



# Pediatric Anesthesiology Faculty Benefit from Facilitation of Pediatric Perioperative Emergency Simulations

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## Introduction

- Pediatric anesthesiologists and trainees feel unprepared to manage rare perioperative emergencies.
- Prior studies have demonstrated utility of simulation education.
- The value for the faculty who teach and facilitate these sessions is not as well documented.
- **Hypothesis: Faculty members benefit from facilitating pediatric perioperative emergency simulation.**



Figure 1. Fellows actively participating in simulation of perioperative emergency

## Methods

- A simulation curriculum using the Managing Emergencies in Pediatric Anesthesia (MEPA) network was implemented at our hospital in 2013.
- All pediatric anesthesiology fellows complete 3 half-days and 1 full day of simulation during fellowship year.
- Faculty attend a 30-minute preparatory meeting prior to each session.
- Upon scenario completion, a debrief facilitates discussion and self-reflection.
- Facilitators and trainees complete an anonymous evaluation of the course.

## Results

- Fifty-two trainees (44 fellows, 4 residents, 4 medical students) and 25 faculty have participated in the simulation program between 2013-2017.
- Most trainees strongly agreed that participating in these sessions was useful (97%) and would likely have an impact on their future practice (84%).
- Most faculty also strongly agreed that facilitation of these sessions was useful (89%) and would likely have an impact on their future practice (84%).

Comparison of Responses from Simulation Evaluations

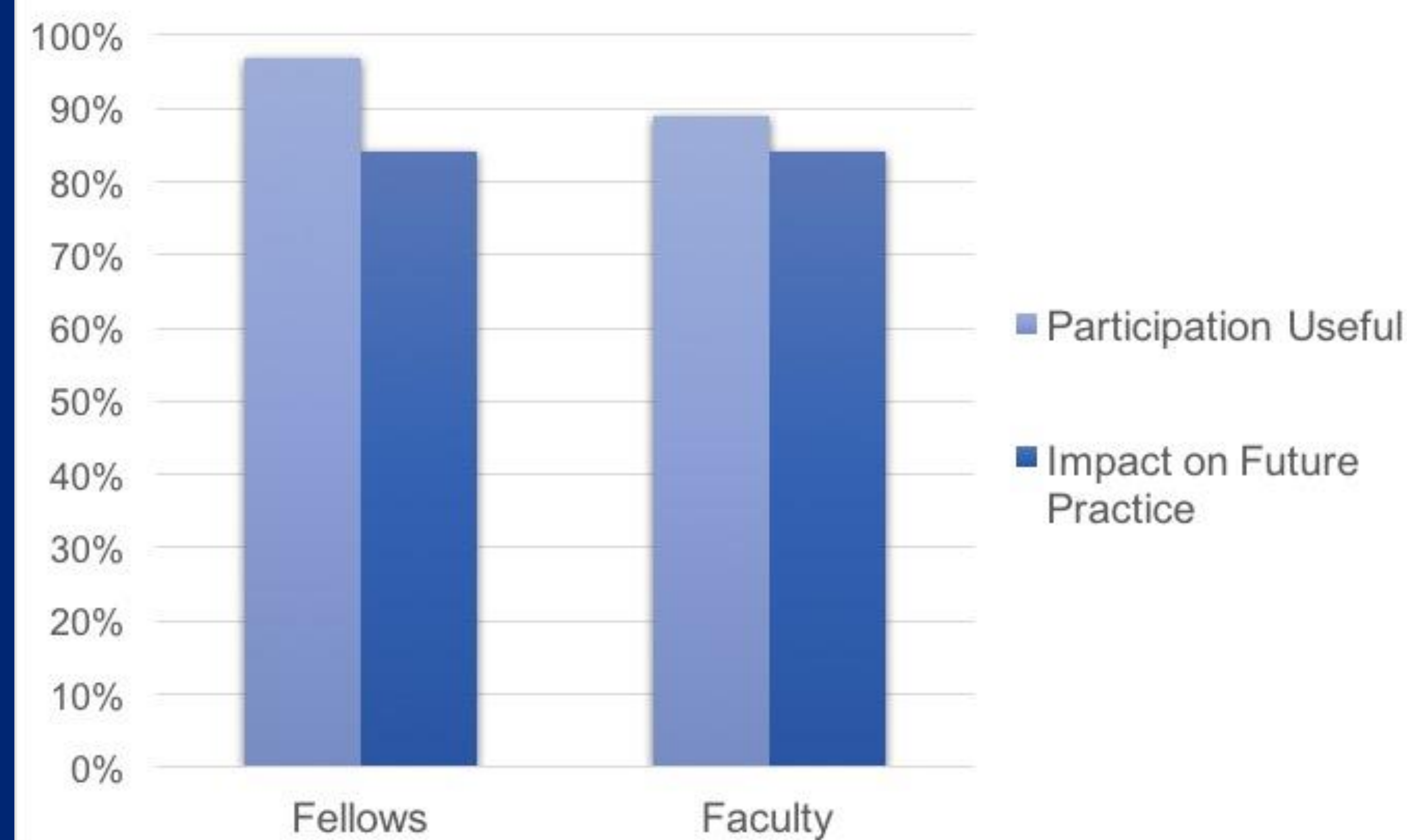


Figure 2. No statistically significant differences between the two groups' responses ( $p=0.5881$  and  $p=0.6139$  by Fisher's exact test), indicating that faculty find facilitation of simulation sessions to be as useful and impactful on their future practice as trainees.

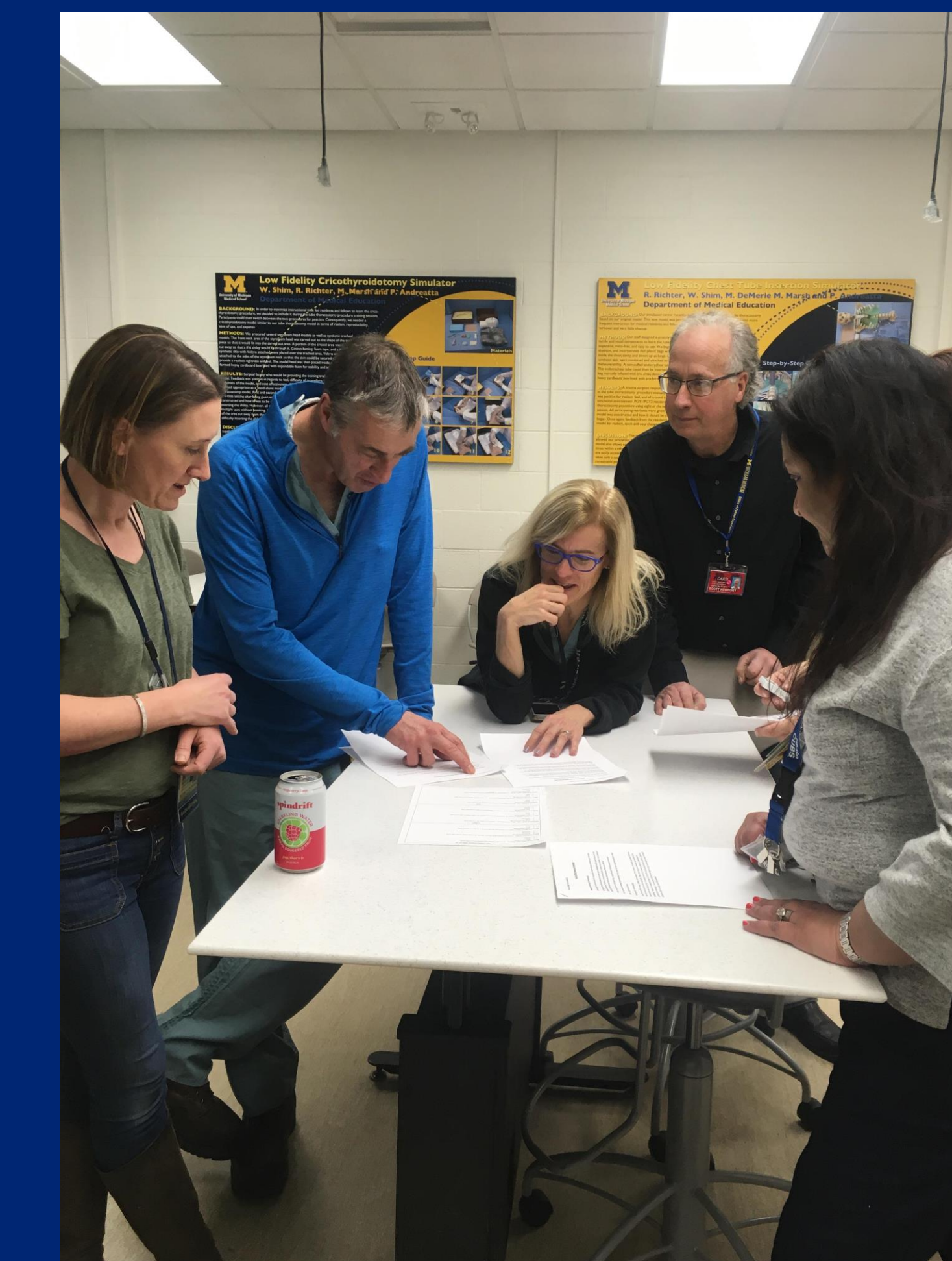


Figure 3. Faculty members prepare for simulation session



Figure 4. Fellows actively participating in simulation of perioperative emergency

## Discussion

- It is evident that most trainees find simulation education to be valuable for their future practice.
- Interestingly, the majority of faculty members felt that their role as a facilitator would also promote a change in their practice, and that guiding trainees through emergency situations was a beneficial educational exercise.
- This result may suggest a novel approach to encourage faculty development as clinician educators.

## References

- JAMA. 2011;306(9):978-988.
- Pediatr Anesth. 2017;27:984-990.