

IMPLEMENTING POINT-OF-CARE ULTRASOUND (POCUS) TRAINING AS PART OF THE CURRICULUM FOR FAMILY MEDICINE RESIDENTS: AN APPROACH TO INCORPORATE POCUS IN PRIMARY CARE

Objectives of the study

The primary objective of this project was to provide family medicine residents at HCA Florida St. Petersburg Hospital with point-of-care ultrasound (POCUS) training.

The secondary objectives are to continue yearly training as part of the curriculum for family medicine residents and to enable family medicine physicians to use POCUS in clinic settings.

Background

Point-of-care Ultrasonography is a portable tool that can complement physical examination and aid in diagnosing multiple medical conditions.¹ The unique features of POCUS like portability, cost-effectiveness, lack of radiation and quick interpretation in trained hands are unmatched. In fact, POCUS has been referred to as a visual stethoscope^{1,2} and rightly so. Focused use of bedside ultrasound has been associated with increase in diagnostic accuracy and decrease in harm associated with radiation of comprehensive scans.³ Traditionally, only emergency medicine residencies and critical care fellows have POCUS training in their curriculum.

Use of POCUS is beneficial for Primary Care Physicians as it can expedite diagnosis and minimize delays in treatment.⁴ Training family medicine residents on POCUS is a vital step to incorporate POCUS in primary care. It can help to address diagnostic dilemma in some cases of congestive heart failure (CHF) versus chronic obstructive pulmonary disease (COPD), abdominal aneurysm screening and different hepatobiliary and musculoskeletal conditions and procedures.

Methodology

- Time frame: Five months
- Participants: 24 participants including Family Medicine residents and Transitional Year residents
- Activities/Interventions: Lecture series and hands-on workshops
- Training given by: Emergency Medicine Physician, Interventional Radiologist and Critical Care Physician
- Assessment: Pre-training and post-training questionnaires

Results

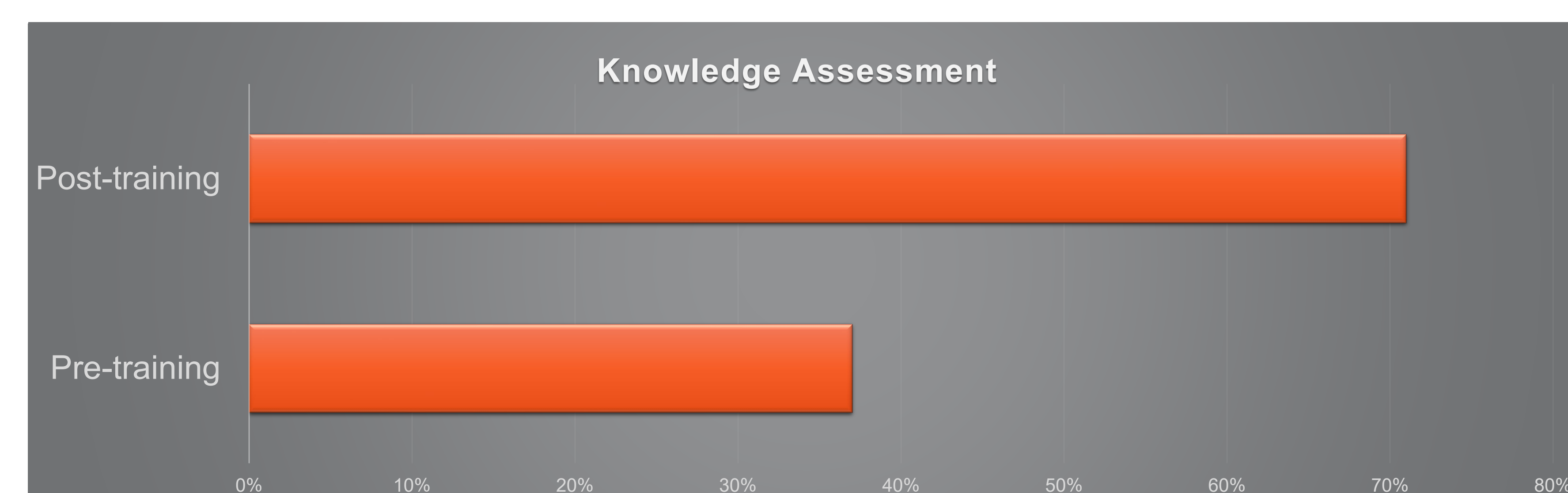


Figure 1: Knowledge Assessment Questionnaire

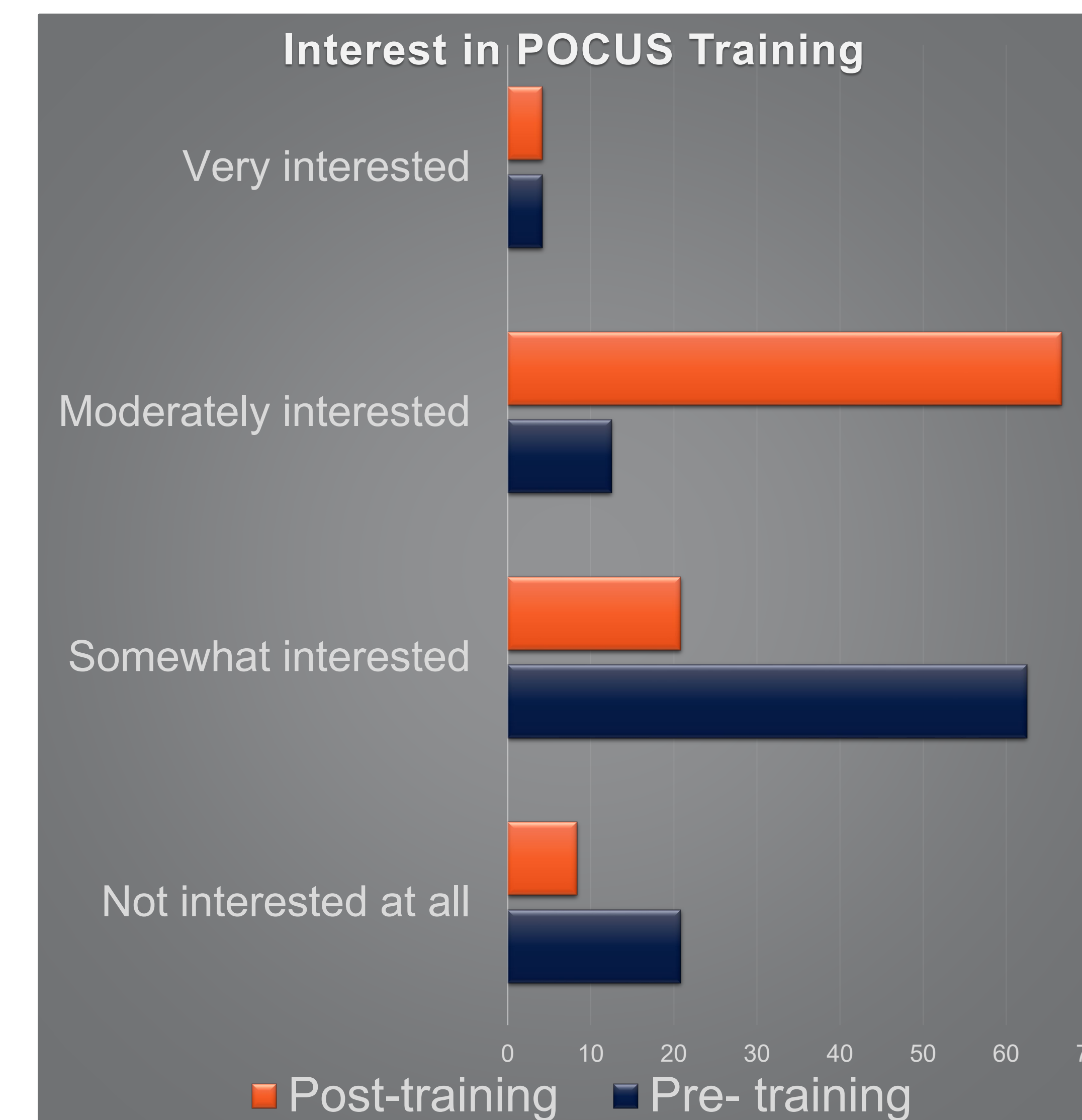


Figure 2: How interested are you in being trained with Point-of-care Ultrasound? (Pre and post training)

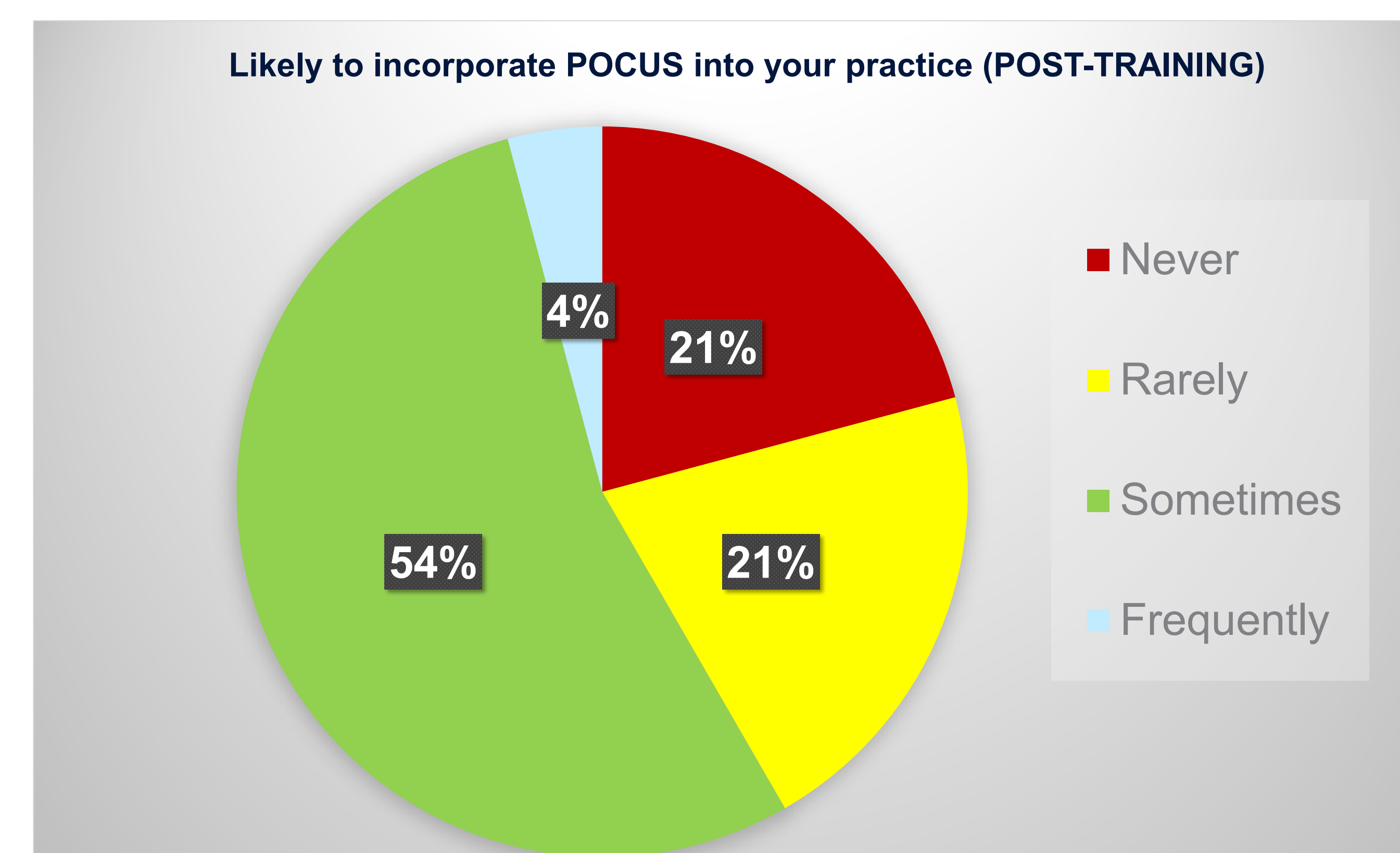
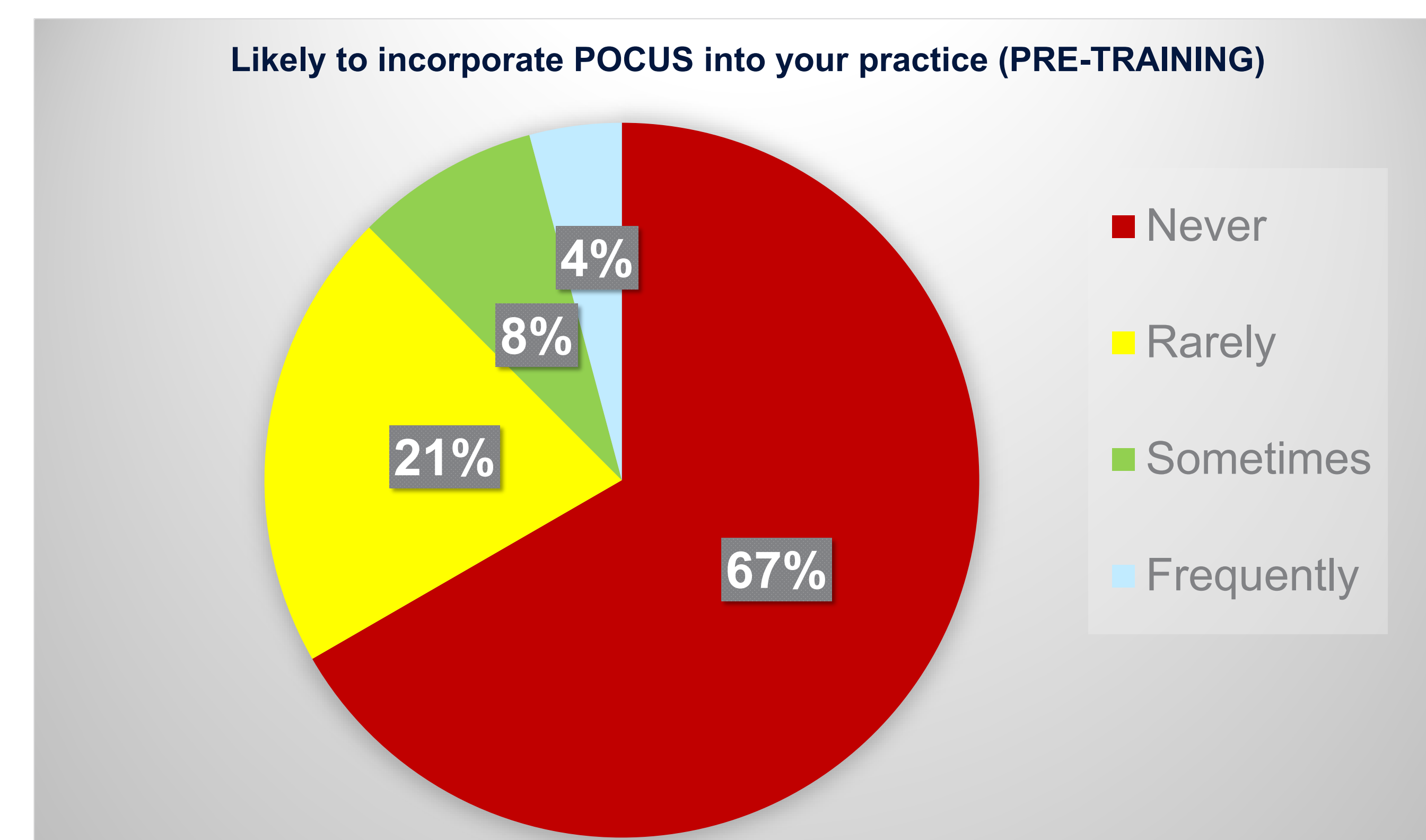


Figure 3 & 4: How likely are you going to incorporate the use of POCUS into your practice? (Pre and post training)

Results

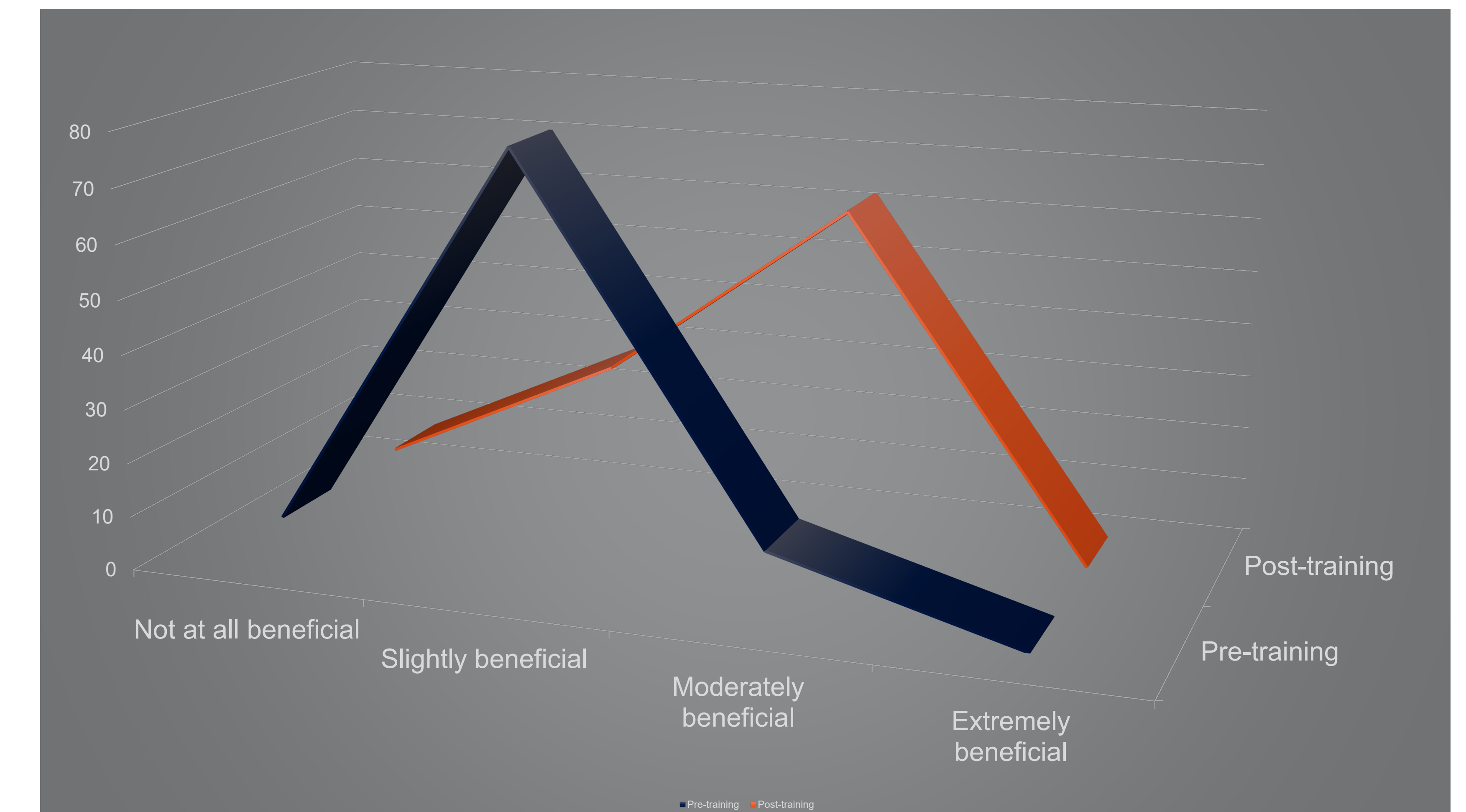


Figure 5: How beneficial do you think bedside ultrasound is for patient care?

Conclusion

Point-of-care Ultrasound can be a useful, radiation-free and cost-effective tool for patient care, and is gaining popularity in primary care. However, POCUS training is not a standard part of curriculum in most family medicine residencies. This study shows 39% increase in basic knowledge of bedside ultrasound, 54% increase of moderate interest level and increase in likelihood of using POCUS in future practice with POCUS training. Thus, POCUS training during residency can help incorporate POCUS in primary care.

References

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