

**Simulation-based team training: Crisis Resource Management and the Use of  
Emergency Manuals in the OR**  
Facilitator's Notes

## **1. Welcome and Introduction**

- a. Introductions
- b. Acknowledgments, as needed
- c. Purpose of session
- d. Methods
- e. Pre-brief and Introduction of ground rules
  - i. Safe learning environment
    - a) Expectation of confidentiality
    - b) Simulation for the purpose of formative learning, not evaluative
  - ii. Immersive / request for active participation
    - a) Please volunteer
    - b) Suspension of disbelief
    - c) Overview of the simulated environment

## **2. Intro to Crisis Resource Management (CRM)**

- a. Quick Background
  - i. Purpose of CRM
  - ii. Training project goals (adapt for your institution)
  - iii. Examples from aviation industry, etc. demonstrating analogous CRM principles
- b. CRM Principles
  - i. CRM Circle Poster, handouts, and/or back cover of EM
  - ii. **Hand out CRM circle diagram – May focus on these:**
    - a) Call for Help
    - b) Leadership
    - c) Communication
    - d) Role Clarity
    - e) Use Cognitive Aids

## **3. Framework for Use of Emergency Manuals**

- a. Present key elements for effective Emergency Manual use
  - i. Content and design matter, but also:
  - ii. Accessibility matters
  - iii. Training and familiarity matters
- b. **Hand out Emergency Manuals**
- c. Use of Emergency Manuals
  - i. “Smart people use cognitive aids” in high stakes industries
  - ii. Designed to be readily accessible, clinically helpful information

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- d. Orientation to Emergency Manual
  - i. Importance of familiarization
    - a) Perceptual blindness
      - a. Example of not seeing what you're looking for - butter in refrigerator even when looking directly at it.
      - b. During simulation, residents removing cognitive aid taped to defibrillator due to lack of familiarity
    - b) Point out location of manuals in OR
  - ii. Organization of Emergency Manual
    - a) Table of contents, alphabetically listed on cover
    - b) ACLS in front section
    - c) Critical Events Non-ACLS alphabetically listed
    - d) CRM principles on back cover
  - iii. Example: Use of Emergency Manual in PEA scenario
- e. Types of situations in which staff can recognize the need for an Emergency Manual(3 R's examples)
  - i. Rare event: e.g. Malignant Hyperthermia
  - ii. Refractory Hypotension or Hypoxemia (i.e. unclear diagnosis)
  - iii. Reader assisting the leader in a complex event: e.g. Pulseless Electrical Activity (PEA)
- f. How to use
  - i. Model of respectful assertiveness
    - a) "Observation - Assessment - Inquiry" <sup>1,2</sup>
  - ii. Empowerment, and role of specific language
    - a) Practice triggering team use "Would you like me to get you the emergency manual?" or "Would you like me to read aloud from the Emergency Manual?"
      - Malignant Hyperthermia brief simulation
  - iii. Cultural change

#### **4. Simulations to illustrate CRM and EM use**

- a. Introductory Demonstration Simulation
- b. Participatory Simulation of rare event (Malignant Hyperthermia)
- c. Participatory Simulation of refractory event (Massive Hemorrhage)

#### **5. Conclusion**

- a. Debrief of simulations
- b. Recap of CRM concept overview and EM use

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### **Facilitator's Debriefing Tips**

Goal: 1) Explore the simulated experience, 2) discuss alternatives, and 3) provide feedback in a supportive nonjudgmental environment.

- Clearly state that this is a safe, nonjudgmental environment where constructive feedback is essential to ongoing learning.
- The facilitator enables the debrief discussion and should model active listening. Facilitators are also encouraged to open up the forum to all participants and encourage participants' viewpoints as a topic for discussion.
- Invite everyone in the group to participate at least once, if not within the simulation, then as an observer.
- Ask open-ended questions, beginning with the participants on "How did this simulation go for you?" and "What could have been done differently?" After, invite the observers and others to discuss their observations.
- Link observed behaviors to possible events participants might experience in the OR.
- Encourage participants to share their viewpoints, how they might address a certain challenge. Invite others to share possible solutions.
- Close the session thanking everyone for their open participation, reminding them about the confidentiality of the session.

**For an excellent overview and further literature on debriefing in simulation, please see references below.**

### **References**

1. Minehart RD, Pian-Smith MC, Walzer TB, et al. Speaking across the drapes: communication strategies of anesthesiologists and obstetricians during a simulated maternal crisis. *Simul Healthc* 2012;7:166-70.
2. Pian-Smith MC, Simon R, Minehart RD, et al. Teaching residents the two-challenge rule: a simulation-based approach to improve education and patient safety. *Simul Healthc* 2009;4:84-91.
3. Fanning, Ruth M., and David M. Gaba. The role of debriefing in simulation-based learning. *Simulation in healthcare* 2007;2(2): 115-125.

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