



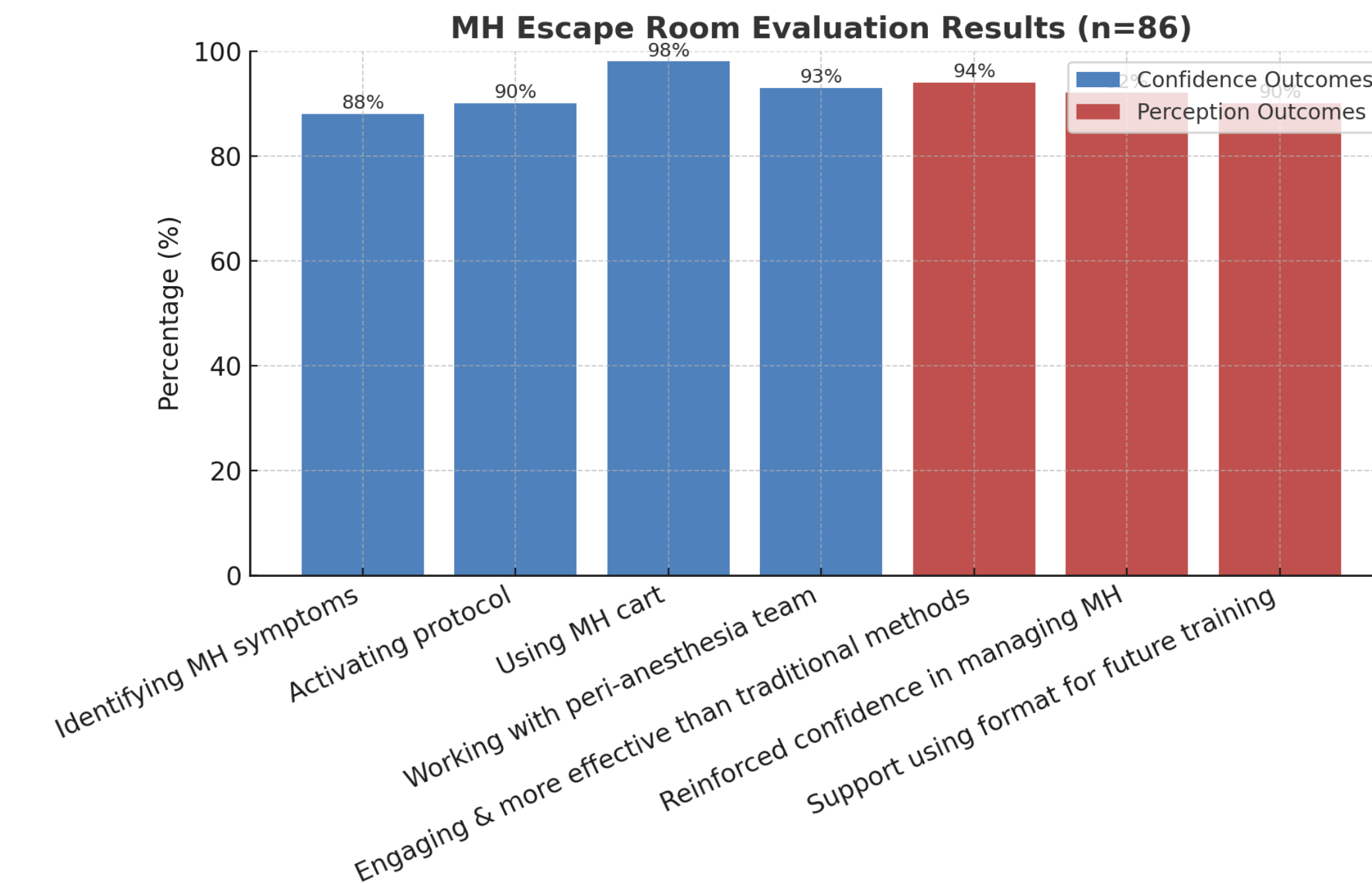
Background / Purpose

- Traditional education formats often fail to fully engage staff or support long-term retention of critical protocols (Klamm et al., 2024). The ambulatory surgical center (ASC) education team developed a hands-on simulation to strengthen malignant hyperthermia (MH) knowledge and boost staff confidence.
- The escape room structure was chosen to reflect the urgency and teamwork needed during a real MH emergency, aligning with the healthcare organization's focus on practical, engaging education that supports clinical readiness and patient safety.
- The aim of this project was to enhance perioperative staff readiness for low-frequency, high-risk events and improve team communication, clinical judgment, and MH protocol familiarity in a realistic, engaging environment.

Methods/Data Analysis

- One hundred and fourteen ASC Peri-anesthesia staff, including RNs, Surgical Technicians, and Patient Care Technicians, participated in the MH escape room.
- The education team traveled to 8 ASCs between May 2025 and July 2025.
- At the end of the simulation, a post-survey was provided to measure confidence levels and engagement perception. Eighty-six of the participants completed the survey.
- We educated ASC managers through brief in-service updates, email summaries, and presentation of post-escape-room survey data. Key findings were shared at staff meetings to highlight impact, reinforce practice changes, and gather feedback for ongoing improvement.

Results



Discussion / Conclusion

- The data shows the goal was met, with participants improving in confidence, communication, and understanding of the emergency protocol, and overall scores rising to reflect stronger skills and readiness for rare, high-risk events.
- Patterns showed higher post-activity scores across all areas, with the biggest gains in teamwork and communication due to the time-pressured collaboration, and smaller improvements in areas where baseline knowledge was already strong.
- Staff gained the most from working in a realistic, problem-solving environment, with clearer communication during shared tasks and immediate feedback, and increased confidence in managing low-frequency, high-risk events compared to traditional in-services.
- Limitations included a small sample size, time constraints that limited participation, varying experience levels and reduced realism compared to actual emergencies.

Implications For Practice

- Gamified, simulation-based learning can strengthen Peri-anesthesia staff readiness for low-frequency, high-risk events.
- The escape room format supports better team communication, clinical judgment, and familiarity with the MH protocol in a realistic and engaging setting (Anderson et al., 2021).
- For Peri-anesthesia nurses, this approach deepens understanding of crisis roles and reinforces rapid-response skills.
- It also encourages a culture of safety and continuous growth.
- The model can be adapted to other emergency situations to support ongoing competency in outpatient surgery environments.

Supporting Evidence/References

- Anderson, J. E., Lavelle, M., & Reedy, G. (2021). Understanding adaptive teamwork in health care: Progress and future directions. *Journal of Health Services Research & Policy*, 26(3), 208–214. <https://doi.org/10.1177/1355819620978436>
- Klamm, M.M, Andries, C., & Lee, L. (2024). Bridging didactic and clinical in nursing education: An innovative health assessment activity. *Teaching and Learning in Nursing*, 19(2), e338-e342. <https://doi.org/10.1016/j.teln.2023.12.010>

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