

MULTICANCER EARLY DETECTION (MCED): Understanding the Paradigm Shift

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Unless otherwise noted, charts show percentages (%) of learners who selected each answer (n=3442).

INTRODUCTION

Early cancer detection remains one of the most powerful, yet persistently underachieved, drivers of improved survival. Nearly 60 percent of cancers responsible for mortality in the United States have no approved screening test, and even when screening exists, many tools are limited by low positive predictive value, logistical burden, invasiveness, and financial barriers, all of which contribute to delayed diagnosis and widening disparities.^{1,2,3(4,7,8)}

Multi-cancer early detection (MCED) testing offers a promising shift in this landscape, with emerging evidence supporting improved sensitivity, expanded cancer coverage, and lower false-positive rates compared with traditional single-organ screening. At the same time, important clinical questions and potential harms remain, underscoring the need for careful, informed implementation in real-world settings.^{1,4,5,6(4, 2,3,9)}

This educational initiative was designed to equip Nurse Practitioners (NPs) with the knowledge, skills, and confidence required to appropriately integrate MCED into patient-centered cancer screening practices.

Learning Objectives

- Identify fundamental clinical practice gaps in the traditional cancer screening paradigm and the consequent need for optimized approaches.
- Review prominent risk factors for the development of cancer, with an incisive focus on how risk level informs the clinical utility of multi-cancer early detection (MCED) screening.
- Evaluate the evidentiary base for current and emerging MCED screening modalities, highlighting their cancer detection mechanisms and key efficacy parameters.
- Recognize potential challenges in the clinical implementation of MCEDs.
- Develop patient-centric cancer screening protocols using MCEDs that integrate the latest data with best practices for interpretation of results, specialist referral, and promotion of equitable access.

PROGRAM OVERVIEW

Enduring OnDemand Activity

- Dates: October 24, 2024 - October 31, 2025
- Accreditation: 0.75 Hours of CE Credits

Participation Over 1 Year
Registrations **4680** → Completions **3442**

The Enduring OnDemand Activity Achieved **117%** of Expected 1-Year Registrations and **172%** of Expected 1-Year Completions!

NP Clinical Tool & Patient Handout

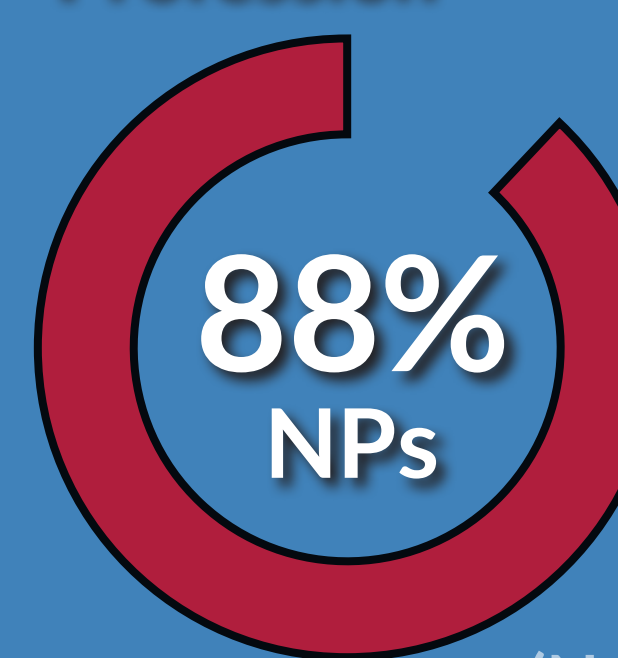
- Professionally-designed downloadable handout (*unaccredited*) to assist patient education.

METHODS

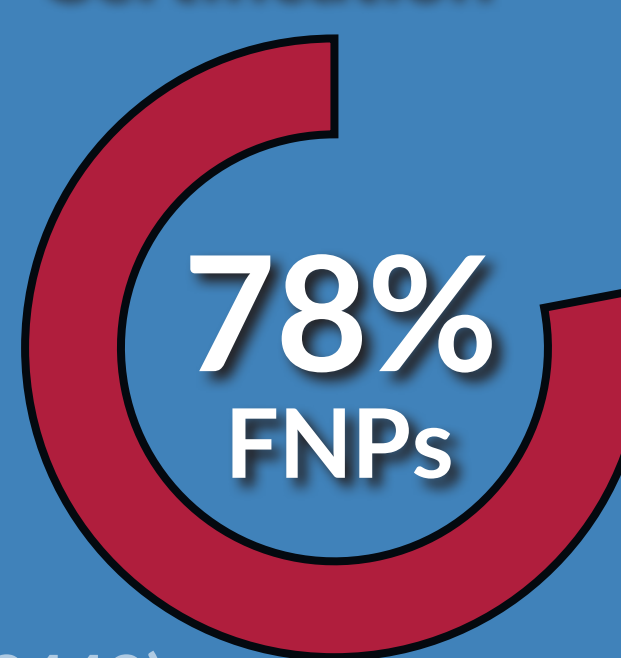
Learners completed pre- and post-activity knowledge, competence, and evaluation questions aligned with learning objectives. A paired analysis was conducted using McNemar and Wilcoxon tests to assess changes ($P \leq 0.05$). Software included Microsoft Excel (aggregating data) and IBM SPSS Statistics v31.0.0.0 (statistical analysis). Effect size (Cohen's d) quantified magnitude of change (0.20 = Small, 0.50 = Medium, 0.80 = Large). Demographics, confidence and preparedness, and intent-to-change responses were analyzed descriptively.

LEARNER DEMOGRAPHICS

Profession



Certification



(N = 3442)

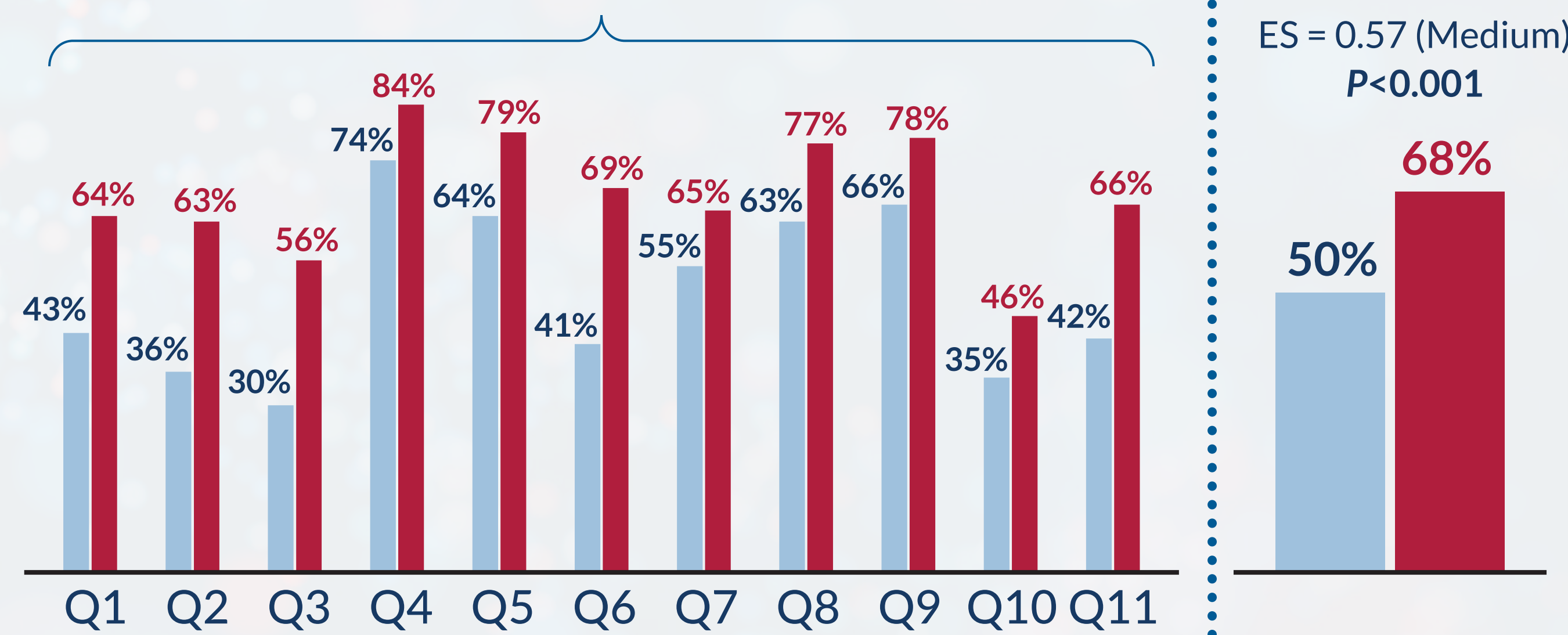
Current Practice

- Broad reach with at least 21 settings represented.
- Largest setting: 40% practice in Family/Primary Care.
- Majority of Learners had 1-10 years in practice (39% 1-5 years and 29% 6-10 years).

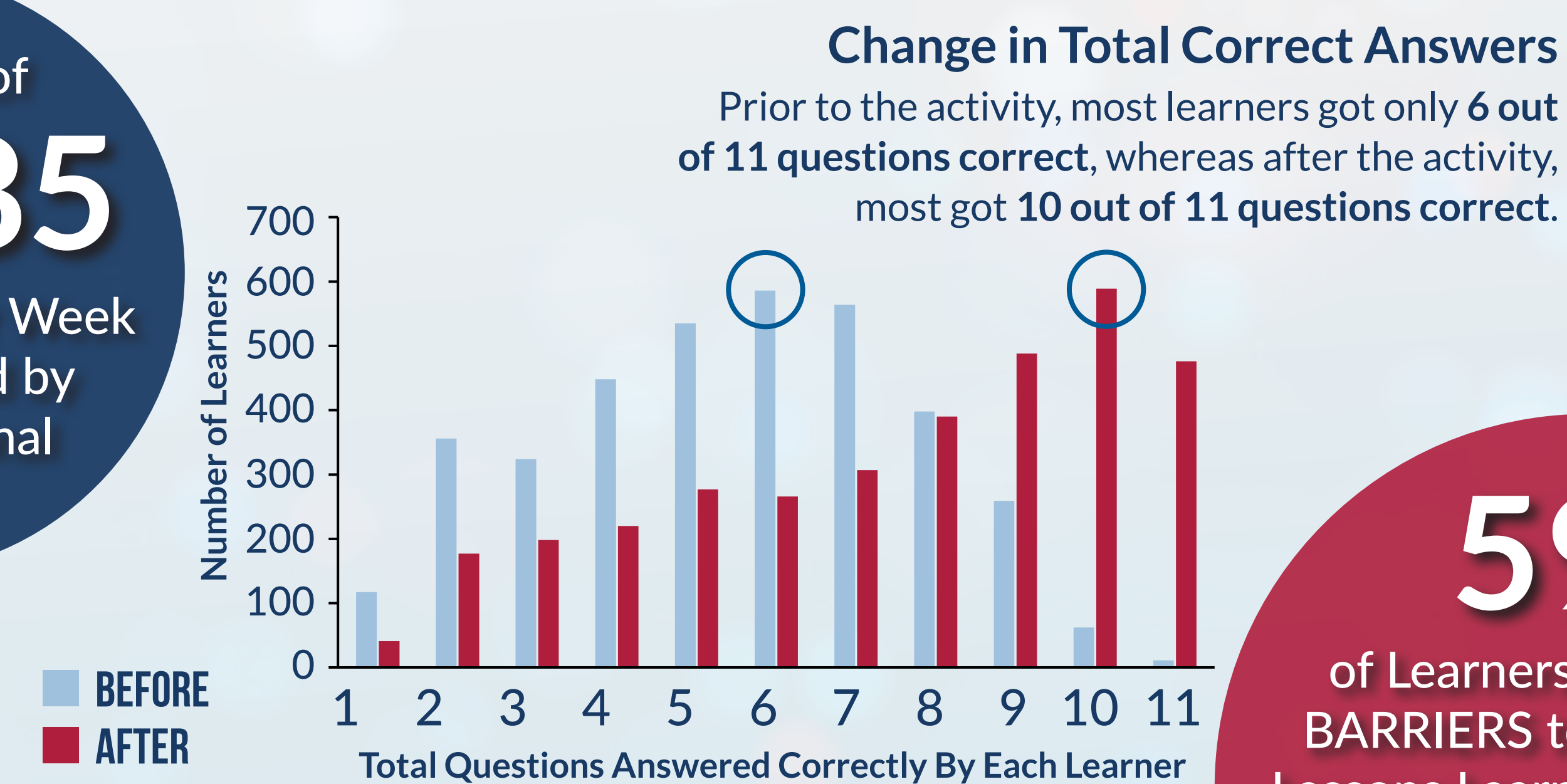
KNOWLEDGE & COMPETENCE GAINS

Statistically Significant Knowledge & Competence Gains

All 11 pre/post test questions showed statistically significant improvement ($P < 0.001$).

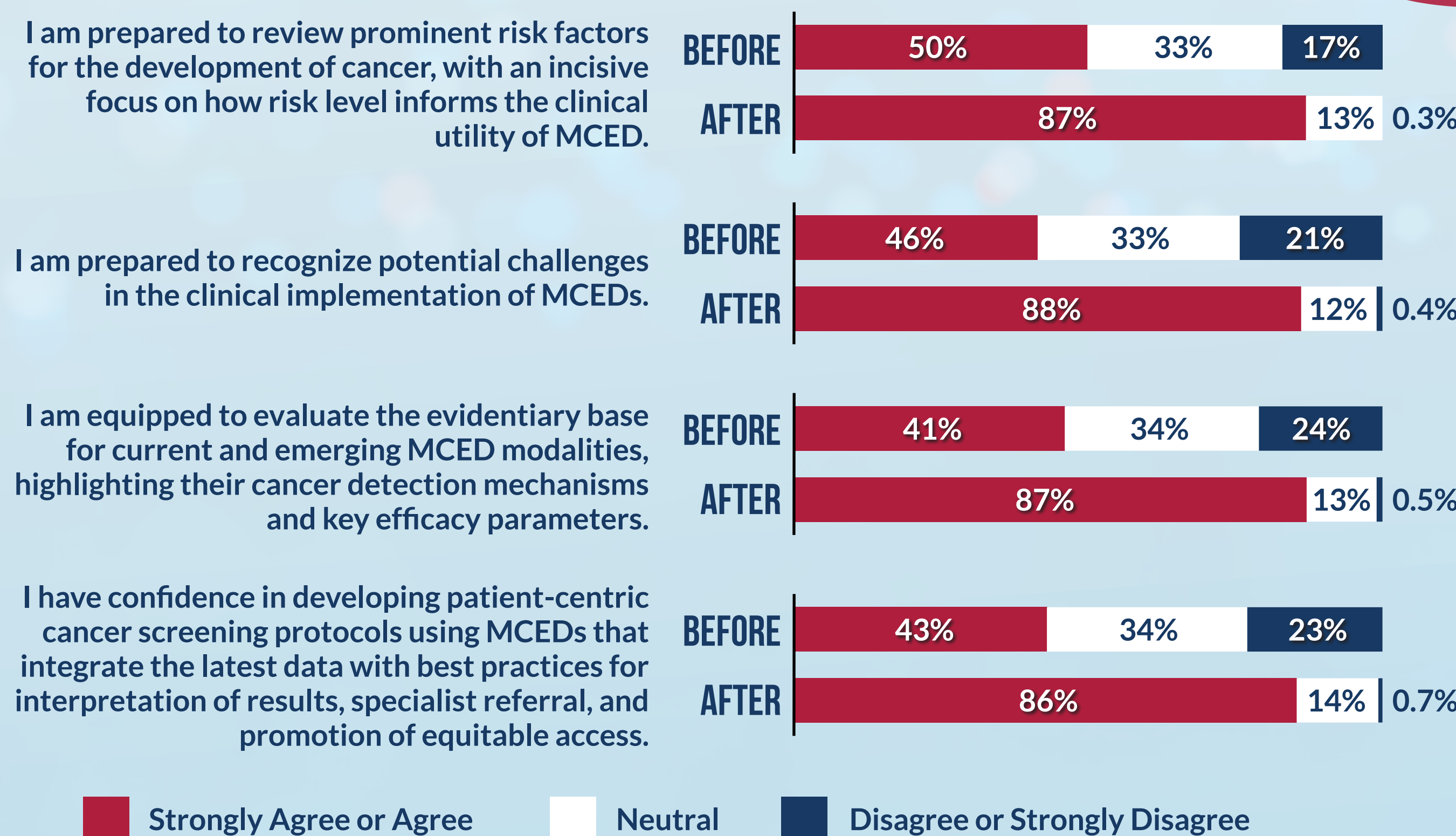


An Average of **42,585** Patients Seen per Week Were Impacted by This Educational Activity.



CONFIDENCE & PREPAREDNESS

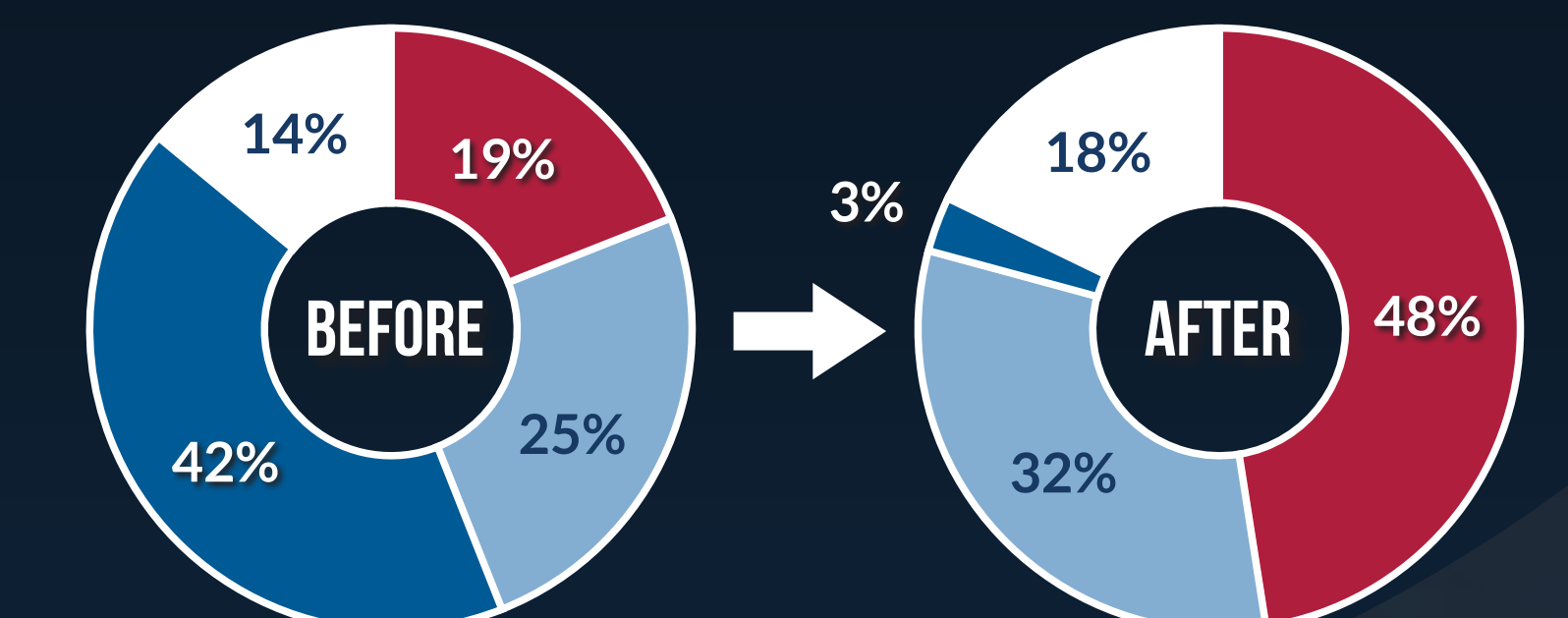
- Learners demonstrated substantial increases in confidence and preparedness regarding MCED and its clinical implementation.



COUNSELING PATIENTS ABOUT MCED

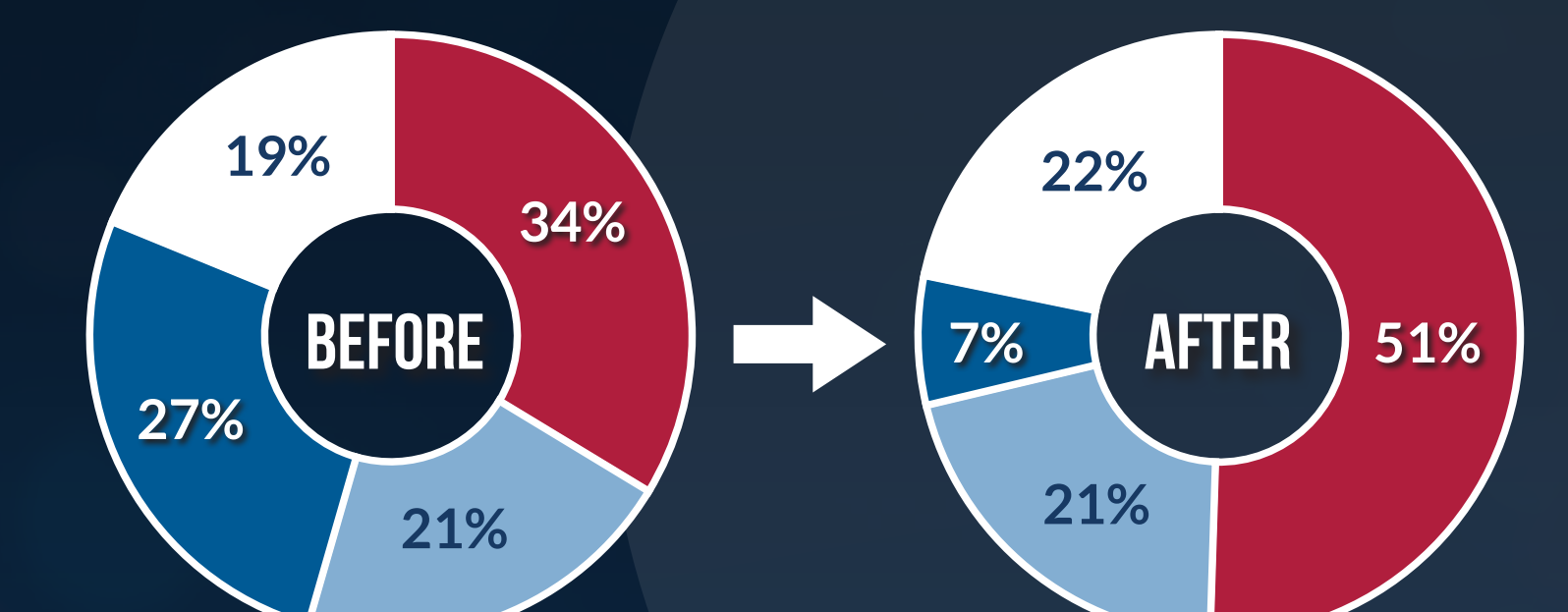
How confident are you in your ability to identify patients that could benefit from MCED testing?

- Extremely or Very Confident (red)
- Somewhat Confident (light blue)
- Not Very or Not At All Confident (dark blue)
- Not Applicable to My Practice (white)



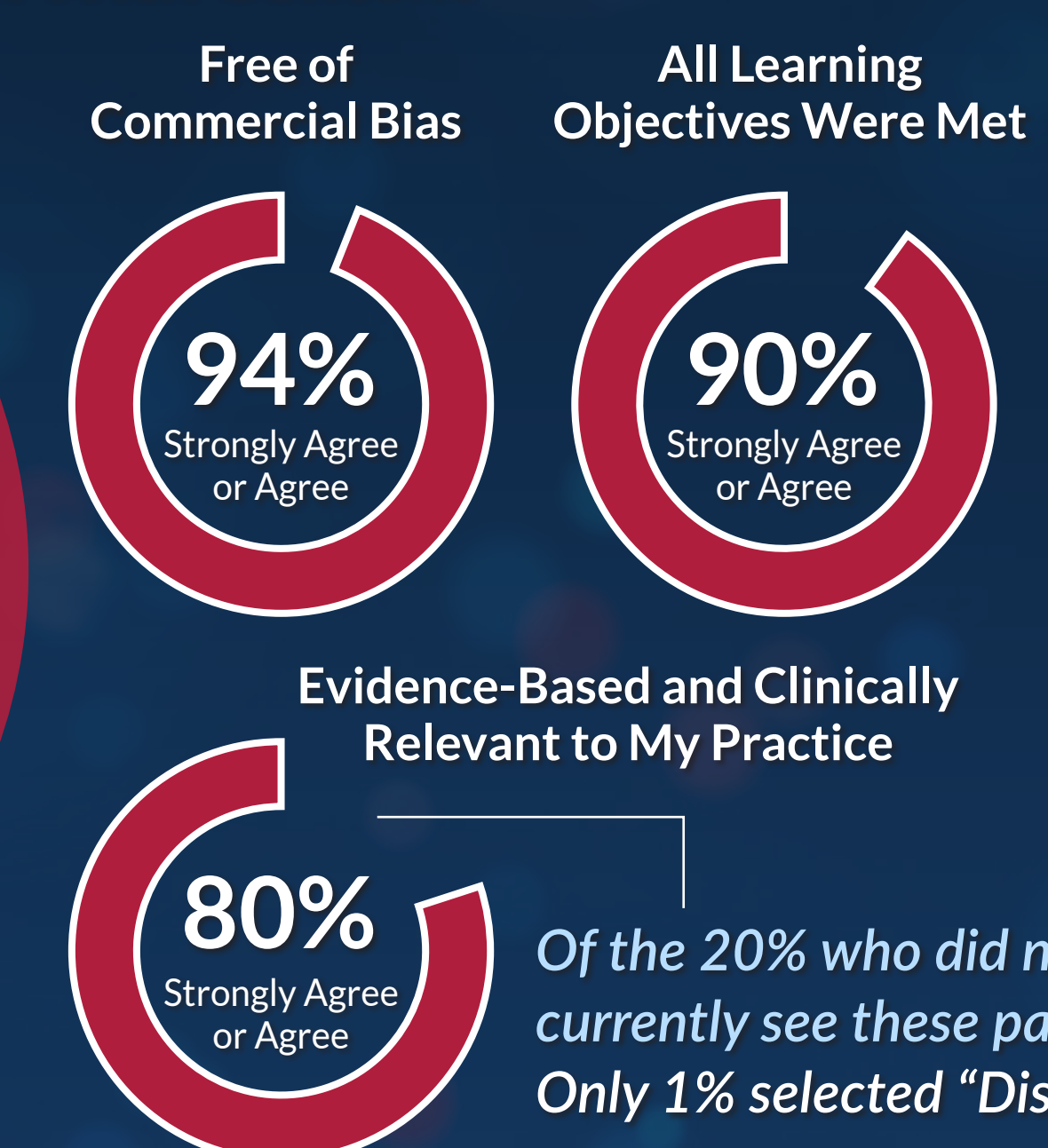
How often do you plan to recommend that eligible patients undergo MCED?

- Always or Often (red)
- Sometimes (light blue)
- Rarely or Never (dark blue)
- Not Applicable to My Practice (white)

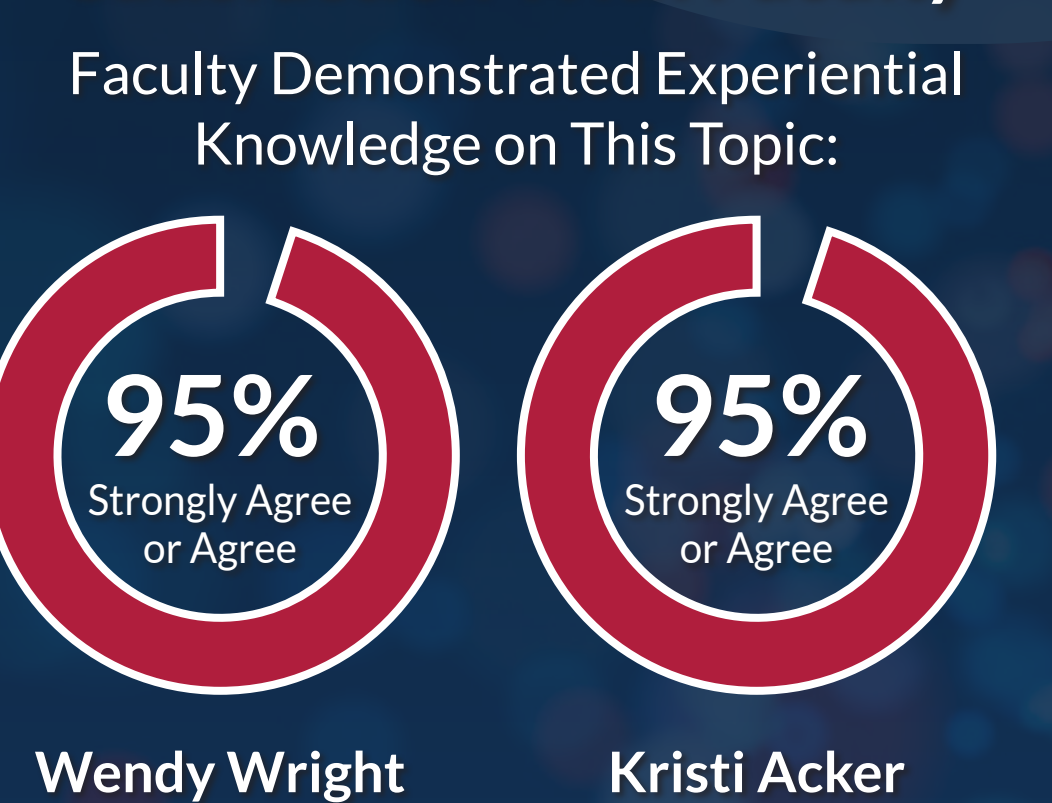


LEARNER SATISFACTION WITH ACTIVITY

Satisfaction With Content



Satisfaction With Faculty



59% of Learners Reported **NO BARRIERS** to Implementing Lessons Learned About MCED Into Their Clinical Practice. Most-Reported Barriers: Time Constraints (15%) and Hospital/Clinic Policies (11%)

Of the 20% who did not agree, 9% selected "N/A I do not currently see these patients," and 11% selected "Neutral." Only 1% selected "Disagree" or "Strongly Disagree."

CONCLUSION & REFERENCES

This 12-month educational initiative produced substantial, measurable gains in NP knowledge, confidence, and clinical preparedness regarding MCED. Participation exceeded expectations, conceptual understanding improved across every learning domain, and statistically significant gains were observed in both knowledge and competence. Most learners reported minimal barriers to implementation and demonstrated increased intent to identify eligible patients and recommend MCED when appropriate. As technologies evolve and additional evidence emerges, continuing education will remain essential to ensure that early detection strategies are applied thoughtfully, ethically, and in alignment with patient-centered care.

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In a rapidly advancing oncology landscape, empowering NPs with timely, evidence-based guidance on MCED represents a critical step toward earlier diagnosis, more equitable access, and improved outcomes across cancer types.