

Simulation-based education to improve procedural skills in spinal cord stimulation and dorsal root ganglion stimulation

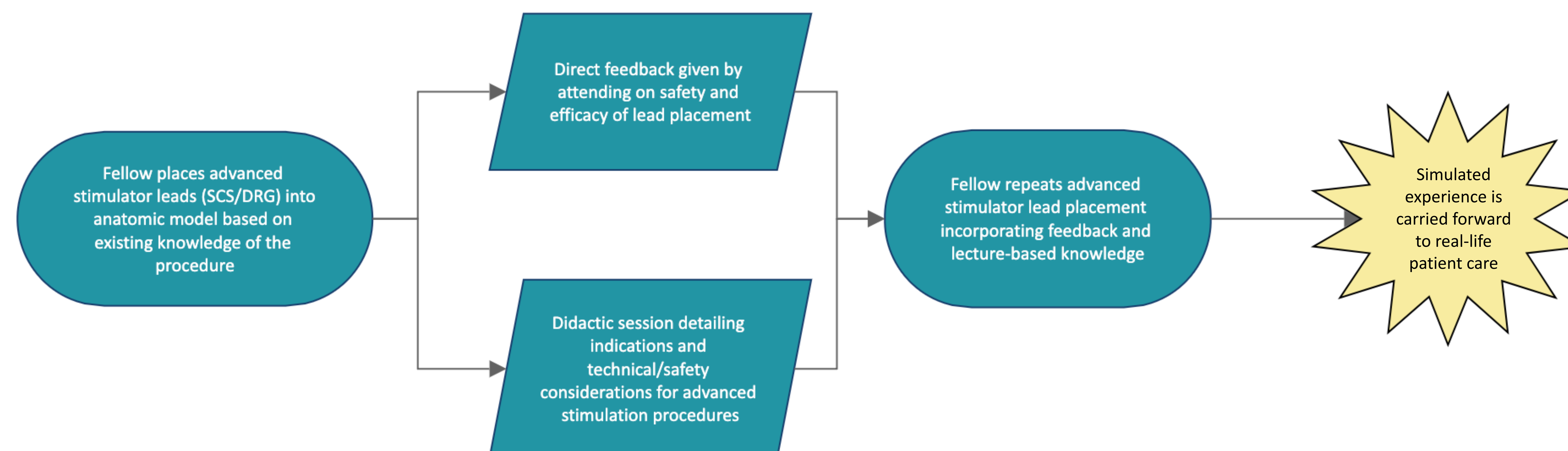
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Background & aims

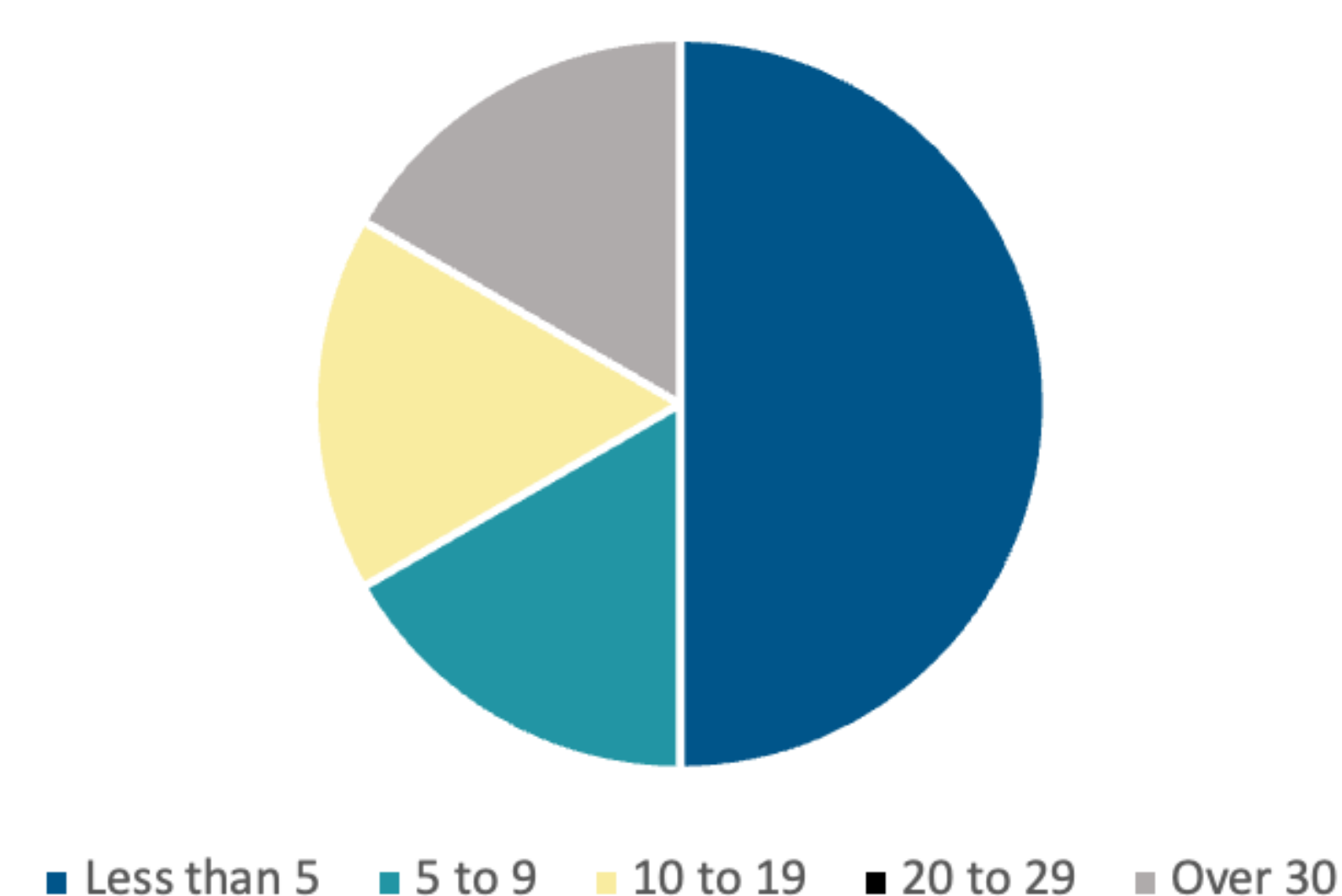
- Simulation-based education in pain medicine is a useful tool to improve trainees' technical skills in a manner that does not compromise patient safety.¹
- Simulation-based education also allows clinical educators to assess trainees' competencies in various domains and identify targeted areas for improvement.
- This study seeks to evaluate trainee-perceived utility of a simulation-based curriculum for advanced pain procedures including dorsal root ganglion (DRG) stimulation and spinal cord stimulation (SCS).

Process map of simulation exercise

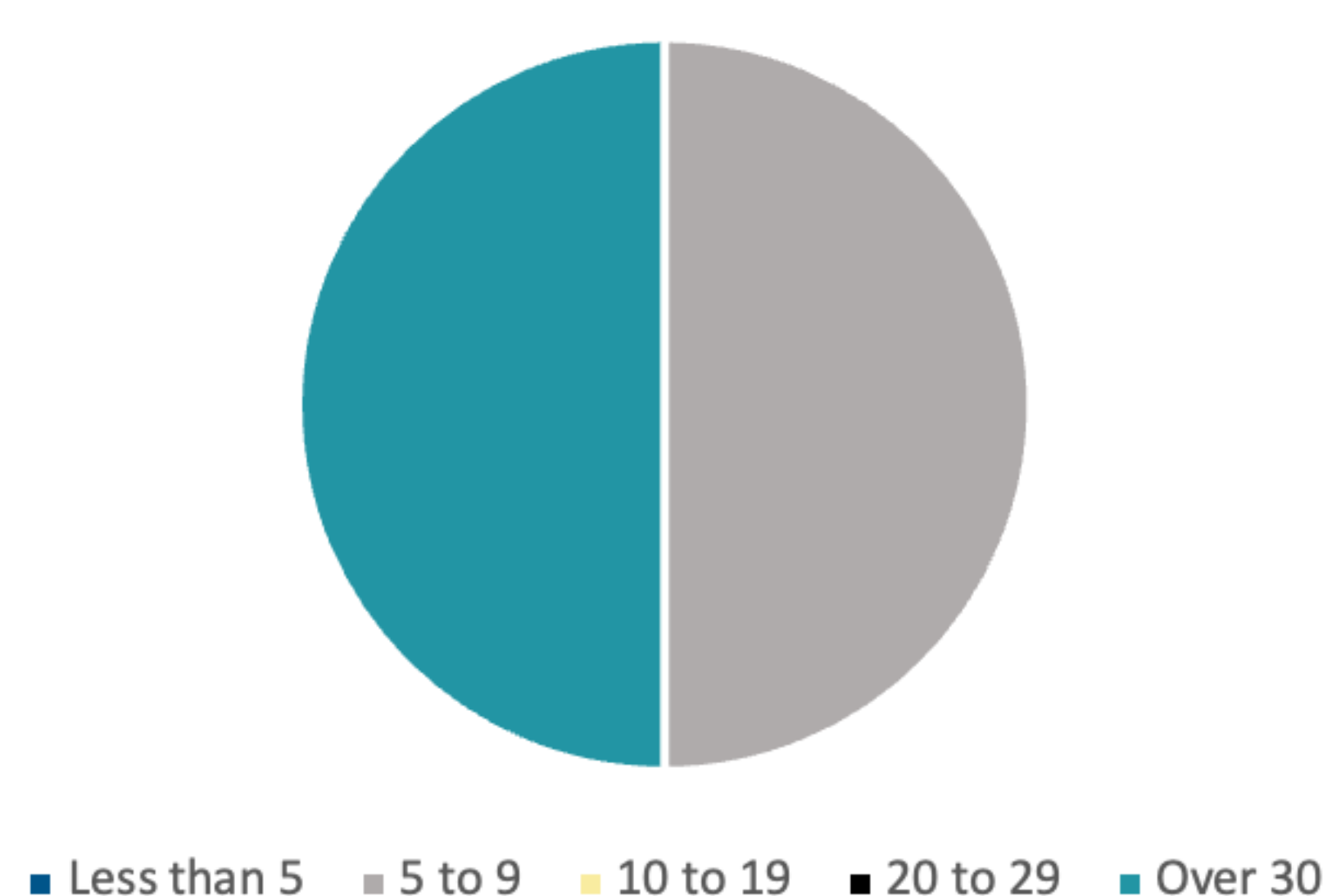


Trainee experience

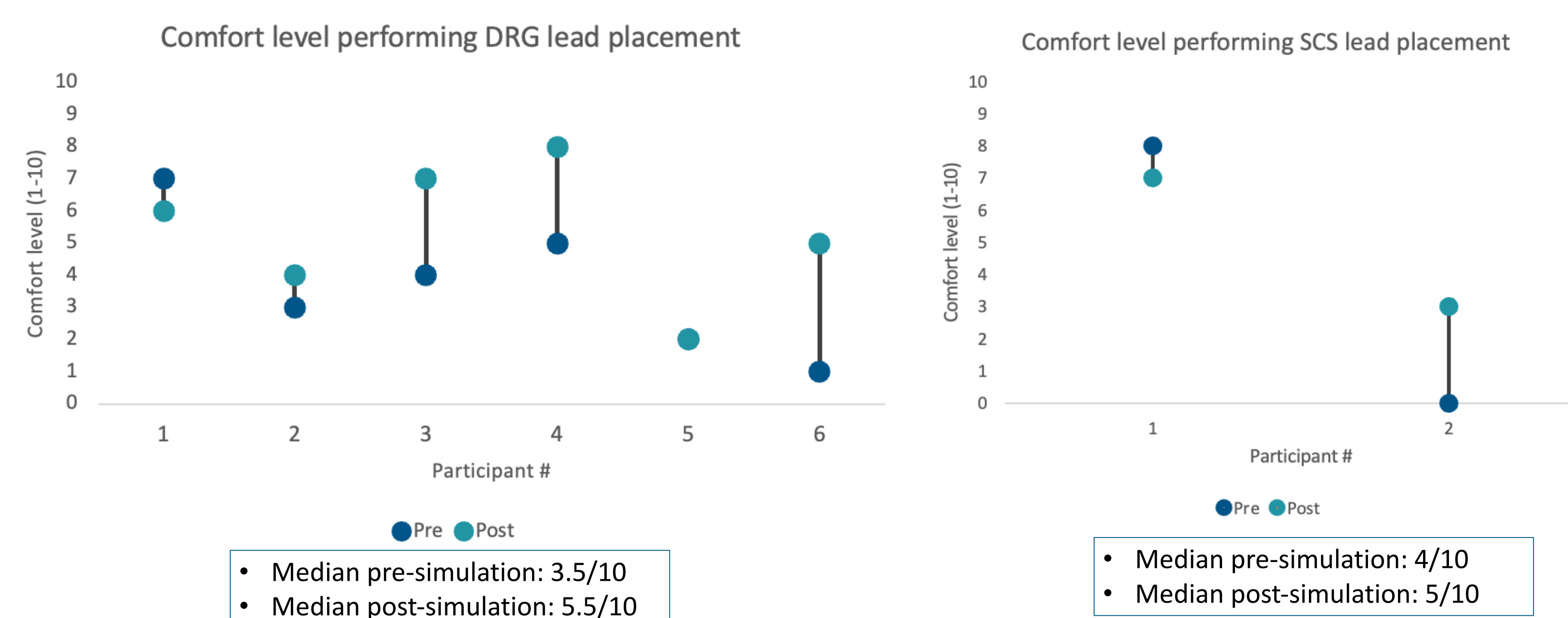
Prior dorsal root ganglion stimulation lead placements performed



Prior spinal cord stimulation lead placements performed

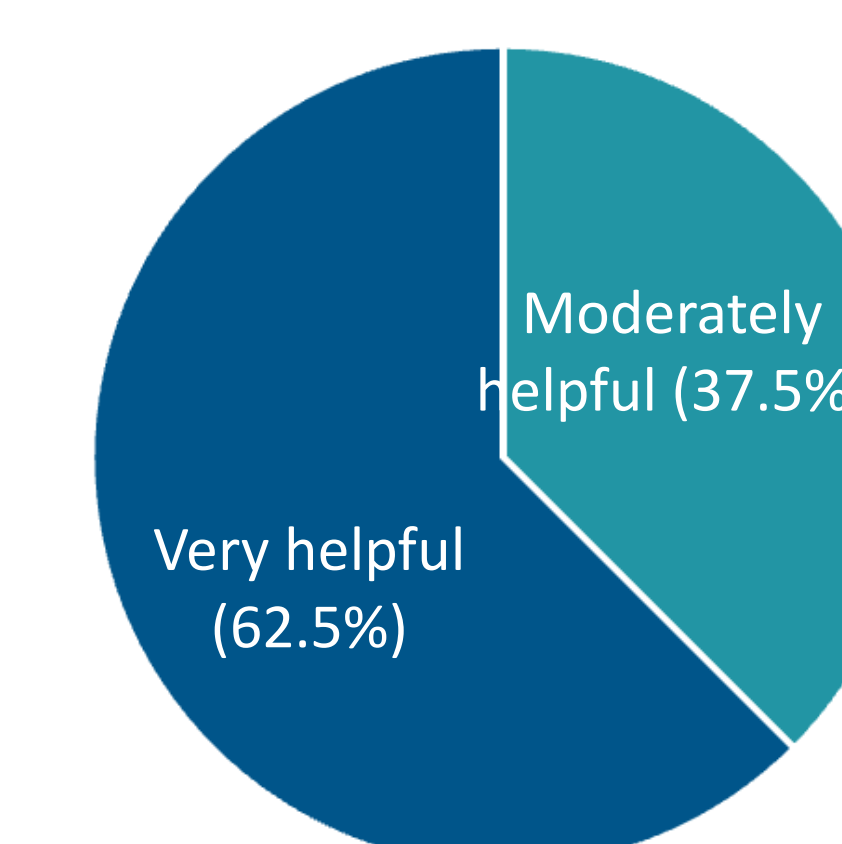


Quantitative outcomes



Qualitative outcomes

Did you find this exercise helpful?



Did this simulation...

- Provide a realistic procedural experience? **Yes (100%)**
- Change how you will perform this procedure? **Yes (100%)**
- Improve your understanding of fluoroanatomy? **Yes (87.5%)**
No (12.5%)

Conclusions

- Simulation-based training can provide realistic advanced stimulation procedural experience in a setting devoid of risk to patients.
- Advanced procedural simulations provide unique opportunity for feedback in a psychologically safe environment.
- Trainees' simulated experience with advanced stimulation procedures may translate to improved patient care.

References

- Sarno DL, Yong RJ, Fields KG, Lim SM, Gilligan CJ, Khan L, Nelson, ER. A Novel Interventional Pain Simulation-Based Education Curriculum: Implementation to Enhance Procedural Training. *Interventional Pain Medicine*. Dec 2022. <https://doi.org/10.1016/j.inpm.2022.100167>.

