Chasing Perfection

Gene Chang, MD
Maternal Fetal Medicine
Disclosure

- No conflicts to report
Pay for performance

- Value based care—“Pay for Performance”
- Not paying for bad outcomes
- Short term data is mixed
- Long term data is lacking

Lee G et al. NEJM 2012
Bardach N et al. JAMA 2013
**FIGURE 1.** The healthcare quality pyramid.
Objectives

- Convince you of importance of simulation
  - Examples outside of medicine
- Address barriers to use of simulation
- Resources/Courses
  - South Carolina
- Beyond
10% don’t get mentoring on handedness
Few get offered Left-handed instruments
55% annoyed faculty
28% forced to switch handedness
Deliberate Practice

- Individual motivation
  - Exertion of effort to improve
- Pre-existing knowledge taken into account
- Immediate informative feedback
- Repeatedly perform or repeat similar tasks
- Controlled setting

Ericsson KA et al. Psych Review. 1993
Ericsson: 10,000 hour rule

Figure 9. Accumulated amount of practice alone (on the basis of estimates of weekly practice) as a function of age for the middle-aged violinists (Δ), the best violinists (□), the good violinists (○), and the music teachers (●).
Team dynamics in practice

- Obstetrics emergencies
  - Unpredictable, sudden
  - Can occur in healthy, low risk women at term
- Rapid coordinated response
- Ad hoc teams
  - Varying experience
“Make it Routine”
What does literature say?

- **SaFE Study**
  - HIE decreased from 27.3 to 13.6 per 1000
  - Decrease in brachial plexus injury, fx RR 0.25 (0.11-.0.57)
  - Cord prolapse median D-D interval 25 to 14.5 minutes
- **Grobman et al**
  - Shoulder dystocia training
  - Decrease in shoulder dystocia from 10.4 to 2.6%

Loss of skills

- Dimunition of skills or knowledge
- Following periods of nonuse
- Influenced by
  - Task characteristics
  - Methods of original learning
  - Individual differences

Arthur W et al. Hum Perform 1998
How often?

- SaFE study
- Training evaluated
  - Pre-training, 3 weeks, 6 months, 12 months
  - Knowledge, skills, attitudes improved for at least yr
Who else can we learn from?

- Band
  - Need to be on same page
- Improvisation
- Sight Reading

- Technical fundamentals
- Psychomotor skills/Memory
- Ability to read, recognize, remember
- Awareness of music’s structure and theory
Advantage of in situ

- Greater ease of access
- Reduced time/expense of travel
- Greater familiarity with equipment/surroundings
- Address local issues
- May more closely approximate clinical scenario
In Situ Simulation

- Full-team drills
- Full environment simulation (FES)
- Kaiser Permanente experience
  - Exclusively uses In Situ Simulation
  - Overestimation of ability to multi-task
    - Urgent cases
  - One OR favored over others
Sim Center vs. In situ

- SaFE study
- 140 participants
- Sim center vs. in situ
- No difference
  - Knowledge
  - Improved performance

Applications for FES in OB

- Postpartum hemorrhage
- Shoulder dystocia
- Ecclampsia
- Trauma/Cardiopulmonary resuscitation
- Operative vaginal delivery
Downside to In Situ Simulation

• Challenging for Simulation Personnel
  • Equipment
  • Travel
• Need in house champion/content expert
• Clinical volume
  • In one study 6/14 sessions carried out

Air Force Experience

“Difference b/t involvement and commitment is like a Ham and Eggs Breakfast. The chicken is involved but the pig is committed”

Debriefing
Debriefing: 3D’s

- Defuse
  - Elicit reactions/emotions
  - Describe events
- Discover
  - Analyze and evaluate
  - Mental models
- Deepening
  - Connecting learning to practice
Barriers to Simulation for us

- Cost
- Lack of benefit
- Lack of resources/equipment
- Ego/Pride
SimCoach
ACOG/ABOG

- ACOG
  - Simulation Working Group
  - ECO course (train the trainer course)
- ABOG
  - Maintenance of certification (Part IV)
Simulation Courses

Upcoming CAMLS Events

10/20/17-10/21/17 - OBSTETRICAL SIMULATION COURSE: EMERGENCIES AND CATASTROPHES

Course Director: Shelly Holmstrom, MD, FACOG

Click here for more information about the conference.
Simulation Courses

Upcoming Events

Simulation Course for Maternal-Fetal Medicine

Despite advances in Maternal Fetal Medicine and a focus on quality and patient safety, there is an urgent need to train many obstetric providers up-to-date. High rates of maternal mortality and severe morbidity are on the rise in the United States.

**If you are a member of SMFM, please click on the ‘Register’ link below to register online or download the course brochure, complete the registration form on page 4 and return as indicated with your payment.

***If you are not an SMFM member, you have two options:

1. Create a free account to register online or;
2. If you do not wish to create an account, please download the course brochure, complete the registration form on page 4 and.

Event Overview

DATE: June 1, 2017 - June 2, 2017
LOCATION: New York, New York, United States

Downloads

- Preferred Hotels
- Brochure with CME Credit
Simulation Courses

Lower Premiums

CRICO/RMF insured physicians and midwives who complete a Labor and Delivery course at the Center for Medical Simulation as well as RMF CME website coursework and pass a short test on CRICO obstetrical guidelines qualify for a lower premium underwriting specialty category from CRICO/RMF for two years. Obstetricians insured by Coverys who participate in a Labor and Delivery Crisis Resource Management course at the Center for Medical Simulation qualify for an annual premium discount. Please contact your assigned agent directly for further details on how to obtain this discount.
Summary

- Health care is a team effort
- We should pursue excellence
- Simulation important educational tool
  - Effective practice
  - Team practice
  - Feedback
"In the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed."

Charles Darwin
“To practice a discipline is to be a lifelong learner. You never arrive.”
Introducing the

SCRUB ROMPER

NurseBlake.com