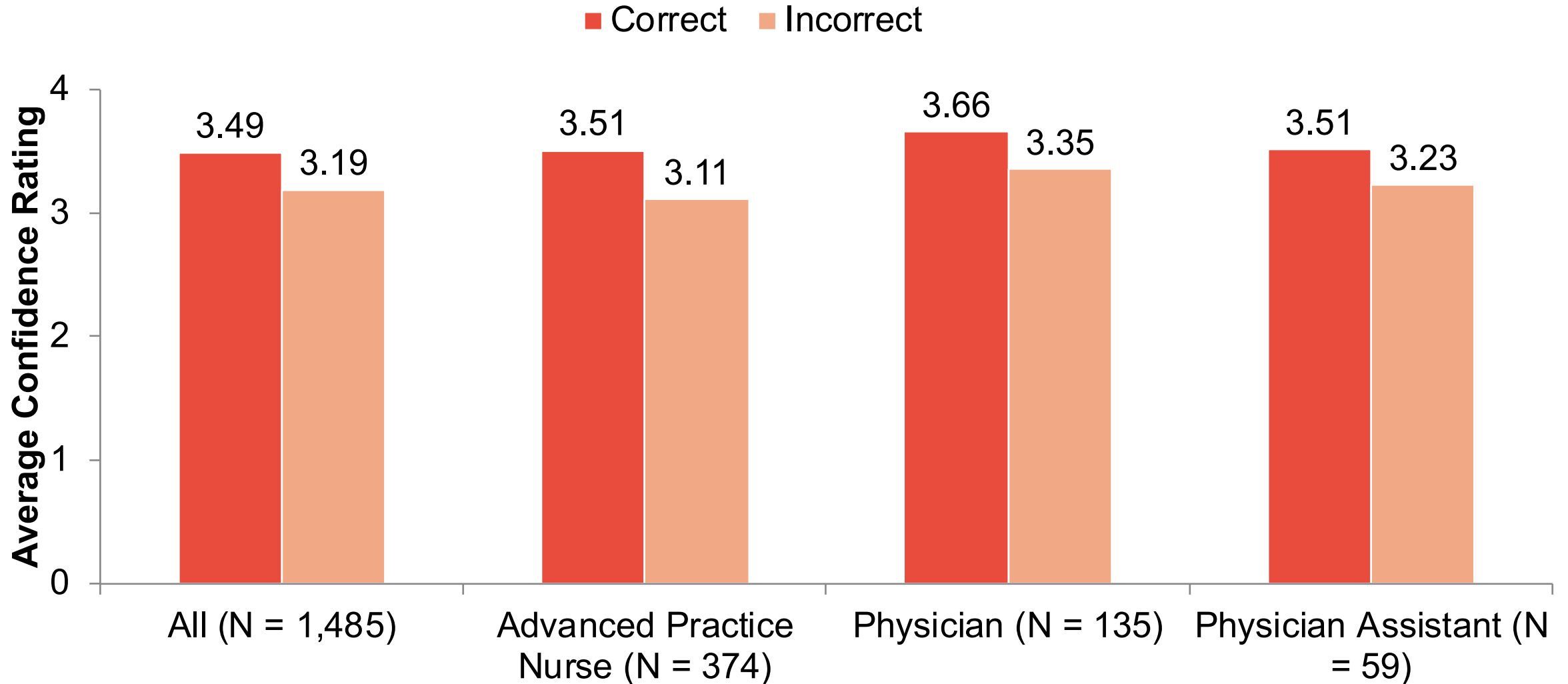
Correlation Analysis

Confidence and Proficiency by Profession

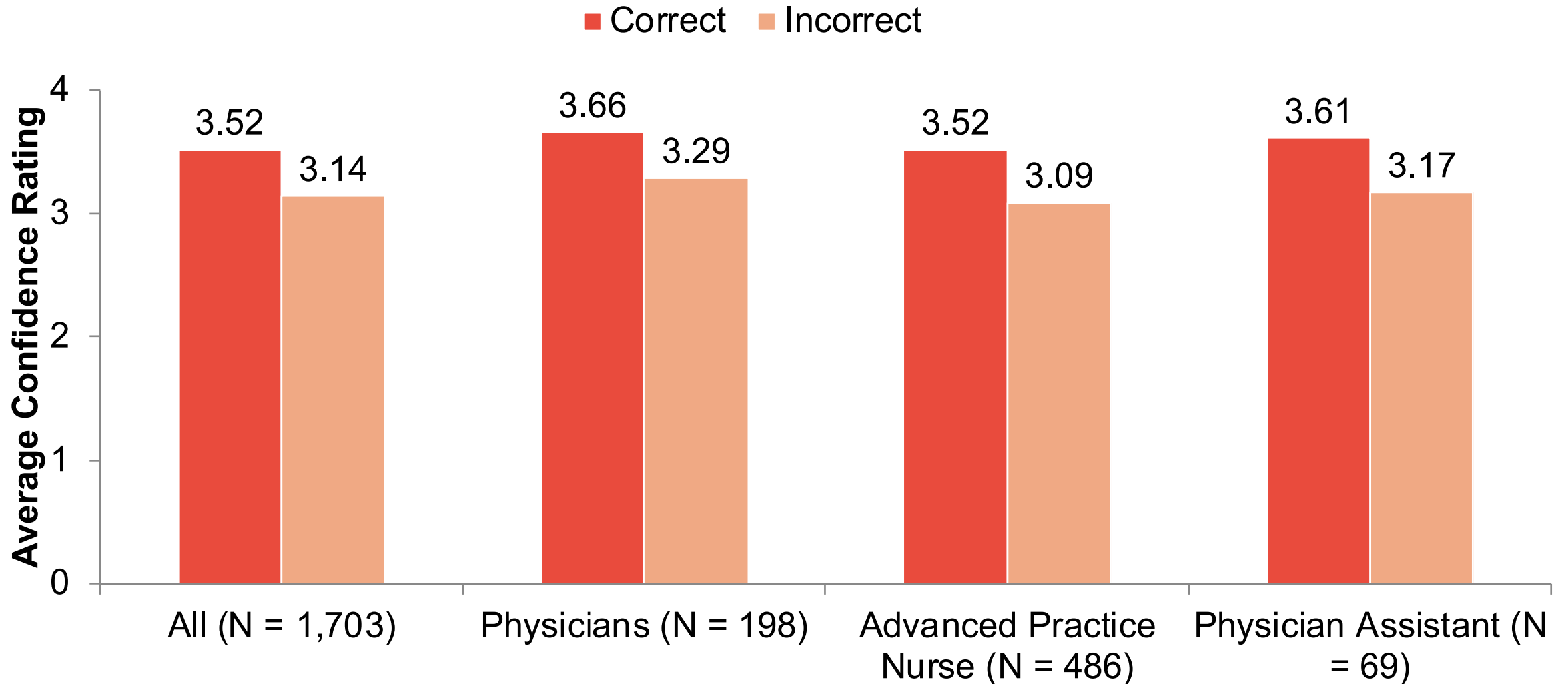


- When exploring relationships between learner Confidence and Proficiency (average Knowledge and Competence) by profession, physicians had the highest Confidence but relatively low Proficiency compared to other professions
- Students had highest Proficiency, but relatively low Confidence
- Registered nurses had lowest Proficiency and lowest Confidence

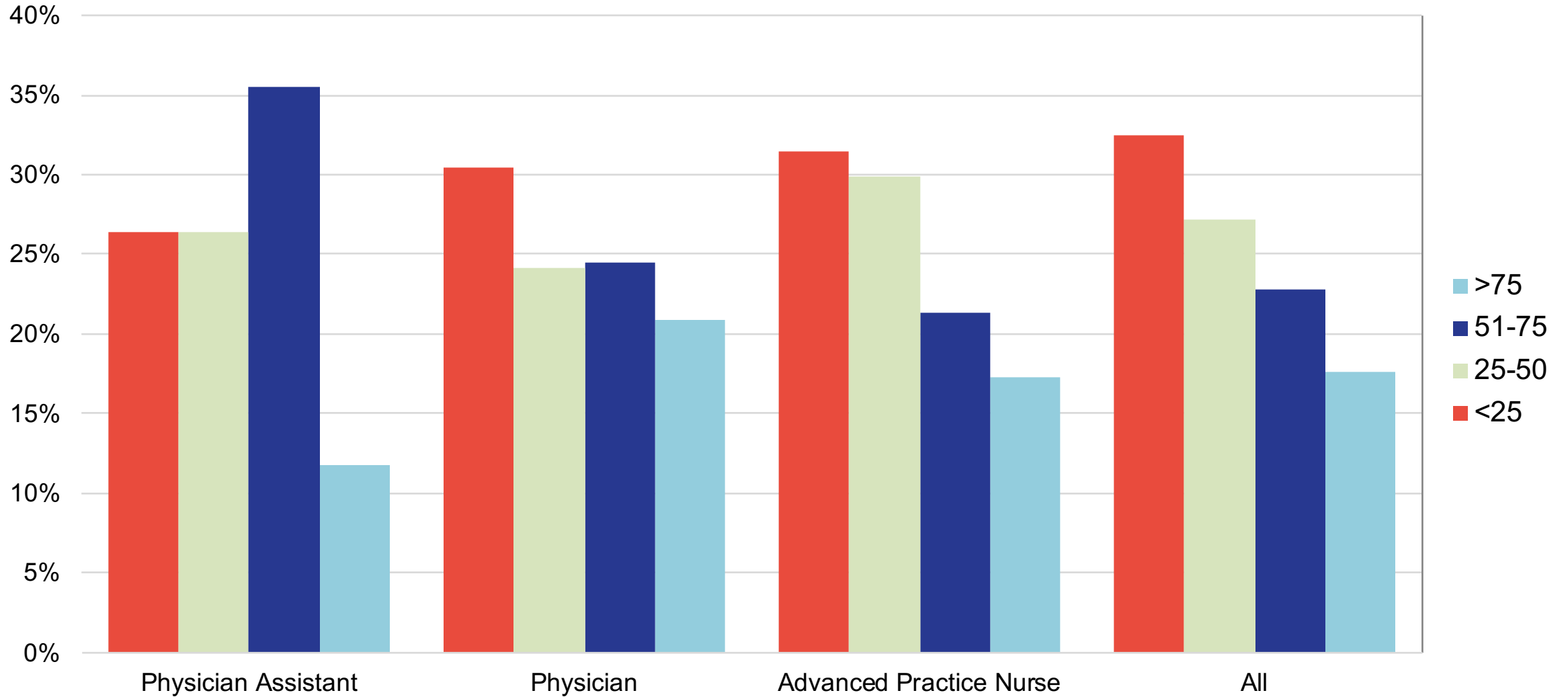
Confidence based on Competence to appropriately select first-line therapy for a patient without relevant comorbidities (51 year-old woman)



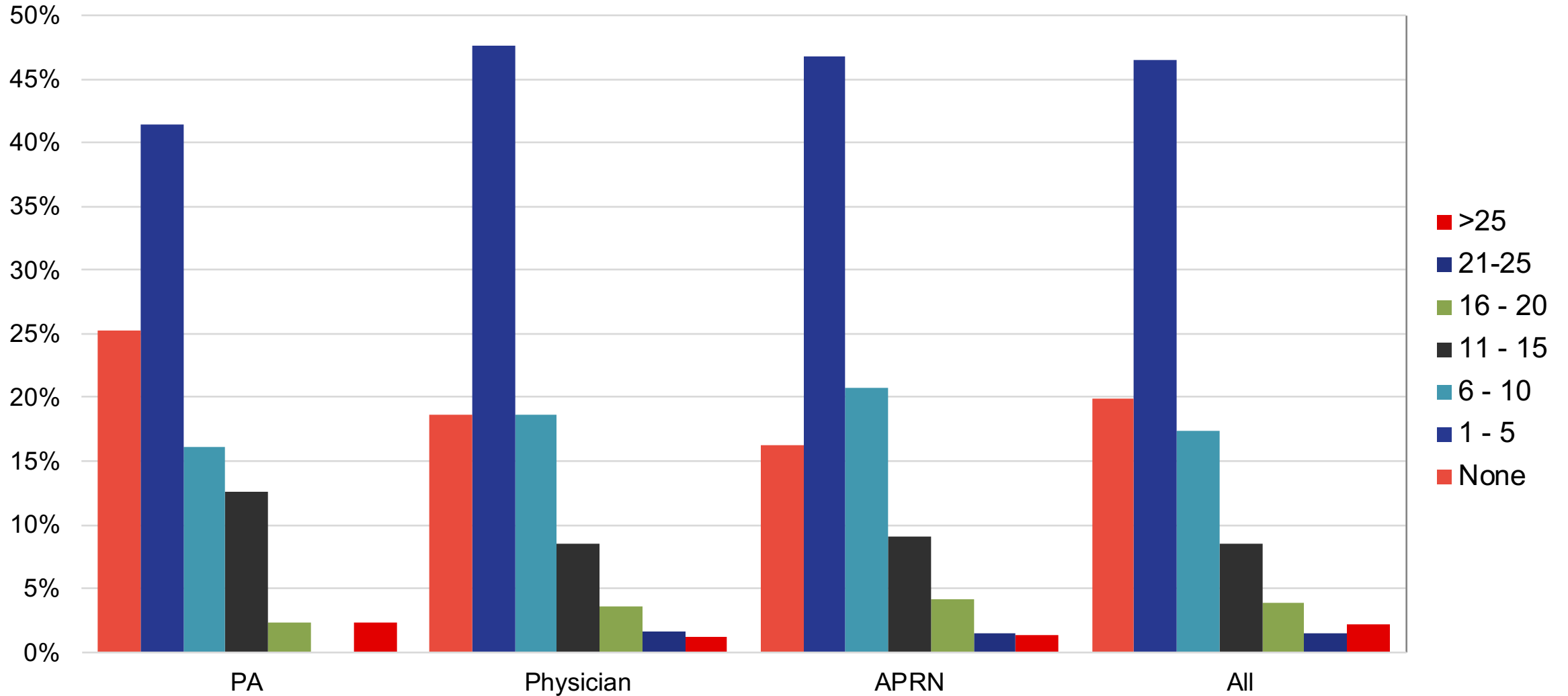
Confidence based on Competence to select appropriate pharmacologic therapy based on patient age and comorbidities (71-year-old man)



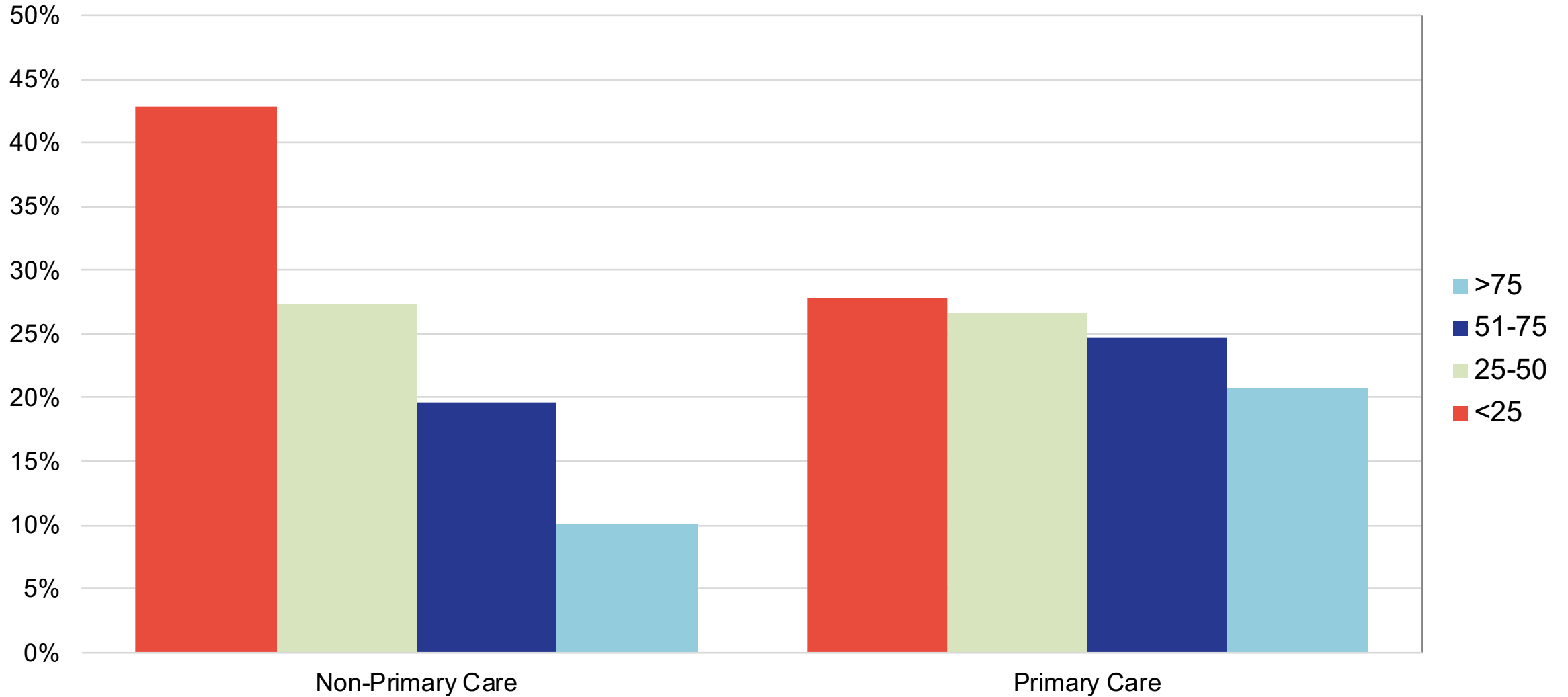
Total weekly patient volume by profession



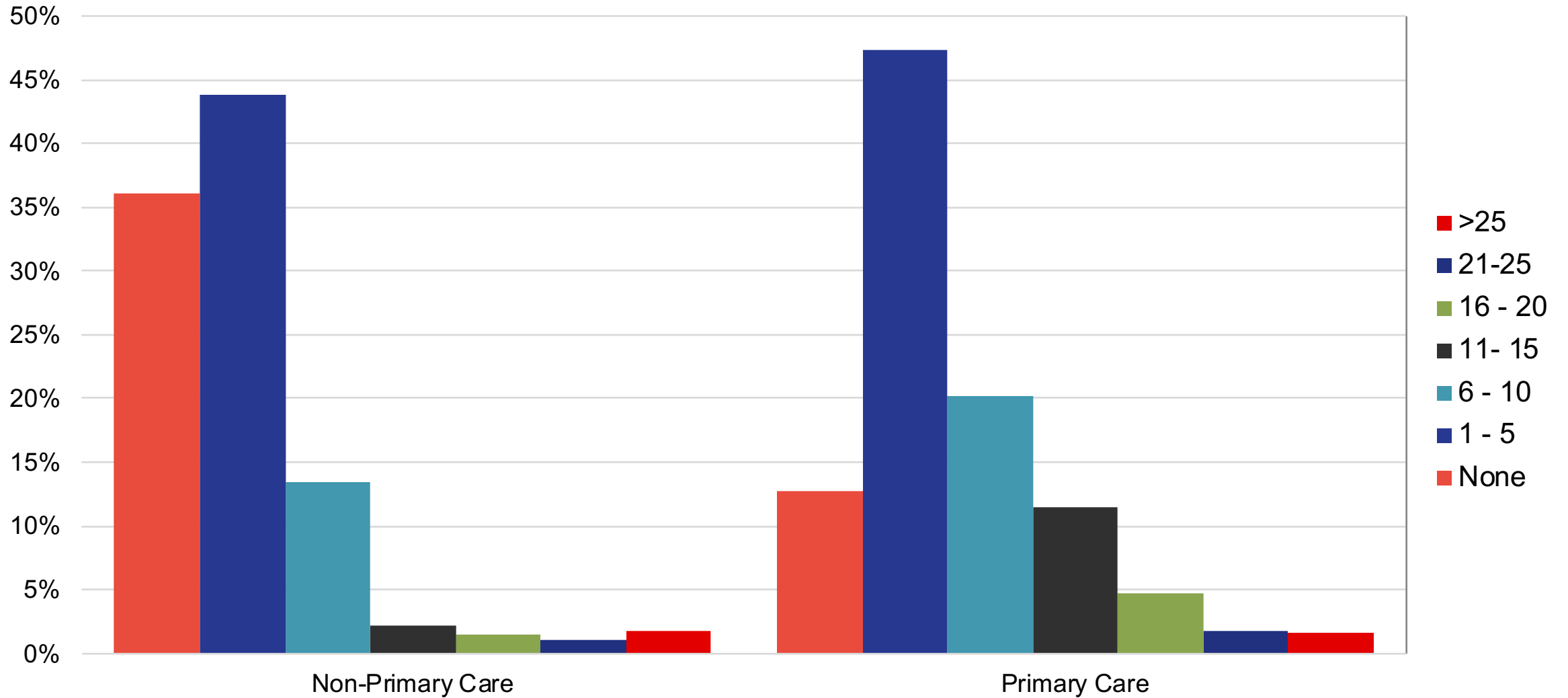
Patients seen with OAB weekly by profession



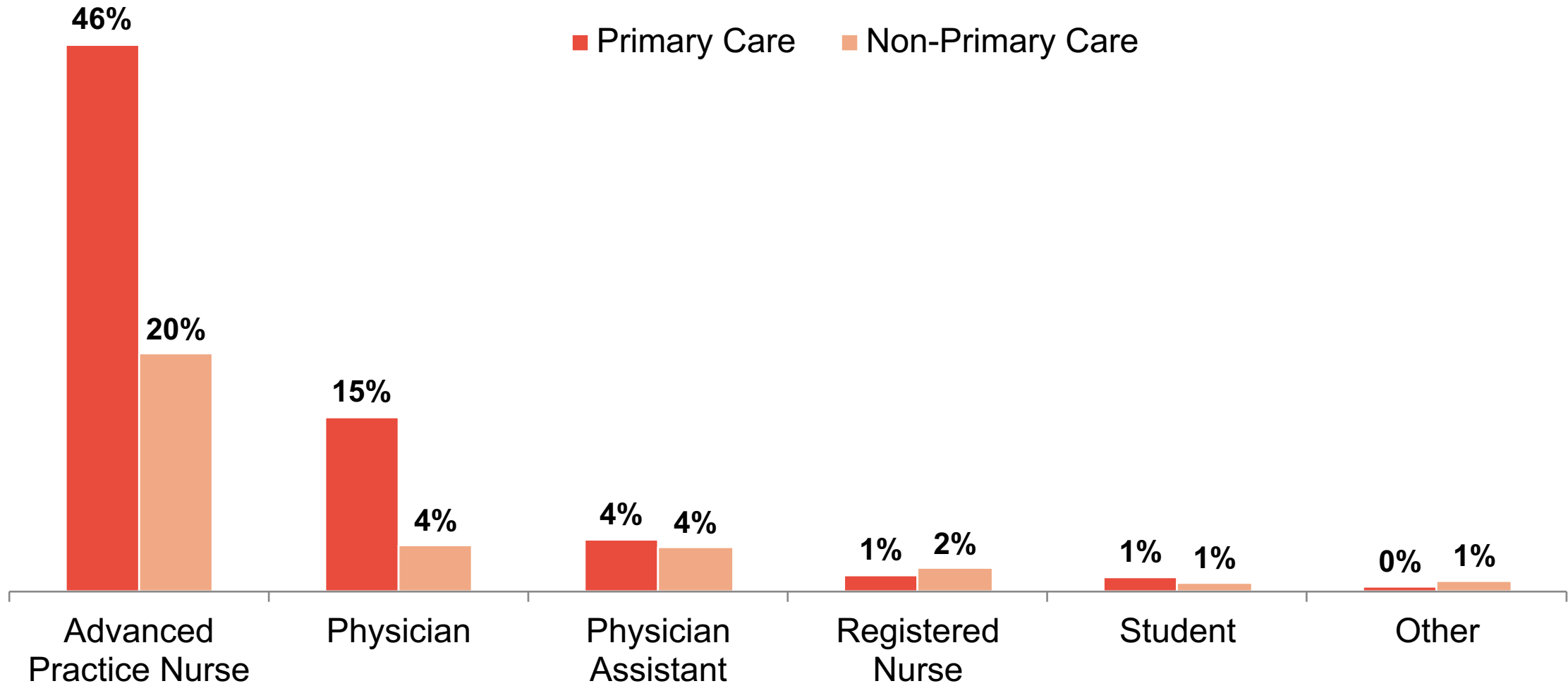
Total patient weekly volume by specialty



Patients seen with OAB weekly by specialty



Specialty by profession



Appendix

**Slides 37 – 39: Pre-Test to Post-Test
matched item responses**

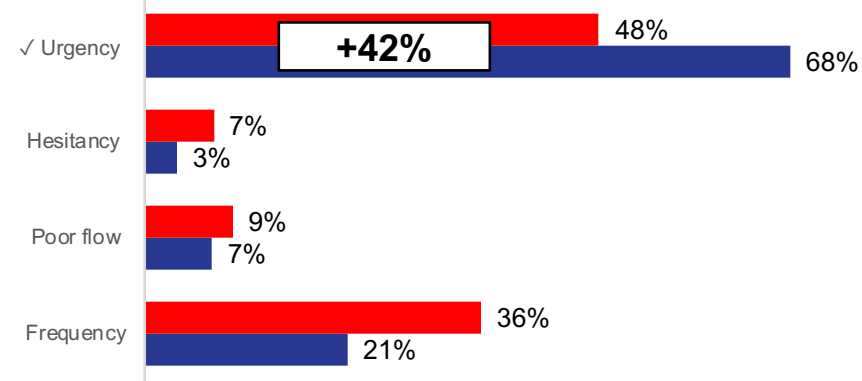
**Slides 40 – 42: Pre-Test, Post-Test, and
PCA matched item responses***

Knowledge Items

Pre-Test
Post-Test

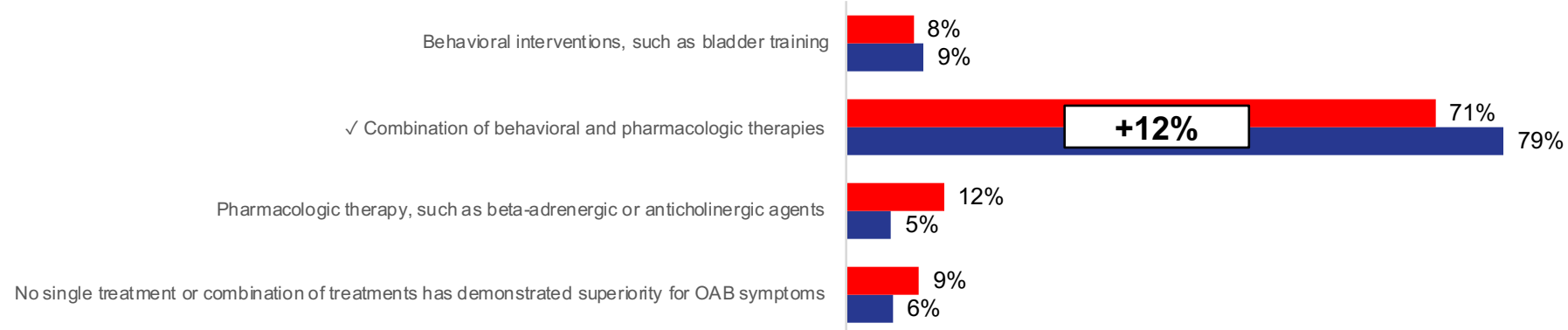
Which of the following lower urinary tract symptoms in a man is the most suggestive of overactive bladder (OAB), rather than prostate disease?

N = 1,566 Matched responses



Which of the following approaches to the treatment of OAB has demonstrated superiority over other approaches in clinical studies?

N = 1,516 Matched responses

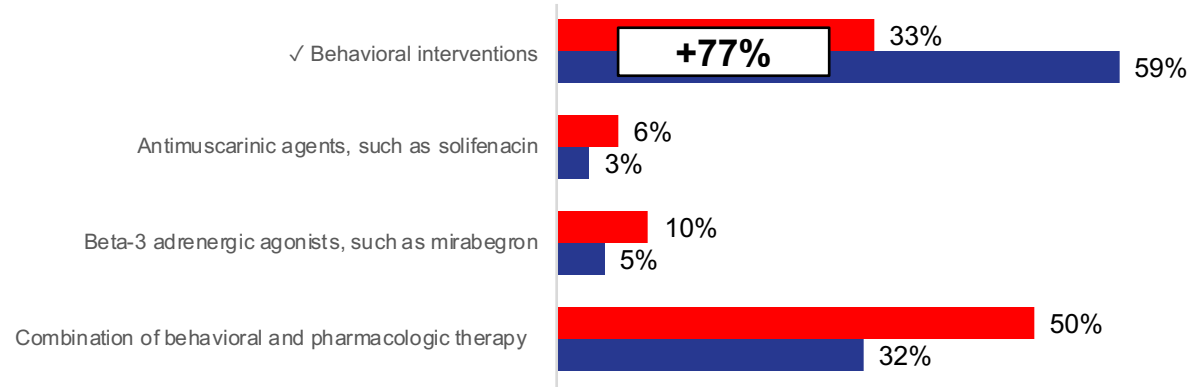


Competence Items

Pre-Test
Post-Test

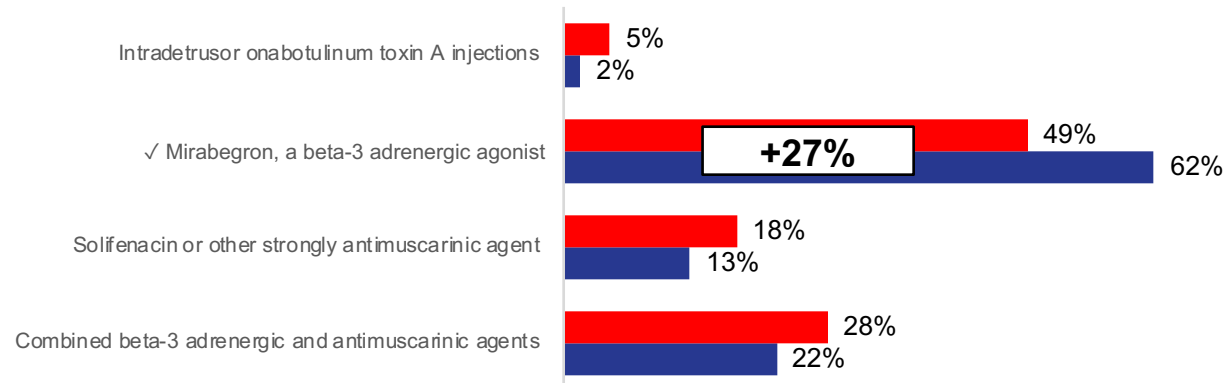
51 y/o woman presents complaining of urinary frequency, nocturia, urgency, and occasional urinary incontinence. Physical exam is unremarkable; urinalysis and other labs are WNL. She has no history of recurrent UTI or other urogenital conditions. You diagnose OAB. Which of the following is recommended as first-line therapy for this patient?

N = 1,330 Matched responses



71 y/o man with a history of OAB managed with behavioral therapies complains of persistent urinary symptoms. Medical Hx: Hypercholesterolemia, early osteoarthritis in right hip. Current meds: Atorvastatin 20 mg qd, ibuprofen 200 mg prn. Workup: Physical exam, prostate exam, and labs WNL. Which of the following might be the best pharmacologic therapy for this patient?

N = 1,511 Matched responses

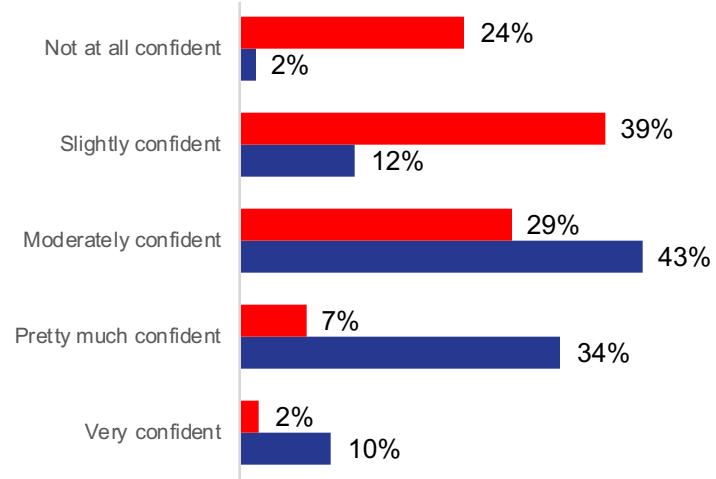


Confidence and Practice Strategy Items

Pre-Test
Post-Test

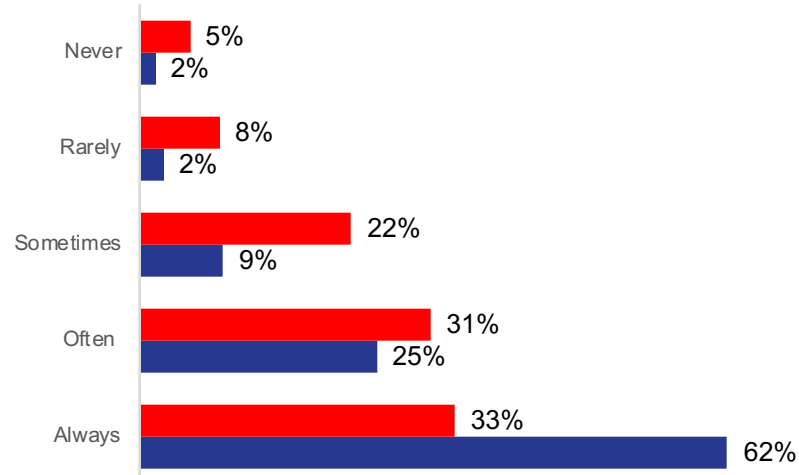
How confident are you in your ability to manage patients with OAB?

N = 1,715 Matched responses



How often do you consider patient characteristics, such as age, when prescribing pharmacotherapy for OAB?

N = 1,824 Matched responses



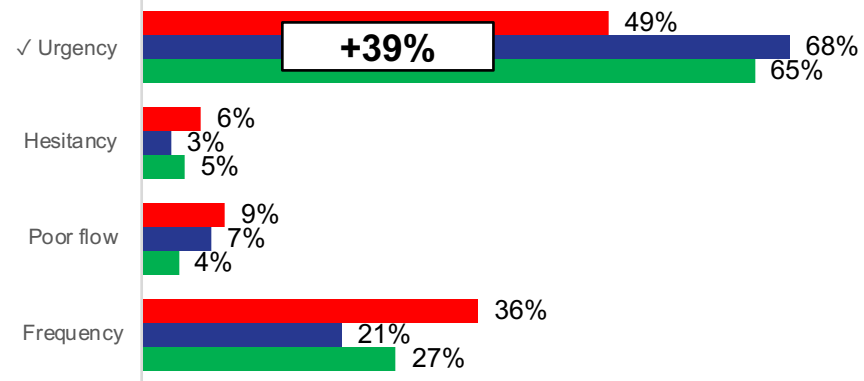
Knowledge Items

Post Curriculum Assessment (PCA)



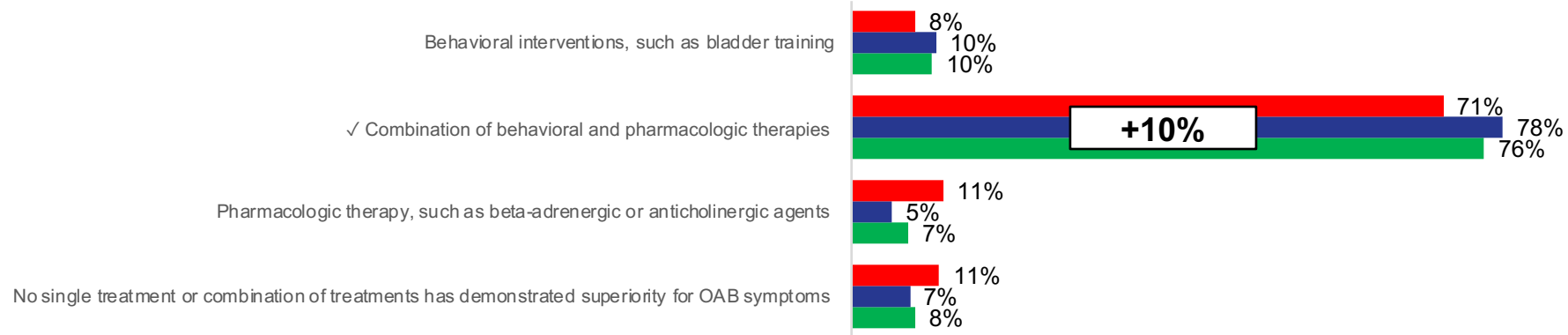
Which of the following lower urinary tract symptoms in a man is the most suggestive of overactive bladder (OAB), rather than prostate disease?

N = 748 Matched responses



Which of the following approaches to the treatment of OAB has demonstrated superiority over other approaches in clinical studies?

N = 721 Matched responses



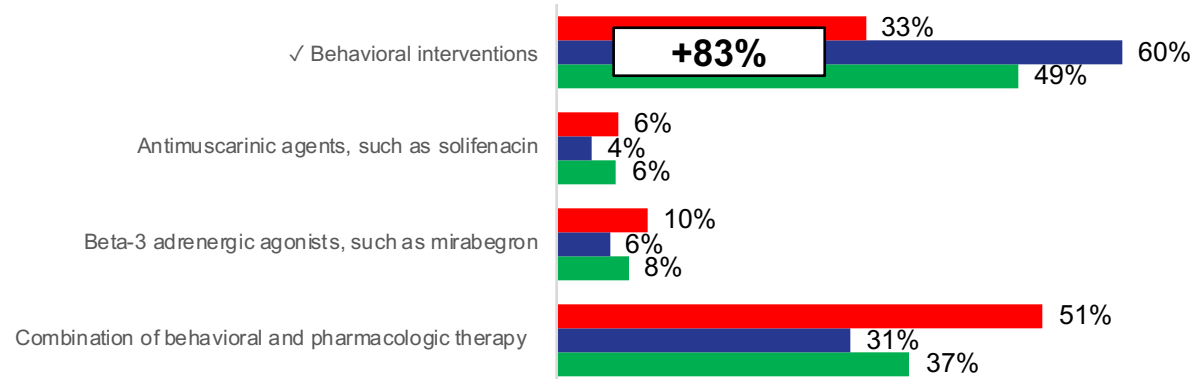
Competence Items

Post Curriculum Assessment (PCA)



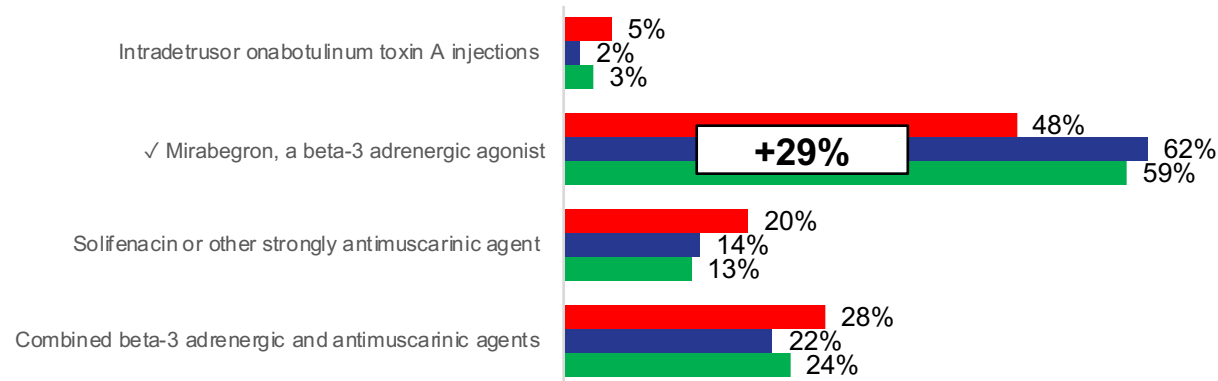
51 y/o woman presents complaining of urinary frequency, nocturia, urgency, and occasional urinary incontinence. Physical exam is unremarkable; urinalysis and other labs are WNL. She has no history of recurrent UTI or other urogenital conditions. You diagnose OAB. Which of the following is recommended as first-line therapy for this patient?

N = 648 Matched responses



71 y/o man with a history of OAB managed with behavioral therapies complains of persistent urinary symptoms. Medical Hx: Hypercholesterolemia, early osteoarthritis in right hip. Current meds: Atorvastatin 20 mg qd, ibuprofen 200 mg prn. Workup: Physical exam, prostate exam, and labs WNL. Which of the following might be the best pharmacologic therapy for this patient?

N = 728 Matched responses



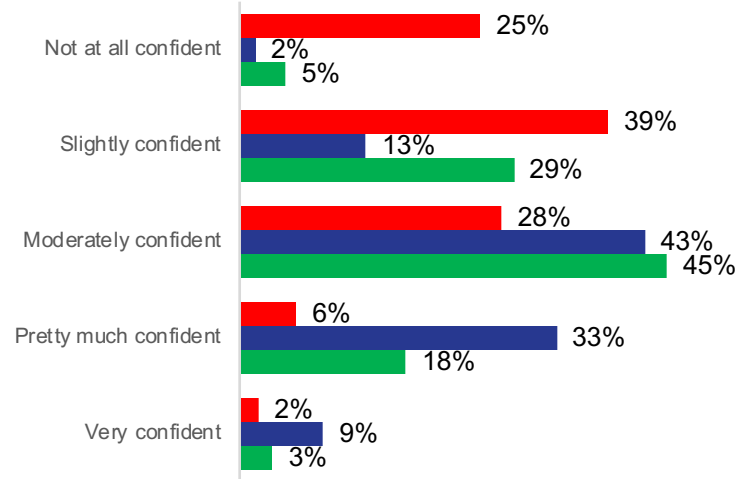
Confidence and Practice Strategy Items

Post Curriculum Assessment (PCA)

Pre-Test
Post-Test
PCA

How confident are you in your ability to manage patients with OAB?

N = 802 Matched responses



How often do you consider patient characteristics, such as age, when prescribing pharmacotherapy for OAB?

N = 856 Matched responses

