

# Cross-specialty Collaboration in Society Sponsored Organizational Performance Improvement

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### **CASS** Council of Medical Specialty Societies

CMSS Annual Meeting 2022 Specialty Societies: Stronger Together

November 9-11, 2022 Washington, DC

# Disclosures

#### Komal Bajaj, MD, MS-HPEd

- AHRQ National Advisory Council
- Board of Trustees, Center for Medical Simulation
- Advisory Board, Level Ex
- Consultant, The Debriefing Academy

#### Randolph H Steadman, MD, MS

- Royalties from UpToDate on unrelated topic
- Editor-in-Chief, ASA Simulation Editorial Board, 2006-2018
- Member, ACS-ASA Simulation Collaborative Planning Committee, 2022

#### Steven Houg, CAE, CHSE

• Nothing to disclose



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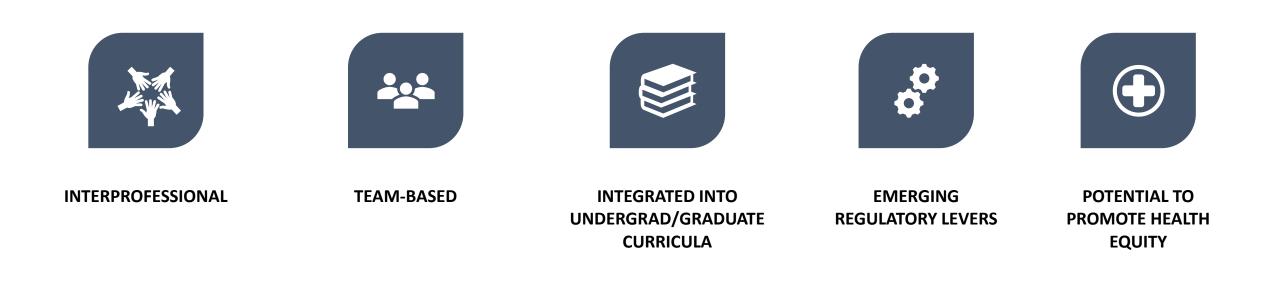
#### Healthcare Simulation Dictionary Second Edition ዮ ₫ 8 O × S

#### Agency for Healthcare Research and Quality

https://www.ahrq.gov/patient-safety/resources/simulation/terms.html

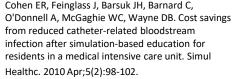
### Simulation + Debriefing

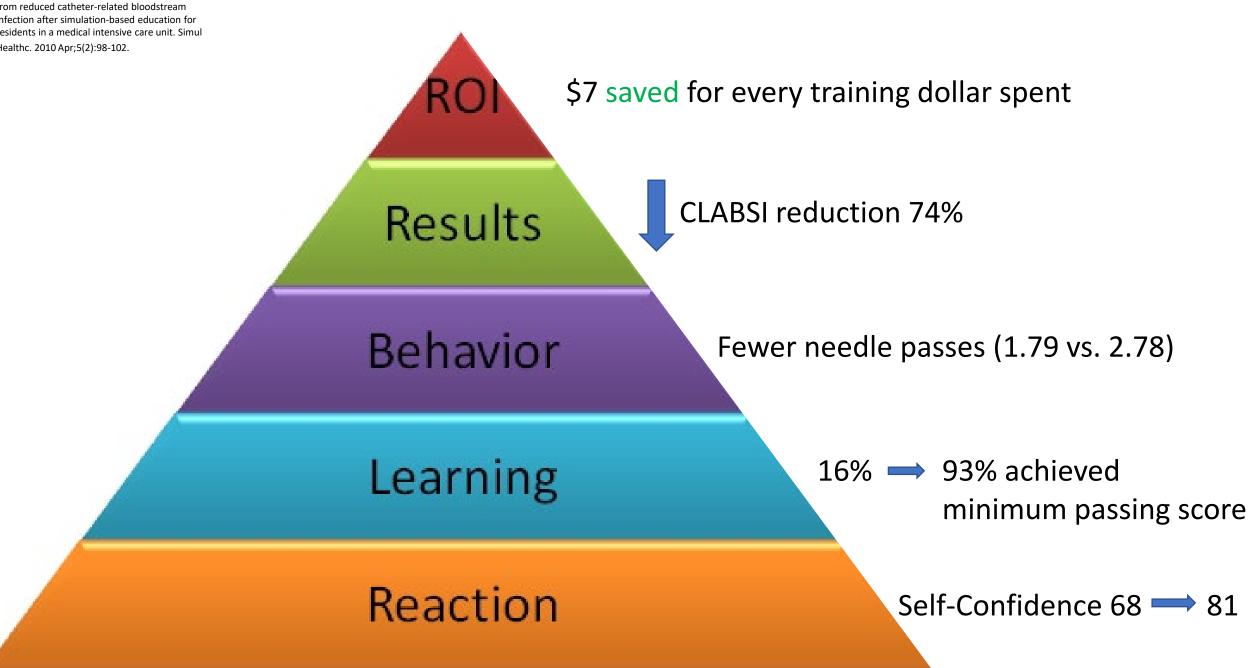
# Why Simulation + Debriefing?



**IMPROVES CARE** 









#### Original Research

### Association of Simulation Training With Rates of Medical Malpractice Claims Among Obstetrician–Gynecologists

Adam C. Schaffer, MD, MPH, Astrid Babayan, PhD, Jonathan S. Einbinder, MD, MPH, Luke Sato, MD, and Roxane Gardner, MD, DSc

### Key findings:

- Retrospective analysis comparing the claim rates before and after simulation training among 292 obstetrician–gynecologists
- Compared with presimulation training:
  - Malpractice claim rates were significantly lower postsimulation training (11.2 vs 5.7 claims per 100 physician coverage years)
  - Attending more than one simulation session associated with a greater reduction in claim rates. (6.3 [1 session], 2.1 [2 sessions], and 1.3 [3 sessions] claims per 100 physician coverage years)



# **R**<sup>3</sup>**Report** Requirement, Rationale, Reference

A complimentary publication of The Joint Commission

Issue 24, August 21, 2019

Published for Joint Commission-accredited organizations and interested health care professionals, *R3 Report* provides the rationale and references that The Joint Commission employs in the development of new requirements. While the standards manuals also may provide a rationale, *R3 Report* goes into more depth, providing a rationale statement for each element of performance (EP). The references provide the evidence that supports the requirement. *R3 Report* may be reproduced if credited to The Joint Commission. Sign up for <u>email</u> delivery.

Provision of Care, Treatment, and Services standards for maternal safety

### Getting Ready for 2021 Joint Commission Perinatal Standards Lessons From the Field

Veronica Lerner, MD, FACOG;

Komal Bajaj, MD, MS-HPEd

**Summary Statement:** The new Joint Commission requirements on perinatal safety present a unique opportunity for the simulation community to actively engage with labor and delivery units nationwide. Considerations for implementation using "real-life" experience with the programmatic development of an in situ team-based simulation training program in obstetric emergencies are discussed. We urge simulationists to explore opportunities to promote culture change on a large scale to move the needle of maternal morbidity and mortality. (*Sim Healthcare* 00:00–00, 2021)

Key Words: In situ simulation, obstetrics, The Joint Commission, accreditation, patient safety, perinatal outcomes, team training.

### HEALTHCARE DEBRIEFING: LINKING QUALITY, SAFETY, & WELLNESS





@ SBENTLEYEMSIM

### Use of a Surgical Debriefing Checklist to Achieve Higher Value Health Care

Michael R. Rose, MD<sup>1</sup>, and Katherine M. Rose, MD<sup>2,3</sup>

Medical Quality

American Journal of Medical Quality 2018, Vol. 33(5) 514–522 © The Author(s) 2018 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/1062860618763534 ajmq.sagepub.com

**SAGE** 

### 54,003 cases -> 4523 events/defect (92 causing harm/critical)

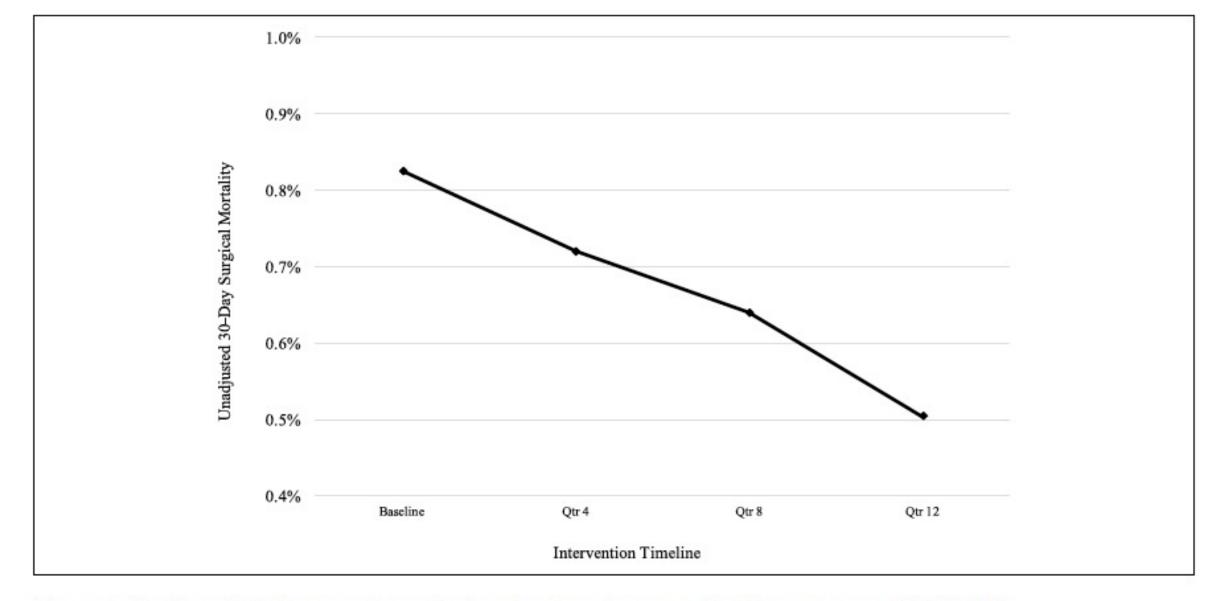


Figure 2. Unadjusted 30-day surgical mortality: baseline through quarter 12 of the intervention (2009-2010). Unadjusted 30-day surgical mortality, which measures death during hospitalization for the index surgery, plus readmission with death within 30 days of surgery was used.

	% Respondents That Agree		
	Baseline $(n = 156)$	Post-Implementation $(n = 132)$	Top Peer <sup>a</sup> (n = 69)
"I am encouraged to speak up about patient safety concerns that I have"	72%	93%	100%
"McLeod has a good safety climate"	46%	90%	98%
"I would feel safe being treated here as a patient"	82%	89%	92%

#### Table 1. Safety Climate in Surgery: Survey Responses From MacLeod Regional Medical Center Staff (2009-2012).

<sup>a</sup>A Top Peer of the 69 hospital surgical departments surveyed.





### American College of Emergency Physicians<sup>®</sup>



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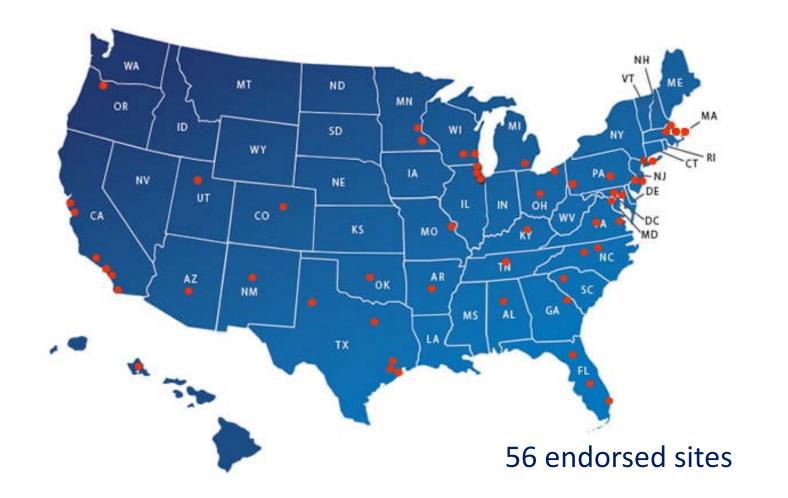
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ASA Simulation Education Network

Simulation Education Network American Society of Anesthesiologists<sup>w</sup>



# ASA Simulation Editorial Board

- Maintenance of Certification in Anesthesiology (MOCA<sup>®</sup>) simulation course:
  - Requirements established in 2006 in conjunction with the American Board of Anesthesiology
  - Course is at least 6 hours
  - Course participant to instructor ratio  $\leq 5:1$
  - Scenario themes that must be included:
    - Hypoxemia
    - Hemodynamic disturbances
    - Teamwork



### Course Format

- Every participant takes a turn as anesthesiologist-incharge for a scenario
- During other scenarios they observe, act as first responders and participate in the debriefings



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### ASA Simulation Editorial Board

- MOCA<sup>®</sup> simulation course goals:
  - Identify optimal care
  - Reflect on whether optimal care is currently provided in your practice
  - Develop an improvement plan that addresses gaps
  - NOT a performance assessment (NOT a test!)



## Post Course Follow-up

- Within 3 days of the training, participants:
  - Evaluate the course
  - Submit 3 practice improvement plans
- Within 90 days of the training, participants:
  - Indicate whether their plans have been implemented: not at all, partially or completely
  - Indicate any barriers that were encountered



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**ORIGINAL INVESTIGATIONS IN EDUCATION** 

#### Practice Improvements Based on Participation in Simulation for the Maintenance of Certification in Anesthesiology Program

Randolph H. Steadman, M.D., M.S., Amanda R. Burden, M.D., Yue Ming Huang, Ed.D., M.H.S., David M. Gaba, M.D., Jeffrey B. Cooper, Ph.D.

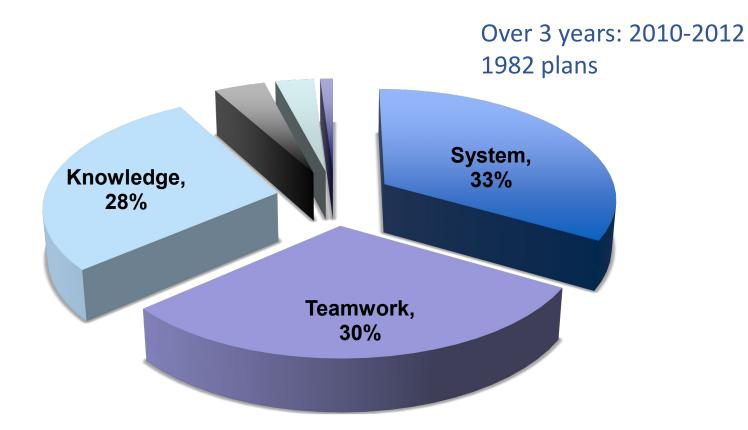
#### ABSTRACT

**Background:** This study describes anesthesiologists' practice improvements undertaken during the first 3 yr of simulation activities for the Maintenance of Certification in Anesthesiology Program.

Anesthesiology 2015, 122: 1154









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### Plan Completion

	Ν	Percent
Fully completed	1,558	79%
Partially completed	310	16%
Not completed	114	6%



### Multivariable Analysis

Predictor	Odds	95% CI	P value
	Ratio		
Measurability	1.57	0.79-3.08	0.591
Experience	0.95	0.90-1.01	0.276
Total number of professions targeted per plan	1.29	1.06-1.57	0.036

Setting was dropped because *P*>0.20 in univariable analysis. A Bonferroni correction was made to account for multiple comparisons.



### Individuals Targeted by Plans

Ν	Percent
1,764	89%
1,546	78%
990	50%
320	16%
525	26%
	1,764 1,546 990 320

There can be multiple targets per plan. Percentages are based on total N=1,982 plans.



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#### / Leadership of the ACS AEI Program

Ajit K. Sachdeva, MD, FACS, FRCSC, FSACME, MAMSE

Director, Division of Education, American College of Surgeons

- Accredited Education Institutes 110 centers accredited throughout the world
- Accreditation involves site visit
- Conferences include annual Simulation Summit



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- Joint Half-Day Sessions
- First scheduled for 2020
- Virtual sessions in 2021 and 2022
- Planning in person joint session in March 2023



### Prior Joint Sessions - Virtual

- 2021
  - How Do We Restore and Advance the Value of Simulation-Based Training for the Future?
  - Themes emerged regarding what ACS and ASA can do
    - Joint activities
    - Joint advocacy
    - Joint certification
    - Joint financing
    - Joint scholarly activity
    - Joint statements
    - Joint training





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### Prior Joint Sessions - Virtual

- 2022 Keynote speaker: Kevin Weiss, ACGME, CLER Officer
- Breakout sessions addressed:
  - How can surgeons and anesthesiologists enhance communication and collaboration through simulations?
  - How can ACS and ASA facilitate these activities?





### Simulation Summit Joint Half-Day Sessions

- Breakout groups addressed the following:
  - Ensuring effective, ongoing team communication during surgery
  - Conducting effective timeouts / huddles before surgery
  - Conducting effective timeouts / huddles postoperatively, for transfer of patients to PACU or ICU
  - Promoting effective interprofessional practice that includes OR staff, residents and others who participate in the surgical care of patients
  - Foster an understanding of each other's roles / needs; learning how what you do impacts your colleagues



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### Future Directions



https://www.asahq.org/meetings/sen-summit

- ACS-ASA task force with 4 surgeons, 4 anesthesiologists, and administrative support
- Setting agenda for 2023 joint simulation summit
- Priorities:
  - Perioperative quality improvement
  - Joint faculty development / joint curricula
  - Joint instructional events / meetings
  - Multi-institutional collaboration



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### Conclusions

- We work as teams
- We need to train as teams



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### Operationalizing Simulation Activities Staff Perspective

Steven Houg, CAE, CHSE Senior Simulation Education Manager Education Department American Society of Anesthesiologists



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### We are ASA: Leaders in Patient Safety

# Mission: Advancing the practice and securing the future

Vision: A world leader improving health through innovation in quality and safety

Values: Patient safety, physicianled care and scientific discovery

#### **Strategic Pillars**

- 1. Advocacy
- 2. Quality & Practice Advancement
- 3. Educational Resources
- 4. Member Growth & Experience
- 5. Leadership & Professional Development
- 6. Scientific Discovery
- 7. Financial Performance and Operational Excellence



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Simulation-based education is within reach for the Medical Specialty Societies

- Link the work that members are already doing in their home institutions. Utilize existing resources.
- No requirement of a large capital investment by the society







### ASA Support for Simulation Education Network

- Committee (Editorial Board for Simulation-Based Training)
- Funding and staff support for Committee Meetings
- Conference (Simulation Education Network Summit)
- Simulation-based Hands-On Workshops at ASA Annual Meeting
- Network Meetings (IMSH, Annual Meeting)
- Endorsement Applications software portal and application management
- Online Community for Sharing Archiving Scenarios



# Impetus for Innovation in Simulation

- Limitations associated with travel to simulation center
- Scheduling, time off work, and availability issues
- "Hot seat" can be uncomfortable in the live environment
- Desire for variety of educational and PI options



### Educational Solution: Screen-Based Simulation

- Scenario-based eLearning modules created by ASA simulation experts and driven by ABA High Priority Topics and CAE Healthcare's validated physiology engine in a virtual environment
- Deployed via the ASA Education Center (LMS)



CAE Healthcare Validated Physiology (Used in the Human Patient Simulation "HPS" Manikin)



SimTabs Virtual Environment

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Full video available at https://asahq.org/simulation



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### SimSTAT Data

- There are presently 5 modules
- >6000 learners started at least one of the modules
- They create > 100,000 sessions
- We've recorded about 2M user actions
- Measured 0.5B physiology data points

### ...and counting...

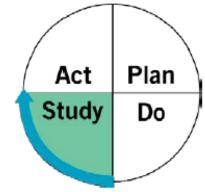




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### Opportunities for Specialty-Board Collaboration

- ASA and ABA collaborated in the early stages (planning stages)
- Several years have passed (we've been "doing")
- It's time to "study"
- ASA and ABA seek to collaboratively analyze SimSTAT data
  - Collaboratively we can achieve outcomes that a board or society could not achieve independently
- Examples of Proposed Research Areas:
  - Identify training needs based on behavior in simulations
  - Identify training interventions with high impact
  - Evaluate efficacy of this novel format
    - To what extent are participants learning?
    - How does screen-based simulation compare to other QI activities?





# Cross-specialty Collaboration

- Involve experts from other specialties in activity planning
- Reference guidelines from other organizations where applicable



**Labor & Delivery** 



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# Future Opportunities for Collaboration

- Build on each other's work and resources across specialty lines
- Interprofessional team training via screen-based simulation





https://asahq.org/simulation



# In Summary

- Simulation is a robust tool that can be employed in ways that strongly improve performance and patient safety.
- Parallel activities across specialties represent opportunities for greater impact through collaboration.
- Simulation takes many forms. It can be feasible and sustainable for specialty societies.