



# Shoulder Dystocia and Neonatal Resuscitation: An Integrated Obstetrics and Pediatrics Training Intervention for Medical Students

Yale

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## Background

Longitudinal clinical clerkships are emerging as a new model for medical education. High-fidelity simulation can be used to complement modern clinical training by providing a safe space for learners to consolidate clinical knowledge and practice decision-making skills, teamwork and communication. We developed an **interdisciplinary simulation-based training intervention to link clinical content between pediatrics and obstetrics** at a major academic medical center.

## Objectives

At the end of the training intervention, the successful student will be able to demonstrate the following:

### EPA<sup>a</sup> Goal

- 1,2,10 Evaluate an emergent obstetric or pediatric clinical scenario
- 10.12 Manage either: (1) a case of labor complicated by shoulder dystocia, or (2) resuscitation of a depressed neonate
- 8,9 Participate in interdisciplinary teamwork
- 6 Demonstrate professional communication

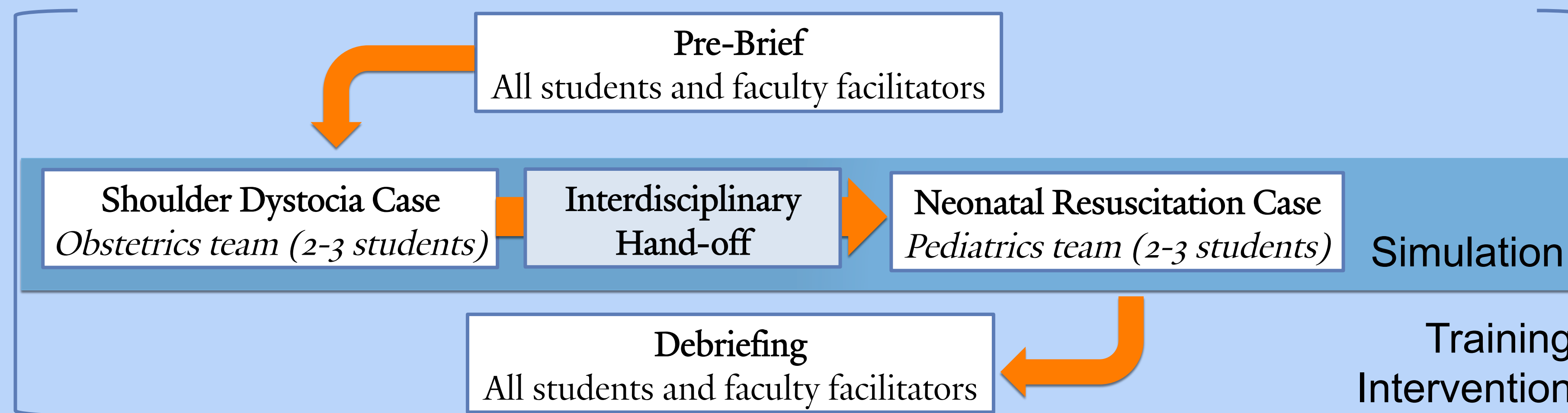
<sup>a</sup>AAMC's Entrustable Professional Activities (EPA) for graduating medical students; Association AMC. Core Entrustable Professional Activities for Entering Residency (CEPAER) Association of American Medical Colleges. 2014;1-105.

## Conclusions

- The integrated obstetrics and pediatrics scenario is **feasible** to run and **clinically accurate**.
- Two distinct areas of medicine in the third year curriculum were logically incorporated into one cohesive simulation-based training intervention that students found **positive, valuable, and appropriately designed**.
- Future iterations of the simulation curriculum may include additional time for students to participate in both clinical scenarios and placement earlier in the integrated clerkship course.

## Materials & Methods

- Participants**
- 54 third year medical students who completed the integrated Women & Children clerkship, including obstetrics and pediatrics
  - 5 Faculty facilitators: 3 from OB and 2 from neonatal intensive care
- Case**
- A 38 year-old female at 39 weeks gestation presents with onset of labor complicated by shoulder dystocia. After the appropriate maneuvers, a depressed neonate is delivered and requires resuscitation.



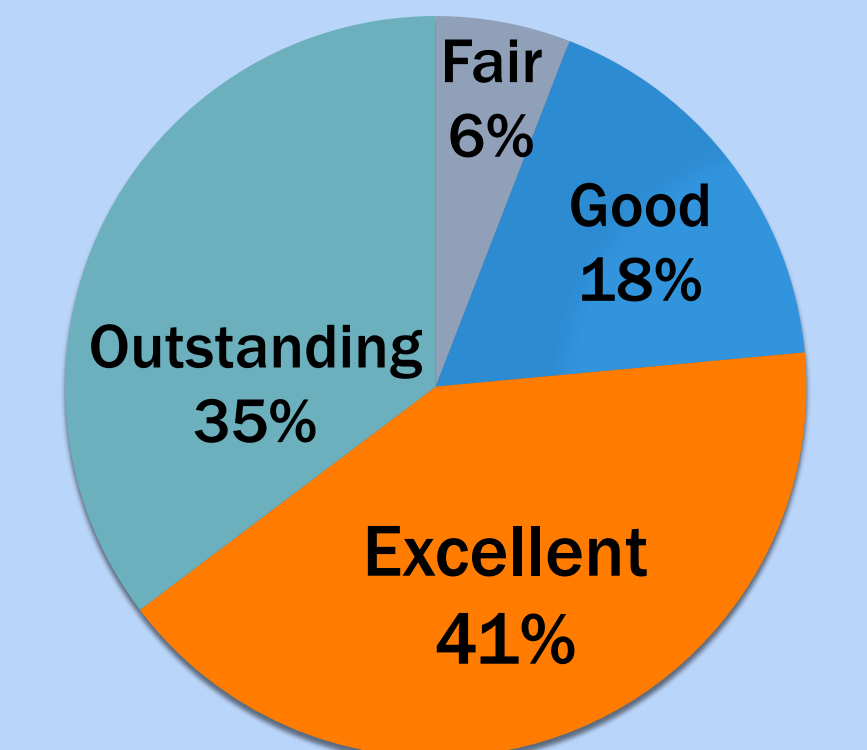
## Results

### Post-Intervention Survey Results

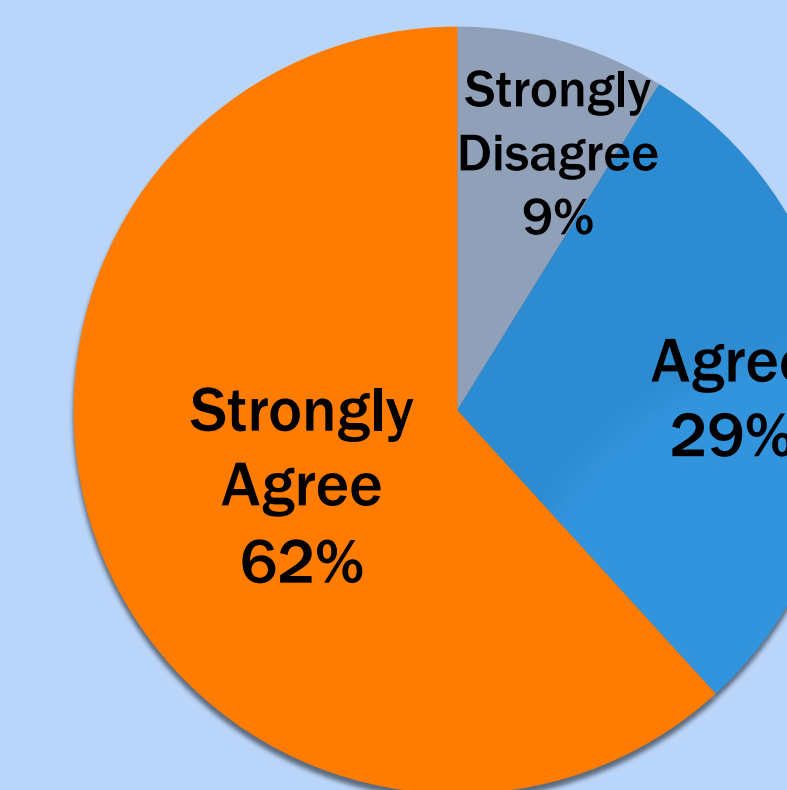
#### Shoulder Dystocia Case



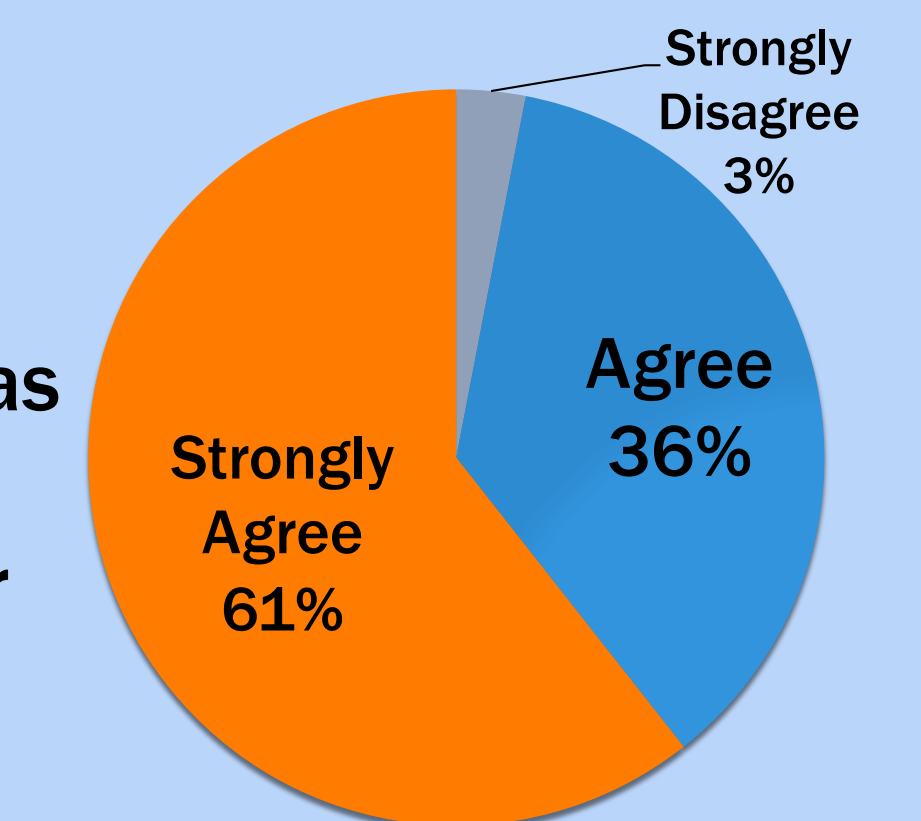
#### Neonatal Resuscitation Case



Overall Rating



The simulation was designed appropriately for learning level



## Student Feedback

Themes of Success		Themes for Improvement	
Safe space for learning	“Awesome sim! Learned a lot that I didn’t necessarily see in L & D or triage... Feeling these nerves in a <b>safe space</b> makes me feel much more prepared for a real-world situation.”	Time for additional practice	“After a practice in a safe environment like this where faculty are involved, it would be nice to do a follow up mock code so that we can continue to build our confidence in these scenarios and carry out tasks in an efficient and rapid manner.”
Communication	“I really liked the idea of joining an ob and peds scenario. It was at our level, and I felt that I learned a lot not only about the protocol, but also about <b>communication</b> with patients and our classmates.”	Intervention earlier in clerkship	“Move this to sometime earlier in the clerkship or cover the resuscitation material through a simulation prior to this session.”

## Acknowledgements

We would like to thank Drs. Scott Casper, France Galerneau, and Jessica Illuzzi in the Department of Obstetrics, Gynecology and Reproductive Science and Drs. Eve Colson and David Hersh in the Department of Pediatrics for their contributions in the development of this activity and with the simulation intervention.