ICPM IMPROVING CHRONIC PAIN MANAGEMENT

Outcomes Report 2016

Jointly sponsored by the NYU Post-Graduate Medical School and DKBmed, LLC.

This study is supported in part by an independent medical education grant from Pfizer, Inc.

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PROGRAM OVERVIEW

ICPM IMPROVING CHRONIC PAIN MANAGEMENT

PURPOSE OF PROGRAM

To assess the impact of a medical education-based program on the use of pain scales in practices of clinicians seeing patients with chronic pain.

TARGET AUDIENCE

Primary Care clinicians (Family Practice, General Practitioner, Internal Medicine, Nurse Practitioner & Physician Assistant); Rheumatologists, Neurologists, OB-GYN, and other clinicians who treat patients afflicted by chronic pain within NYU.

LOCATIONS

The Miller Practice, NYU Langone Trinity Center, NYU Columbus Medical, Ambulatory, Tisch Center for Women's Health, and Arnold and Marie Schwartz Health Care Center.

OUTCOMES MEASUREMENT

Pre-post pairwise comparison of responses in pain score use, as well as analysis based on lecture attendance. The IRB approved the use of a validated patient quality of life survey ("The Brief Pain Index") before and after the program. Self-reflection/barrier survey sent following live lectures.

PROGRAM OBJECTIVES

LEARNING OBJECTIVES

- Describe the basic concepts of chronic pain, including taxonomy, epidemiology, and pathophysiology
- Integrate best practices in assessment of pain
- Apply strategies to monitor and optimize pain treatment

STUDY ENDPOINTS

- Primary: Increase the use of pain scores by clinicians
- Secondary: Improve patients' healthcare related quality of life

PROGRAM DETAILS

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COURSE DESCRIPTION

A multifaceted educational study to improve physician knowledge deficits, close key practice gaps, and remedy system deficiencies that result in suboptimal treatment of patients with chronic pain.

- Four 30-minute unique seminars presented to NYU Practice Group:
  - Introduction to pain
  - Pain assessment
  - Treatment of pain
  - Introduction to pain cases
- One on one Epic training session
  - Data on performance in practice re: use of pain scores
- RealCME virtual patient cases
  - Three patient cases first introduced in the live lectures
  - Level 5 outcomes

PATIENT QUALITY OF LIFE SURVEY

Quality of Life Survey (QOL) was administered prior to and following educational intervention.

- 154 surveys received before the education
- 126 surveys received following the education

MYDAILYPAIN MANAGER

- 31 patients currently subscribed to the app

INVESTIGATIVE COMMITTEE

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EDUCATIONAL COHORT

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- **256 Clinicians were identified to participate in the study**
- **152 Clinicians qualified to participate in study**
- **64 Clinicians participated in the study**

Practice Location	Potential Attendees	Qualified Participants	Attendees	Affiliated Specialties
Ambulatory Care	79	63	29	Neurology, PM&R
Tisch Center for Women's Health	14	8	8	Internist, Neurology, OB-GYN, Psychology
Trinity Hospital	18	11	7	Internal Medicine, OB-GYN, Orthopedics
Miller	9	7	5	Internal Medicine, OB-GYN
Schwartz Practice	51	28	8	Internal Medicine
Columbus Hospital	16	10	6	Internal Medicine, OB-GYN
Disqualified Practices				
CMC	44	25	0	Rheumatologists
Hospital of Joint Disease	10	0	0	Orthopedics
Tisch Hospital	15	0	0	Hospitalists

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RECRUITMENT TACTICS

- Conducted individual introduction meetings with practice directors
- Obtained convenient days, times, and lecture duration per practice
- Conducted kick-off meetings with study participants
  - Provided details regarding the study and expected responsibilities
- Email reminders sent week and day before lecture
- Tele-recruiting calls made to remind participants of upcoming lectures
- Email campaign to promote online enduring materials

CHALLENGES/BARRIERS

Challenges	Resolution
Super storm “Sandy”	Rescheduled strategy and brainstorming meetings due to the shut down of NYULMC
Qualified participants	Contacted each practice to screen participants
Participation	Scheduled additional meetings with medical/administrative directors to engage them in the study Scheduled lectures around participants’ availability Grand rounds presentation scheduled for participant convenience Barrier surveys distributed to determine barriers to participation
Pay for Performance (P4P)	Create education that establishes realistic expectations of pain management and treatment
Presentation Skills/Availability	Coaching, selecting, and modifying faculty based on presentation skills

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LIVE IMPACT

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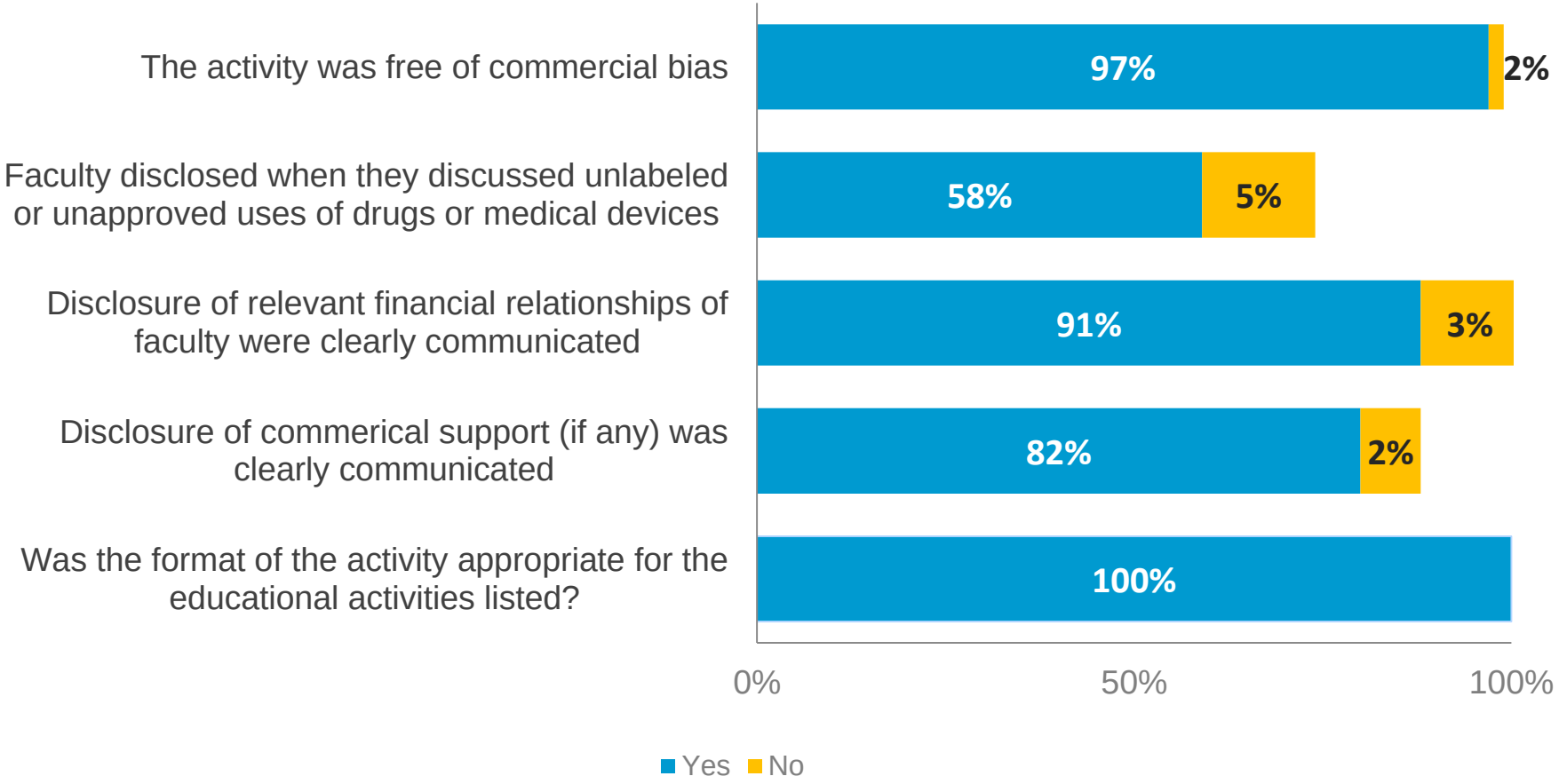
PARTICIPANT EVALUATION

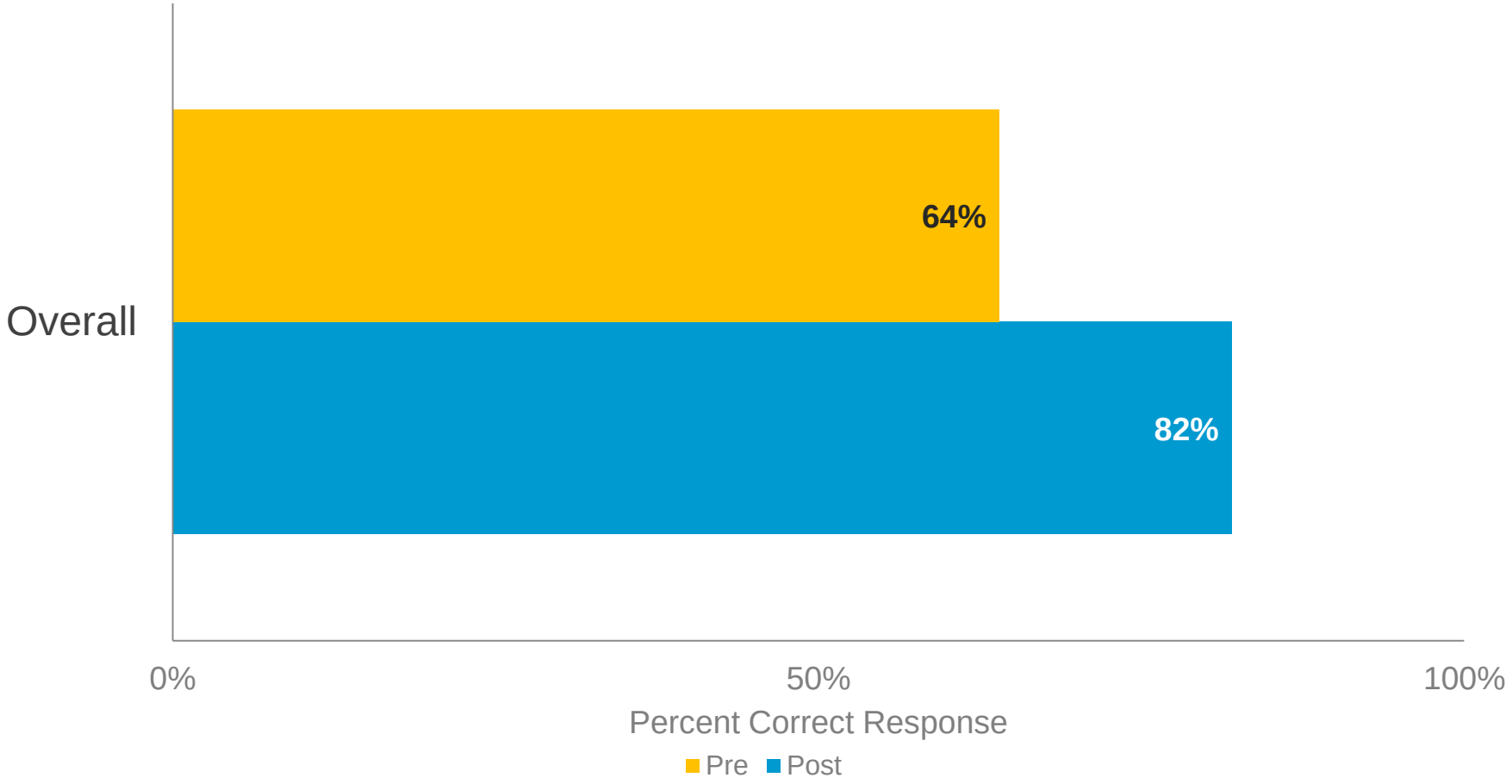
100% of clinicians felt that the program format was appropriate and most believed the activity was free from commercial bias.



N = 143, 140, 136, 143, 144

KNOWLEDGE RESULTS: OVERALL

Clinician knowledge improved by 18% immediately following the program.



N = 34,38

KNOWLEDGE RESULTS: LECTURE 1

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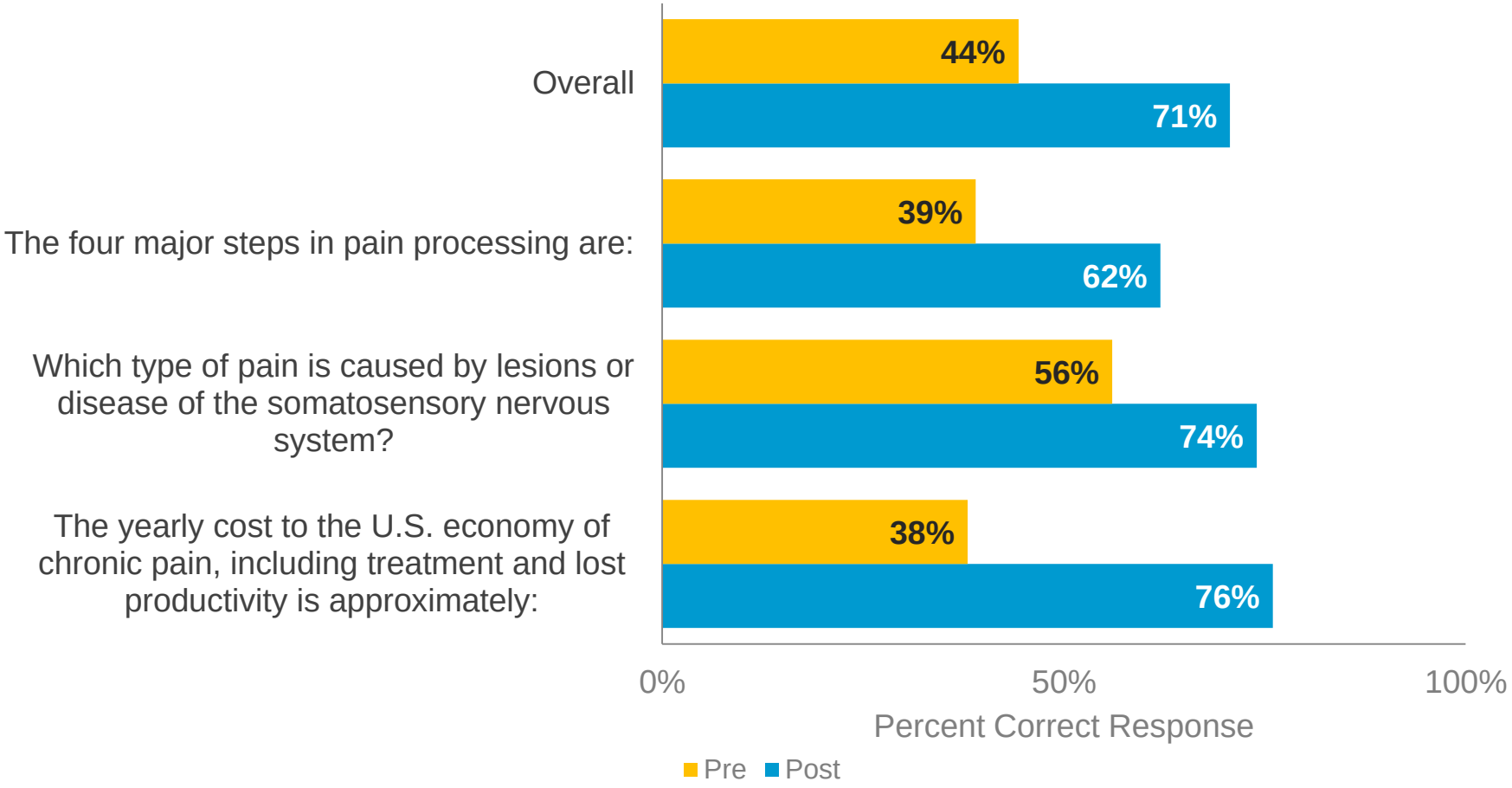
Clinician knowledge improved overall following the program.



N = 34,38

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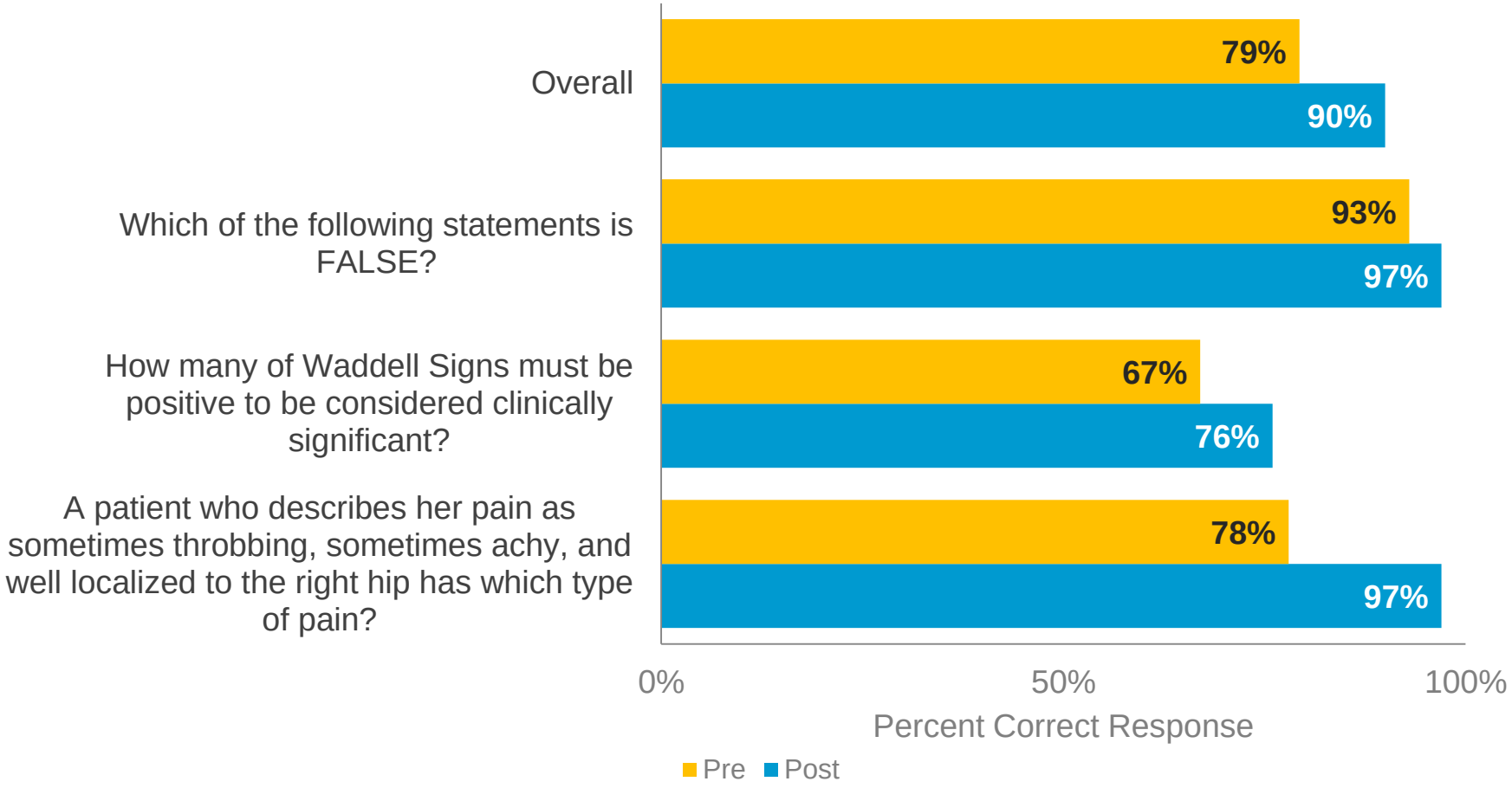
KNOWLEDGE RESULTS: LECTURE 2

ICPM IMPROVING CHRONIC PAIN MANAGEMENT

Clinician knowledge improved overall following the program.



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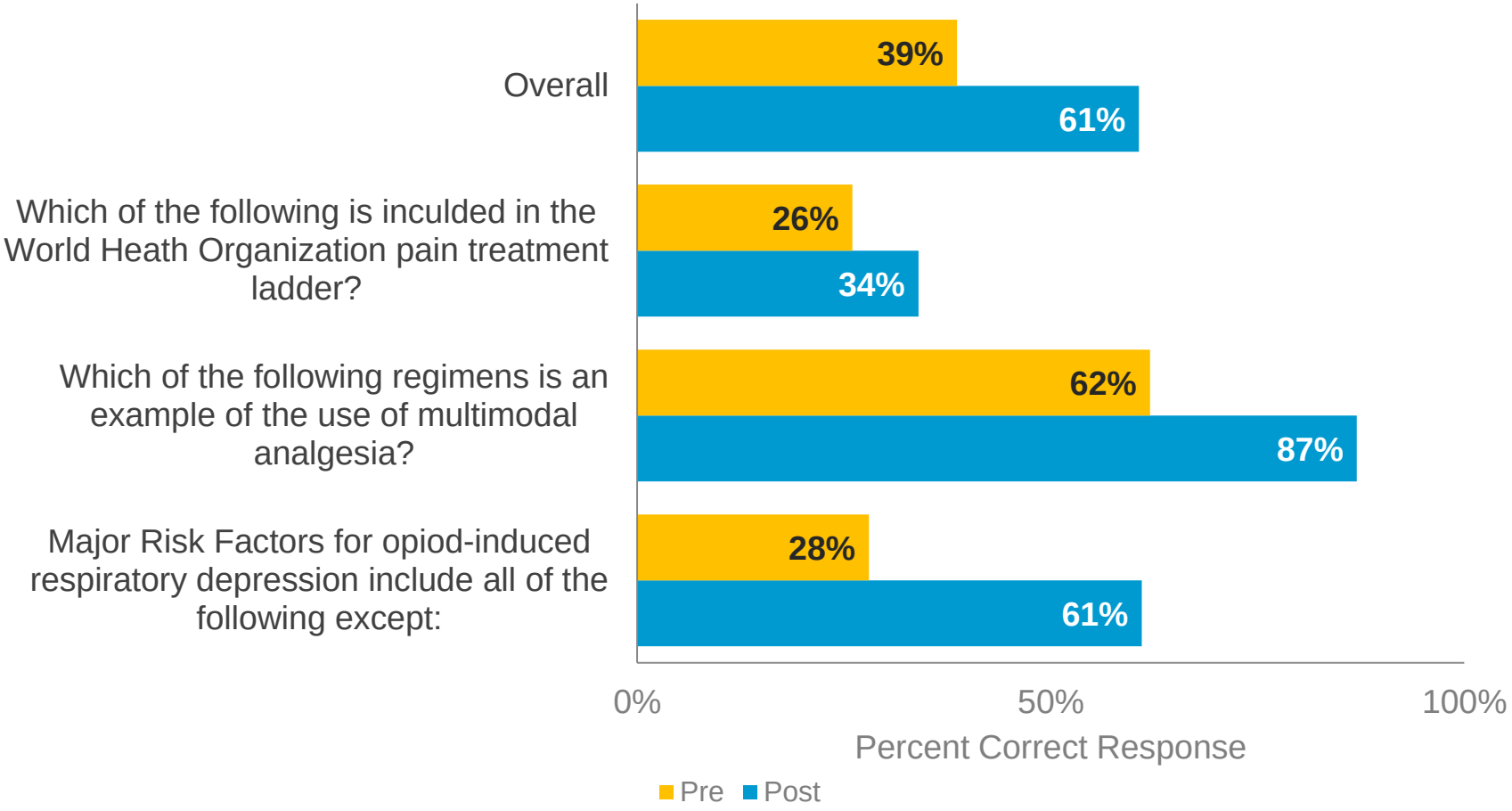
KNOWLEDGE RESULTS: LECTURE 3

ICPM IMPROVING CHRONIC PAIN MANAGEMENT

Clinician knowledge improved overall following the program.



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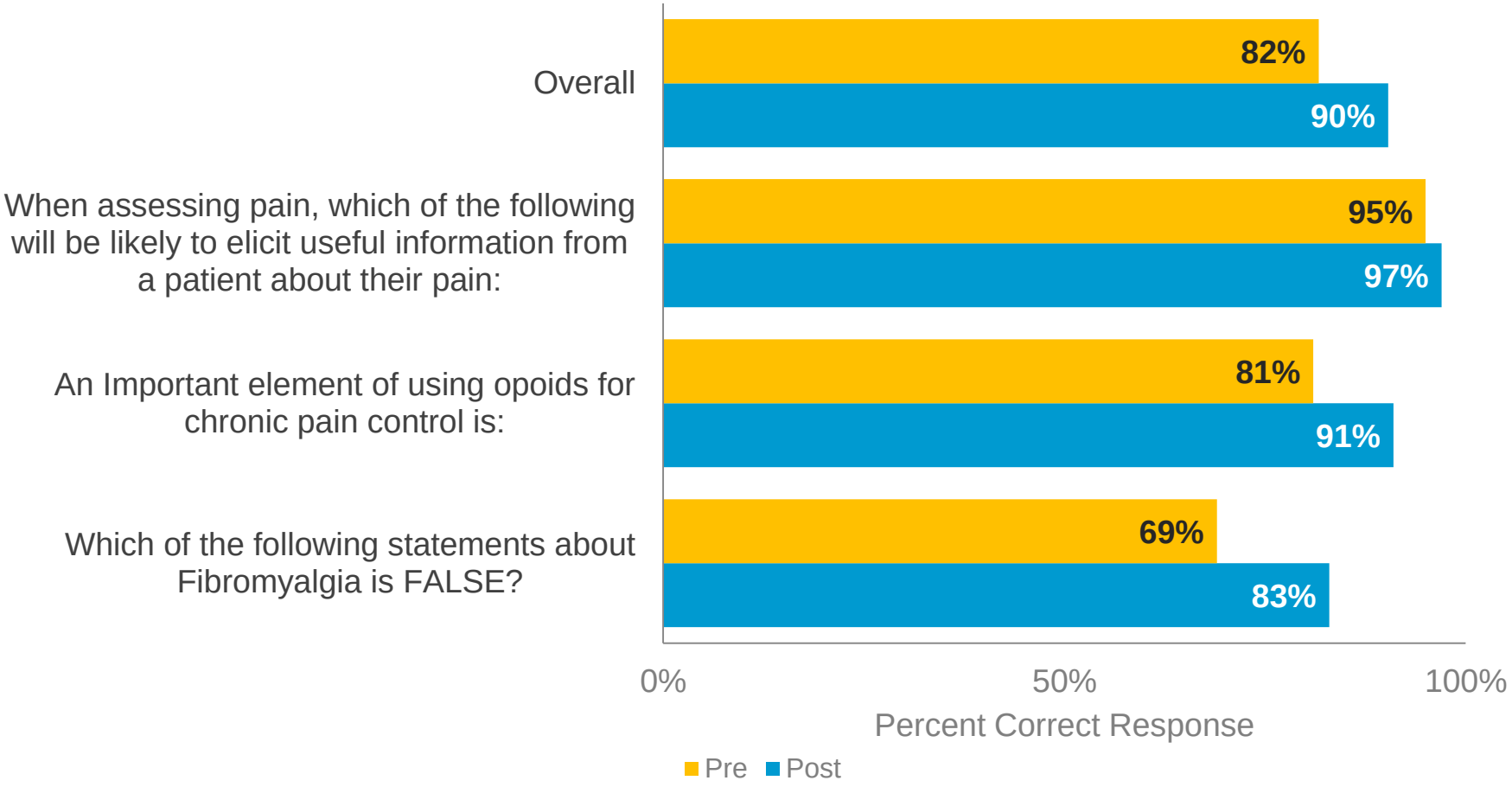
KNOWLEDGE RESULTS: LECTURE 4

ICPM IMPROVING CHRONIC PAIN MANAGEMENT

Clinician knowledge improved overall following the program.



N = 37, 35

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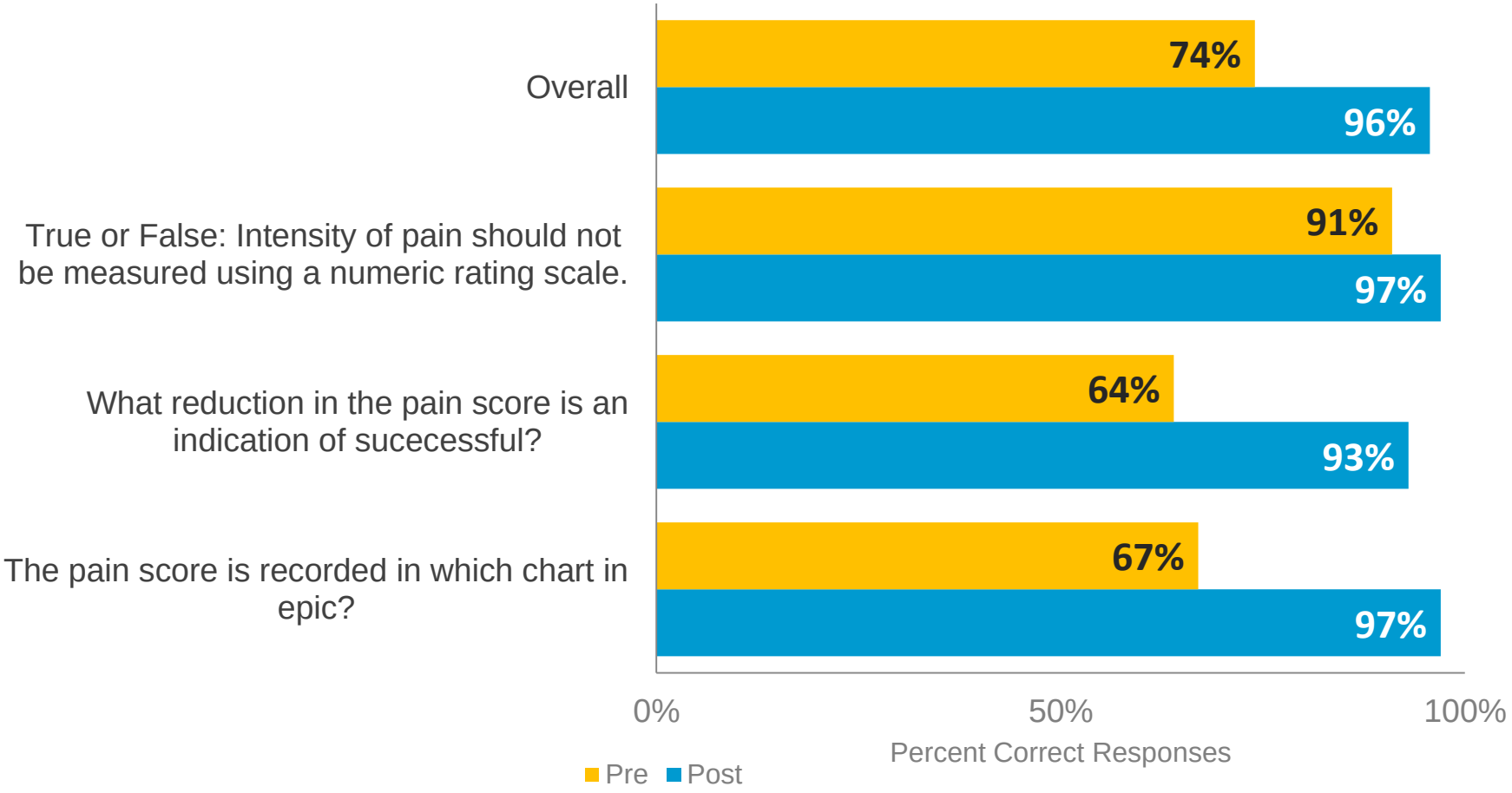
EPIC EVALUATION AND TRAINING

Clinician ability to understand pain score and Epic use improved following the program.



N= 33,30

CHANGE IN CONFIDENCE: REALCME

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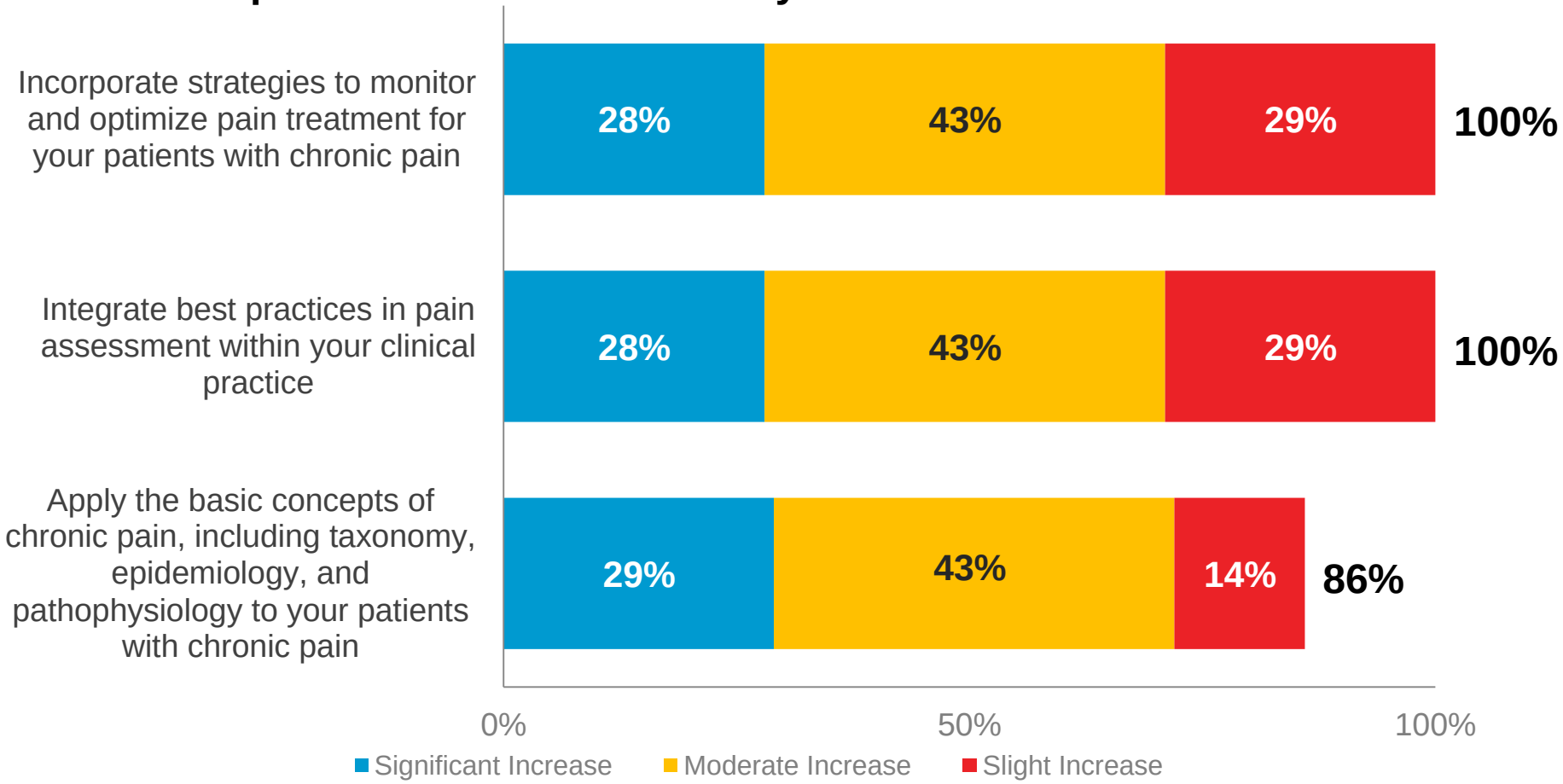
Clinicians' confidence in managing patients with pain increased substantially as a result of the education.



N = 8

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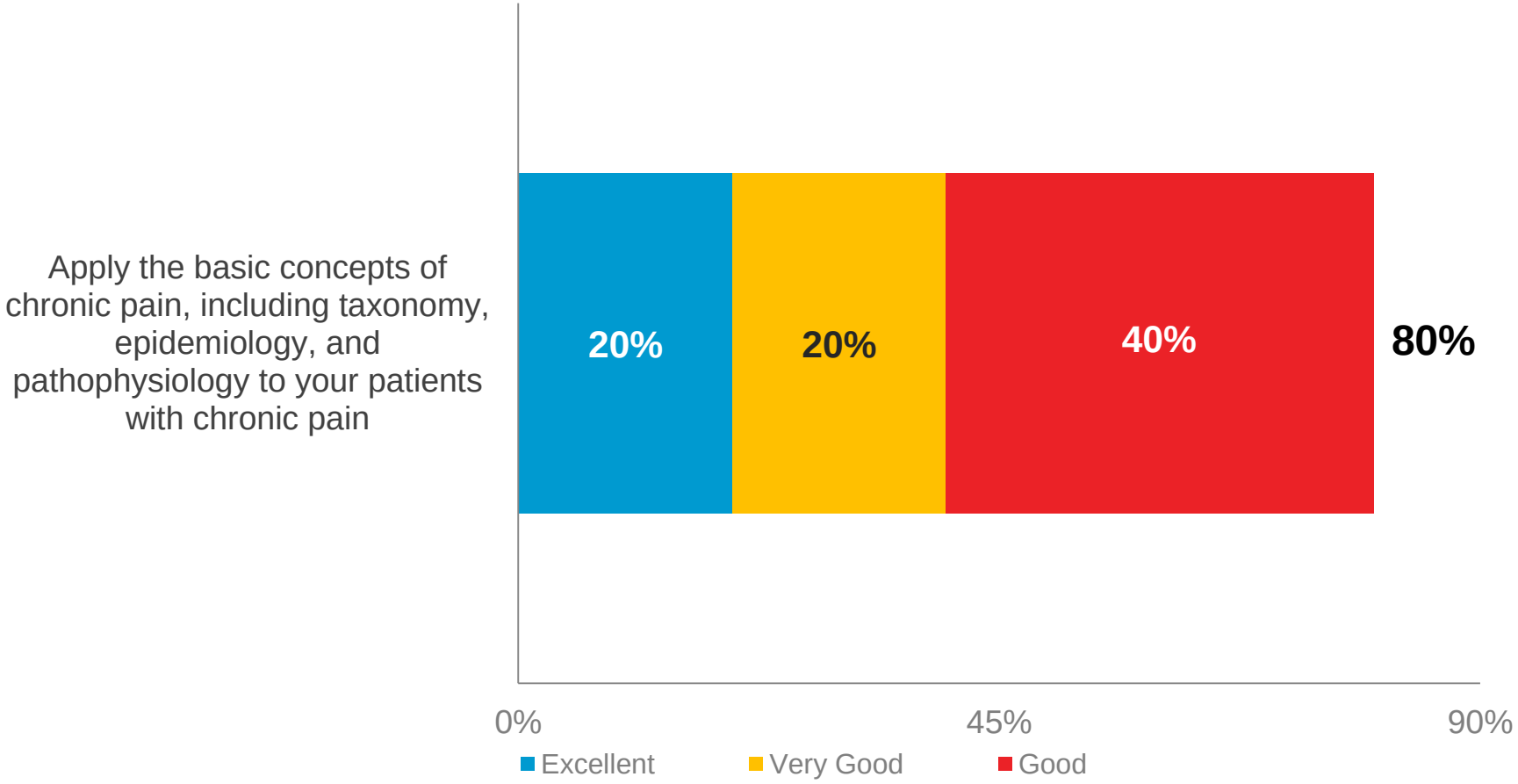
KNOWLEDGE RESULTS: REALCME

80% of clinicians rated their current knowledge of managing chronic pain was good to excellent as the result of participating in the study.



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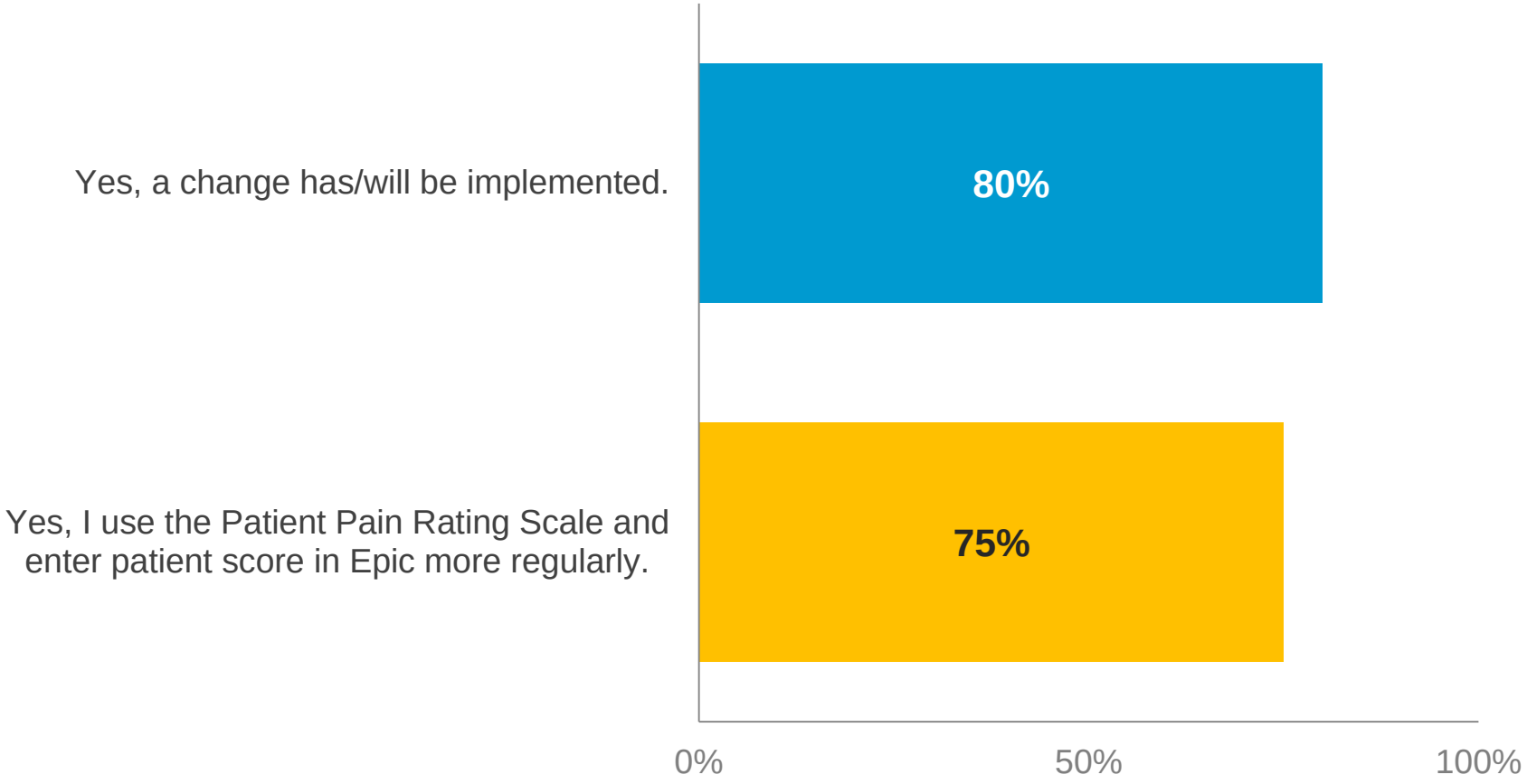
PRACTICE CHANGE: REALCME

80% of clinicians indicate that they have/will change practice and 75% indicate they will enter patient pain scores into Epic more regularly.



N = 8

PRACTICE CHANGE COMMENTS

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- “I will document pain scores more consistently.” (n = 9)
- “I will fill in pain scores in the vital sign section.”
- “Established an Epic routine to track pain.”
- “I will use the pain scale with my patients more often.”
- “Become more attuned to my patients and now ask about pain.”
- “MyDailyPainManager.org will be recommended to my patients.”
- “I will have medical assistant ask patients about pain symptoms while they are taking vital signs.”

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POPULATION DATA

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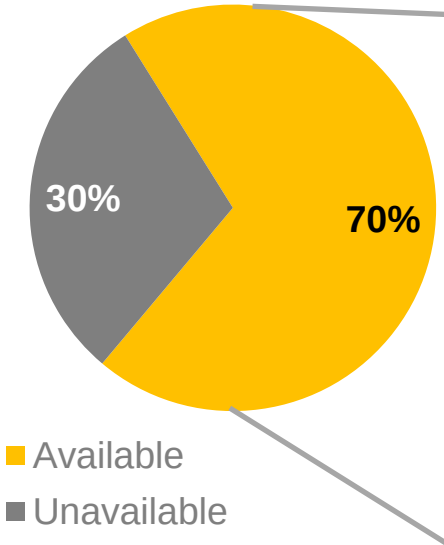
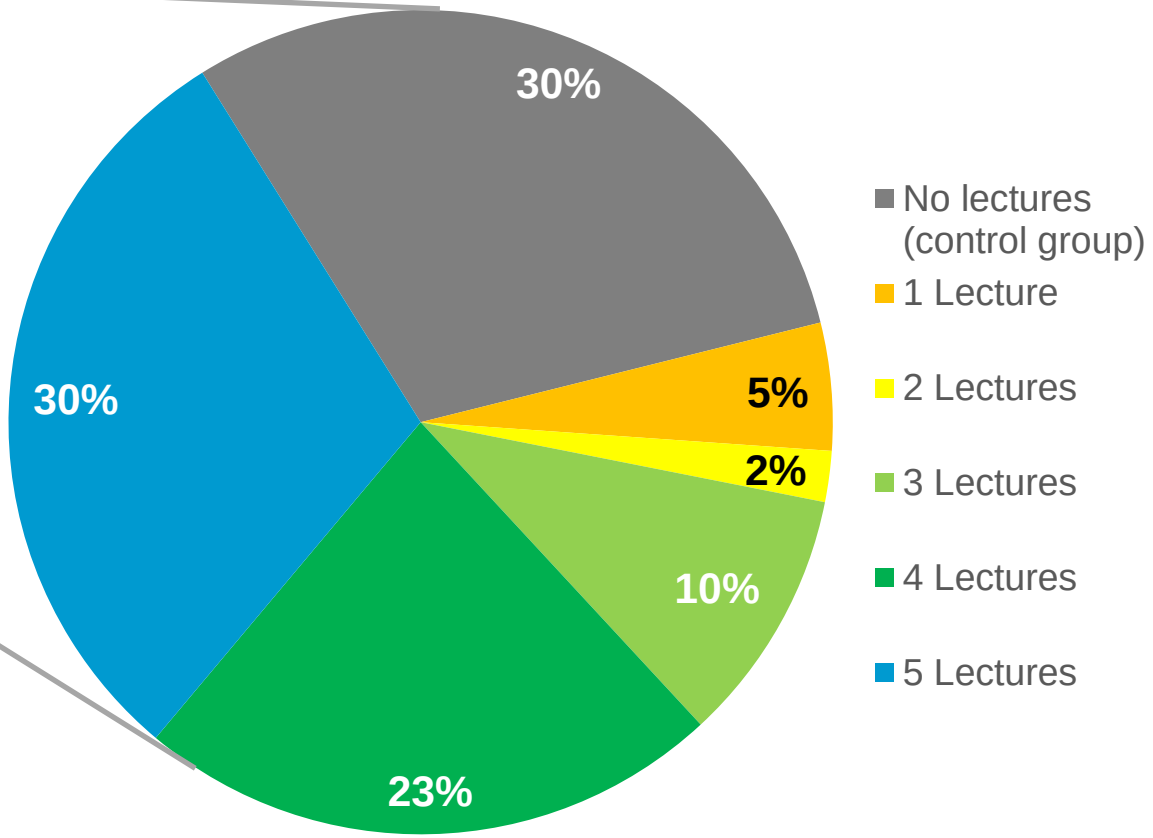
Pre-Post Data Availability



Lecture Attendance



Control group: 18
Participant: 42

N = 86, 60

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CHANGE IN PAIN SCORE USE

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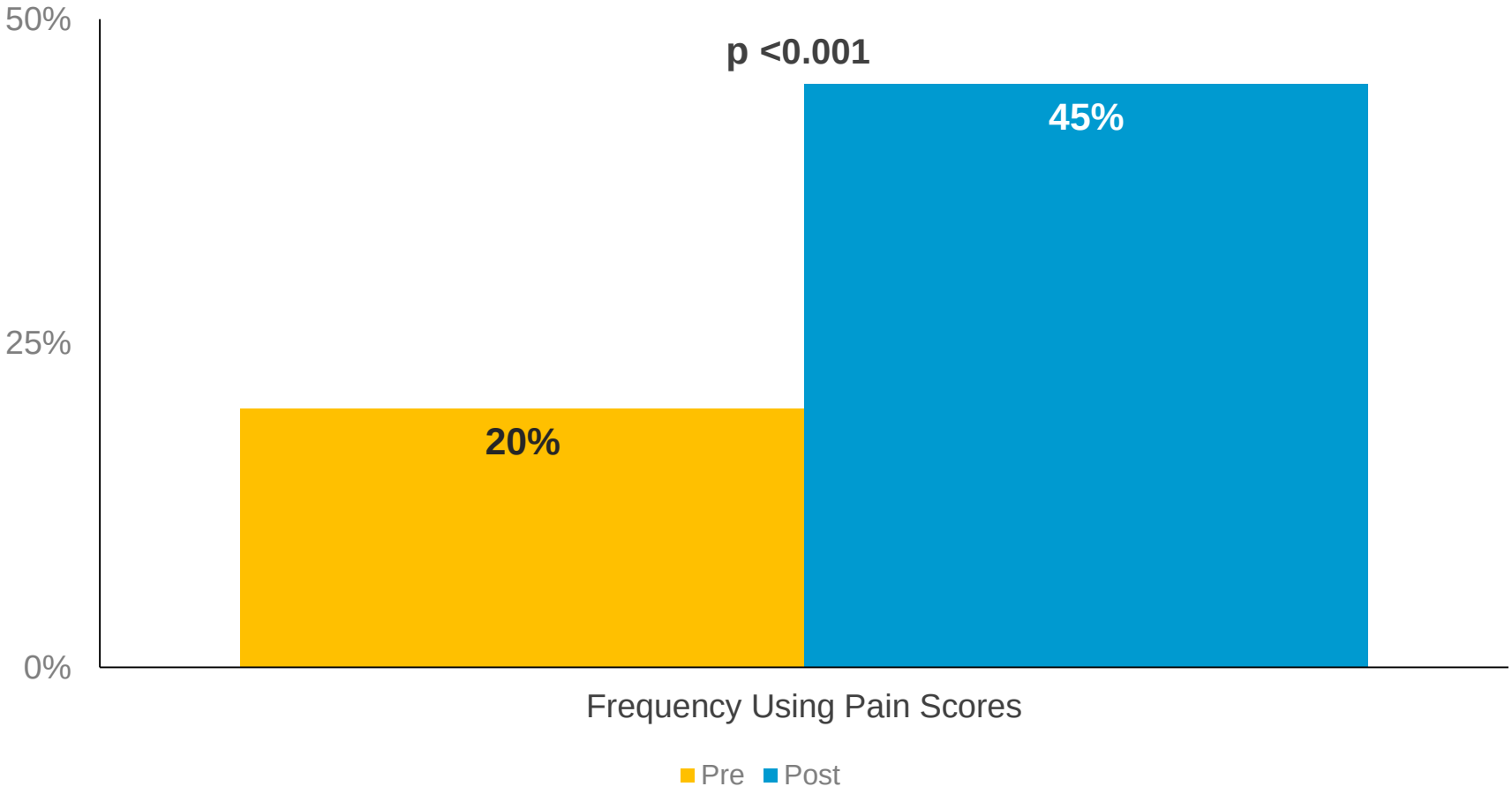
Clinicians significantly increased their use of pain scores.



N = 60

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CHANGE IN PAIN SCORE USE IN PRACTICES

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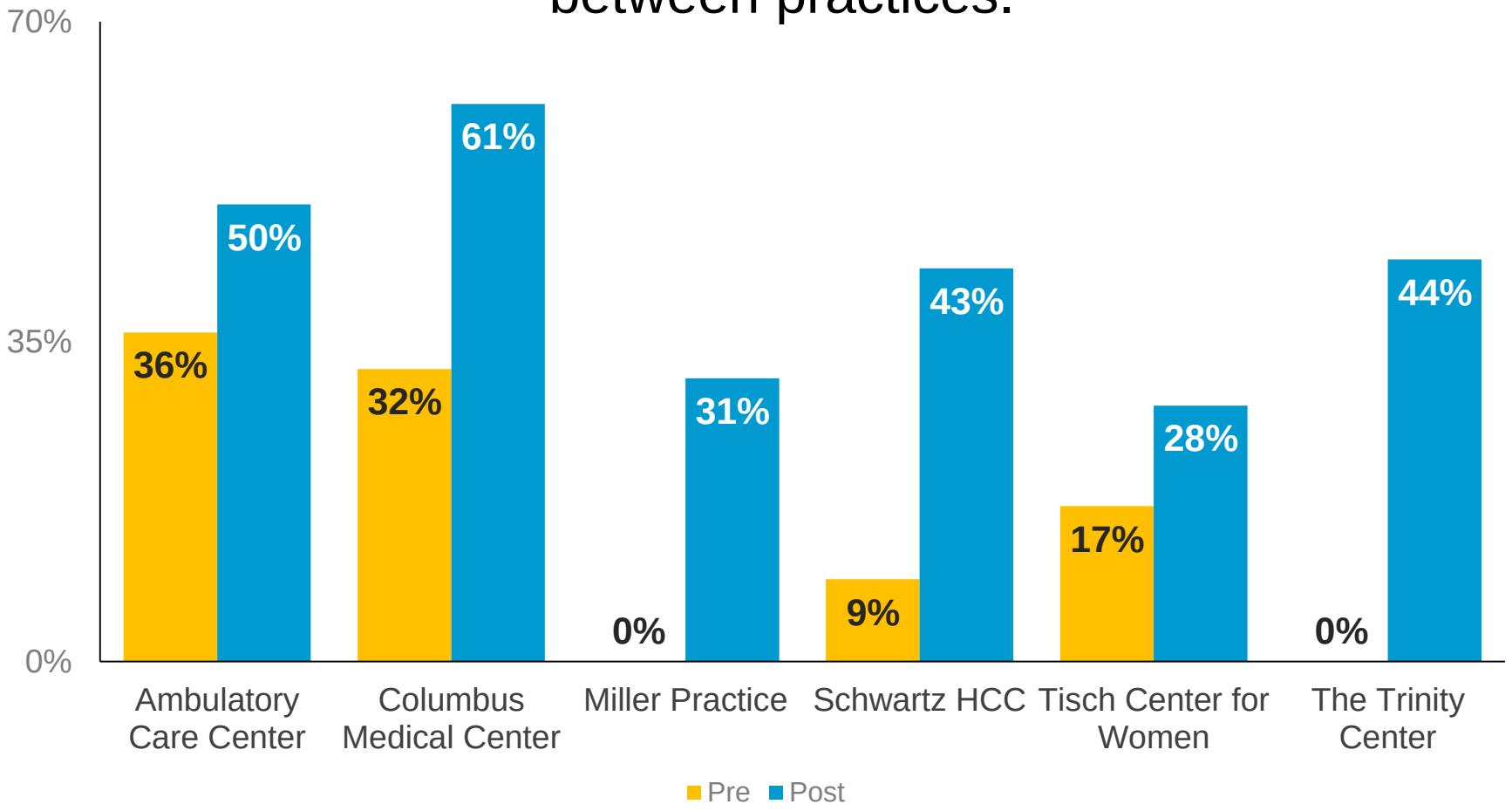
Despite high variation, there is no statistical difference between practices.



N = 60, 60

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EFFECT OF LECTURE ATTENDANCE

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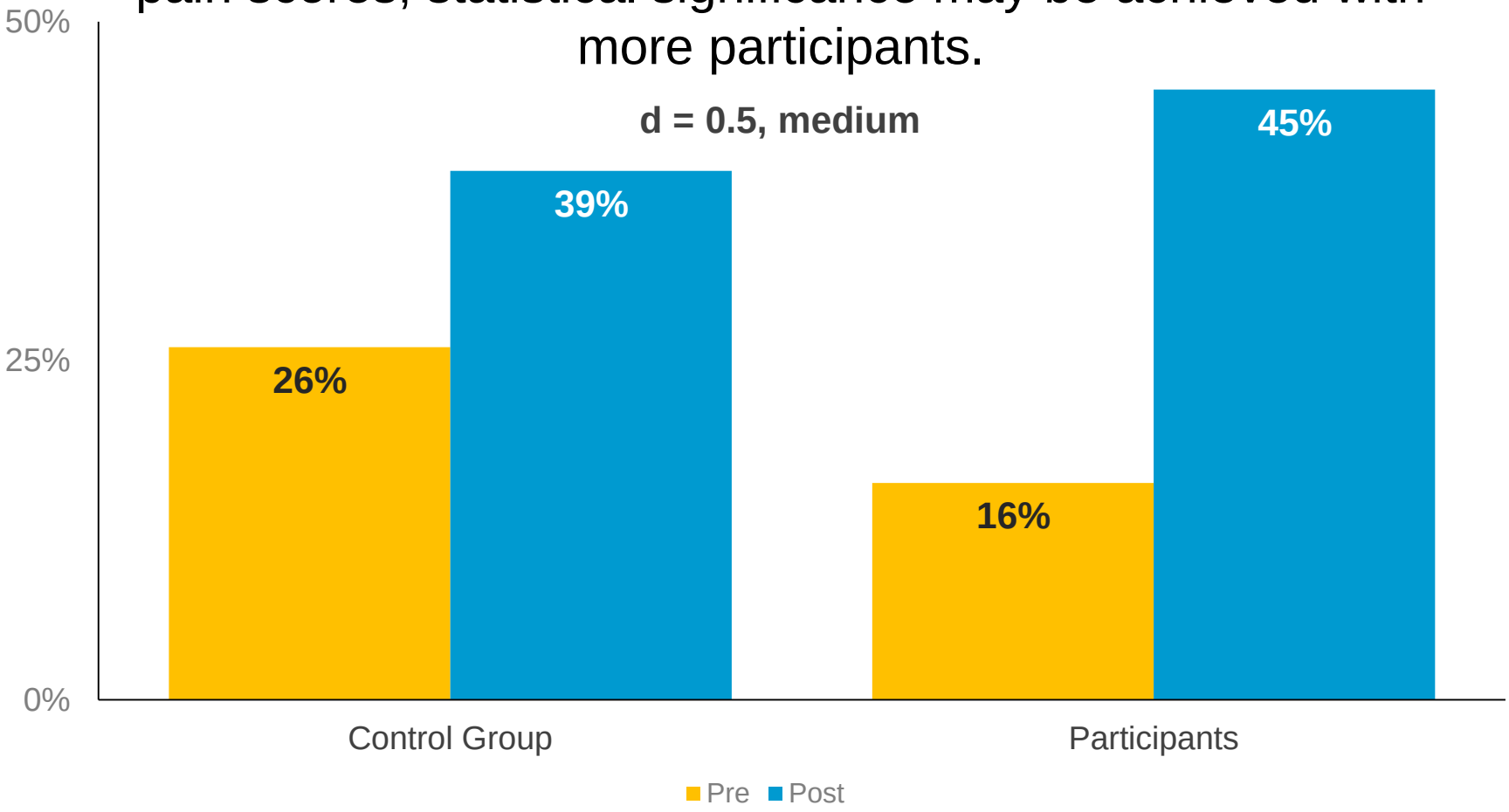
The data suggests that lecture attendance leads to increased use of pain scores; statistical significance may be achieved with more participants.



N = 18, 42

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PRACTICE CHANGE COMMENTS

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- “I am now better able to classify a patient’s pain as acute or chronic pain.” (n = 4)
- “I will use pain scales more consistently.” (n = 3)
- “I have a better understanding of using the multimodal approach to treating pain.” (n = 3)
- “This has given me a better understanding of different classes of pain medication.” (n = 3)
- “Now, I am better able to plan stages in treatment and pain management.” (n = 3)
- “I am better now about being able to talk to my patients and educate them about pain.” (n = 2)

CHANGE IN QUALITY OF LIFE

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Patients report a significant decrease in the impact of pain on daily tasks including walking and work.

N = 154, 126

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PROGRAM IMPACT: ENDURING

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REALCME: CHANGE IN KNOWLEDGE

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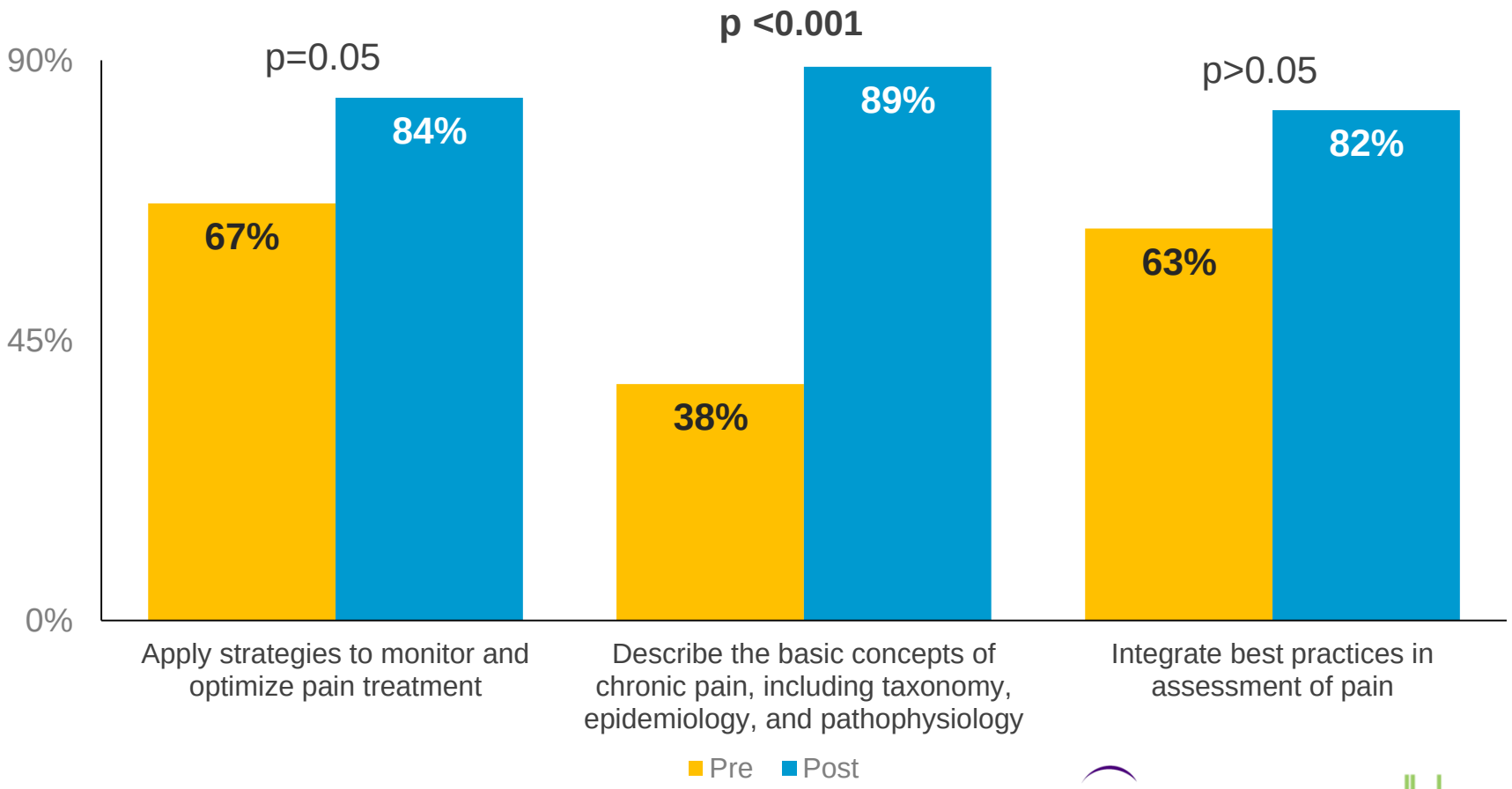
Clinicians improved along each learning objective.



N = 22, 22

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REALCME: CHANGE IN CONFIDENCE

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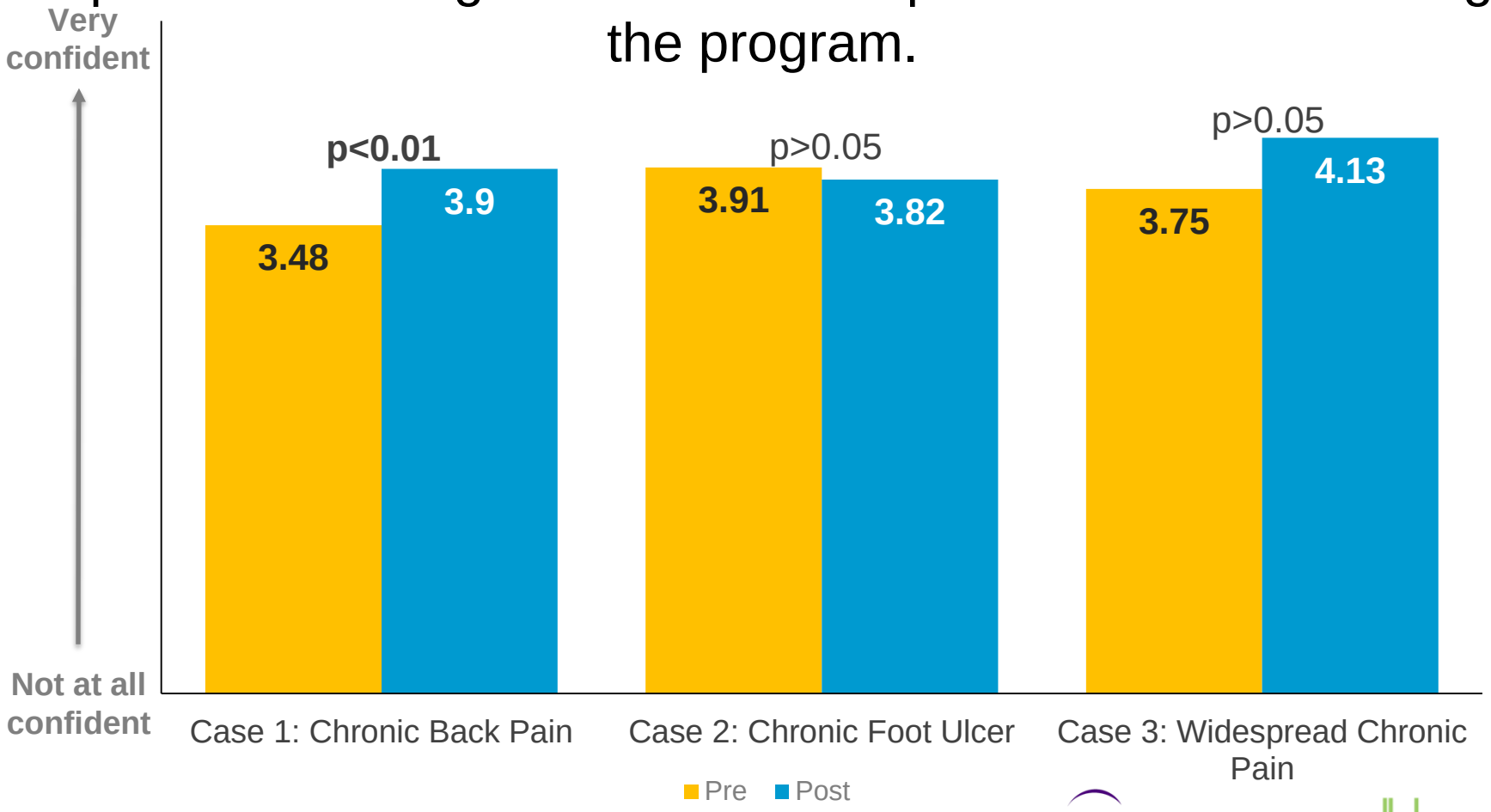
On average, clinicians' confidence in their ability to assess the impact and management of chronic pain increased following the program.



N = 60, 60

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SUGGESTED FUTURE CONSIDERATIONS

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- Provide the education in shorter lectures with a narrowed scope to include only *measurable educational objectives*
- Designate a Program Champion at each location responsible for encouraging attendance at live meetings
- Generate improved clinician participation by increasing competition between locations
- Actively recruit Medical Assistants and other clinical staff to participate in the education because they play a critical role in patient care
- Change the focus of the program to measure improvement of patient function and QoL

CONCLUSIONS

60 clinicians at 6 facilities show marked and significant ($p<0.001$) improvement in their usage of pain scores, knowledge, and confidence in treating chronic pain.

Clinicians increased the use of pain scores by at least 24% overall.

After attending at least one lecture, participants improved their use of pain scores by at least 28%. Although it is not significant ($p>0.05$), a medium effect size ($d=0.5$) suggests that attending at least one lecture improves pain score use; a larger sample may result in a statistically significant difference.

The improvement in the use of pain scores by clinicians who did not attend any lectures (13%) suggests that the effects of education influences not only the participants, but also their colleagues.

Clinicians also indicate that they will now “educate their patients on pain” and utilize pain scales more often.

31 patients are currently subscribed to the MyDailyPain Management tool.