

INTRODUCTION

- **Intraosseous (IO) access** is a medical procedure primarily used in emergencies when peripheral venous access is unobtainable.
- The **EZ-IO** is a battery-operated electric drill.
- The **SAM IO** is a newer, hand-actuated device.

OBJECTIVE

- This study compares the EZ-IO and SAM IO insertion time in a **porcine humeral bone** and EMS provider feedback.

MATERIALS & METHODS

- Prospective comparison study with advanced **EMS providers**.
- Watched instructional videos.
- Participants practiced insertion in plastic and porcine bone.
- Device order was randomized
- IO needle size was paired.
- **Insertion time** into porcine bone recorded.
- **Likert survey** and open feedback.

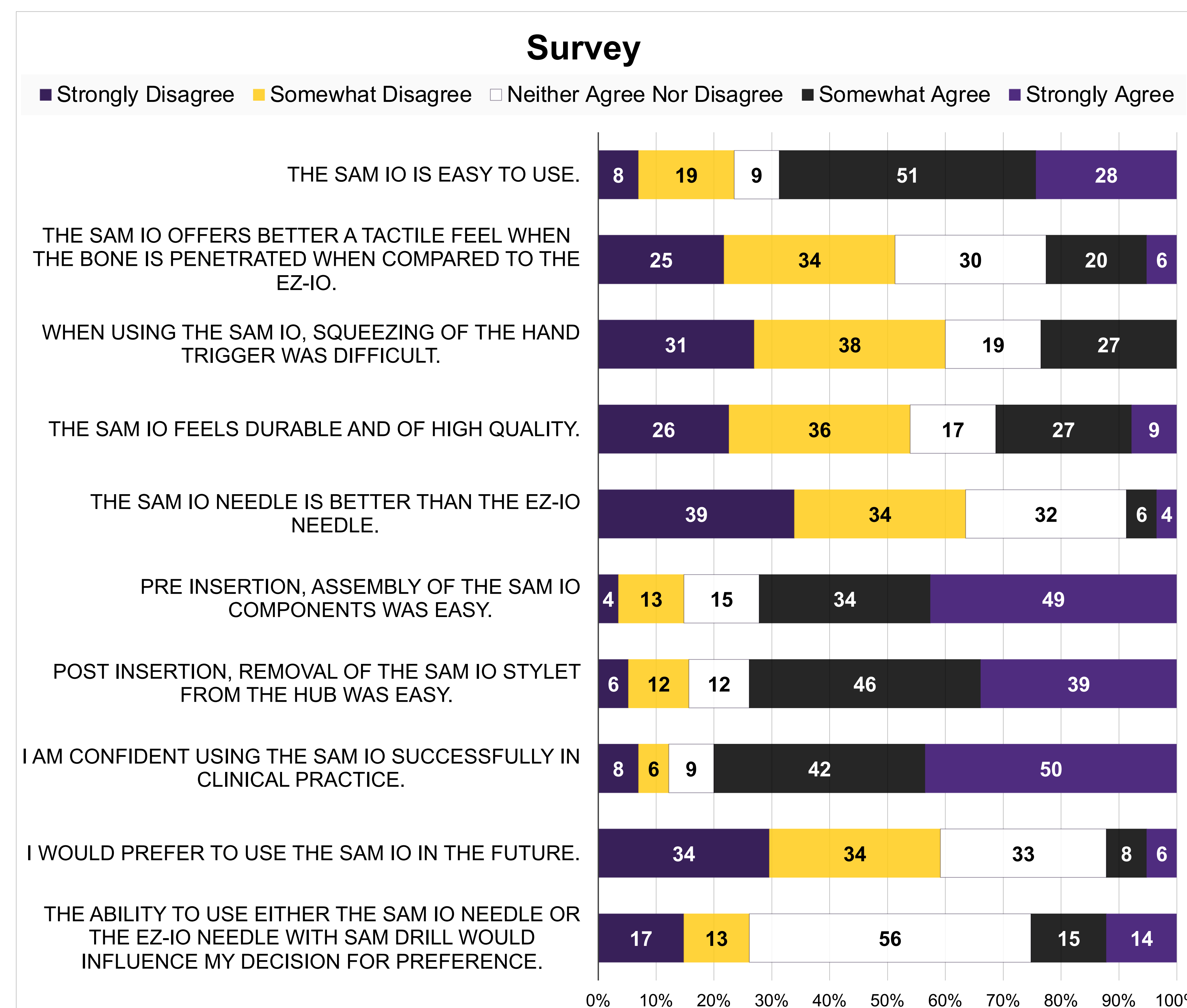
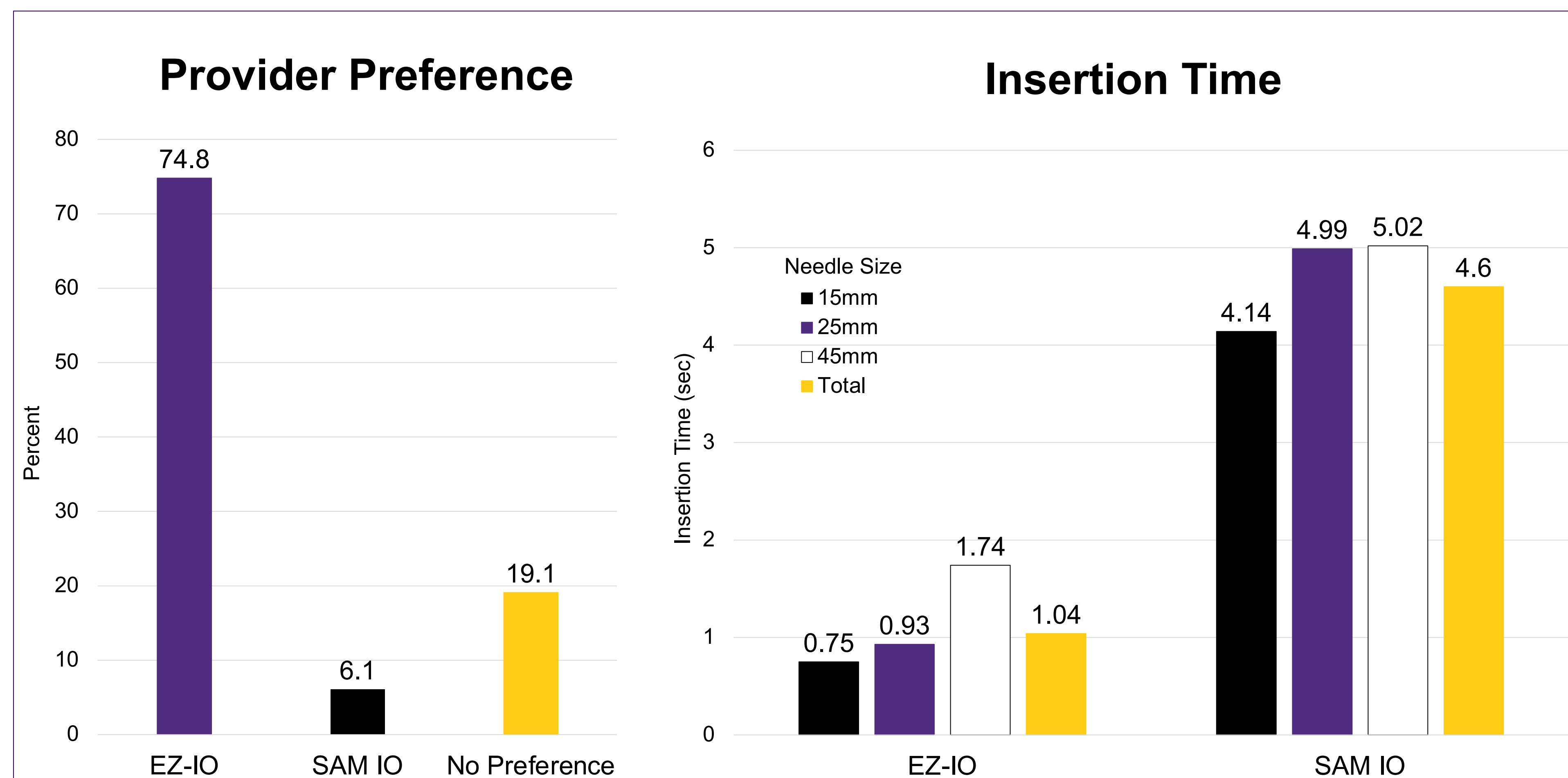


EZ-IO



SAM IO

RESULTS



DISCUSSION

- The **EZ-IO** insertion time was faster, but the difference in time would unlikely impact clinical outcomes.
- Participants **preferred the EZ-IO**, but would also be comfortable using the SAM IO in a clinical setting.
- A limitation of the study may result from **participant bias** on insertion intervals due to personal preference.
- Future studies should look at **clinical trials** to study patient outcomes.

REFERENCES

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