Premier Hospital Engagement Network:

“R” is for Readiness: Developing and improving your hospital's OB emergency simulation program

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The 4 “R’s”

Improve **Readiness**
- Protocols and ordersets
- Availability of resources
- Established response team
- Regular ongoing team education and drills

Improve **Recognition**
- Assessment of maternal risk
- Appropriate triage and assessment
- Implement systems to identify and treat women who may be developing critical illness, such as The Modified Early Obstetric Warning System (MEOWS)

Improve **Response**
- Standardized plans with checklists
- Management based on reliable evidence and research
- Comprehensive postpartum and post discharge planning
- Trained and activated teams

Improve **Reporting**
- Establish a culture of “Huddles” for high risk patients and post-event debriefs
- Review all high risk events cases for systems issues
- Monitor outcomes and process metrics in Perinatal QI committee
- Ongoing multidisciplinary monitoring and review

*Modified from CMQCC and ACOG District II*
“R” is for Readiness:
Developing and improving your hospital's OB emergency simulation program

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Objectives

At the end of this session the participants will be able to outline key elements of a simulation training program including:

1. Preparation
2. Drill Development
3. Team development (CRM)
4. Conducting drills
5. Debriefing drills
Previous maternal hemorrhage webinar

- Magnitude of the problem.
- Risk assessment.
- Recognition of hemorrhage.
  - Ongoing quantification.
- Prevention.
  - Active management 3\textsuperscript{rd} stage.
- Readiness.
- Supplies-hemorrhage cart.
- Treatment algorithms/checklists/mass transfusion protocol.
#1. Preparation for simulation

Obtain Buy-In

- **Institutional**
  - Department chairs, risk management, etc.

- **Staff**
  - Nursing, ancillary.

- **Physician**
  - House physicians, Attending's.

- **Additional Departments**
  - Anesthesia, lab, residency, ED, nursery.
Preparation for simulation

- **Committed budget/resources**
  - Supplies and equipment.
    - Simulators vs low fidelity.
  - Training for leadership.
  - Out of unit time for RN simulation coordinator.
  - Training time for all non salaried staff.

- **Trained team**
  - Physician champion.
  - RN Simulation coordinator.
  - Simulation tech.

- **Rehearsal**
  - Clear objectives.
  - Team coordination.
  - Pre-simulation checklist.
  - Equipment/Scenario run through.
Develop Goals

- **Institutional**
  - Joint Commission standards.
  - Decision to incision.

- **Discipline based**
  - Improve response to maternal hemorrhage.
  - Utilize maternal early warning criteria.
  - Hemorrhage checklist.
  - Code “C.”

- **Unit/Facility based**
  - Detect system based errors.
  - Latent safety threats.

- **Individual**
  - Leadership training.
  - Communication training.
Simulation is education!

I. What is your goal?
   • To improve teamwork.
   • To improve communication.
   • To improve response to hemorrhage by utilizing hemorrhage checklist.

II. Create objectives to meet the goal:
   • Perform a huddle.
   • Demonstrate SBAR, read backs, closed loop
   • Simulate an obstetric hemorrhage and utilize checklist

III. Debriefing matches objectives

IV. Evaluation
Logistics

• In situ vs simulation lab
• Low fidelity vs high fidelity
• Scheduling challenges
• Use of video (pros vs. cons)
• Supplies, equipment, personnel needed
• Troubleshooting, contingency plans
• Evaluation
• Research
Madame Du Coudray’s L&D simulation "machine," patented in 1778
Museum of Flaubert and the History of Medicine
Rouen, France
#2. Drill Development

- Develop a template for all cases
  - Develop cases to help meet objectives.
- Consistent with evidence-based guidelines
- Using current algorithms
- Based on standardized protocols

(https://cmqcc.org/resources/ob_hemorrhage/ob_hemorrhage_tools_simulations_and_drills)
Drill Development

- High risk events, low frequency events

- Learning Objectives drive the content of the simulation

- During the simulation the staff must meet:
  1. Cognitive objectives
     • Recognize the signs of placental abruption call a “Code C.”
  2. Technical objectives
     • Demonstrate the necessary actions to perform an emergency cesarean delivery in a timely manner.
  3. Behavioral objectives
     • Utilize the principles of crisis resource management.
#3. Implementation of Team Development
The Basic Assumption

“I believe that everyone participating in the activities today is intelligent, well-trained, cares about doing their best and wants to improve.”
Assertiveness

✧ Five “Rights”
  • To have and express your own ideas
  • To be listened to and taken seriously
  • To be treated with respect
  • To ask for information from others
  • To make mistakes

✧ Individual (or team) recognizes a problem...and is empowered to ask for help:

✧ You’re allowed to “CUS!”
  • Concerned
  • Uncomfortable
  • Scared
Crisis Resource Management

CRM is the science of *successful* teams

- Communication is vital
- Establish leadership
- Recognize the specific functions of a leader
- Continue to re-assess
- Avoidance of fixation errors
- Use all available resources
- Team roles
Communicate Clearly

1. What I meant to communicate
2. What I actually said
3. What I heard her say
4. How I understood what I heard her say

Close the loop!
Shared mental model
Situational awareness
Possible metrics

- **Time**
  - Decision to incision
  - Time to obtain uterotonics
  - Time to obtain blood transfusion

- **Adherence to guidelines**
  - Checklist followed?
  - Correct order of actions?
  - Everything completed?
#4. Conducting Drills

- **Brief**
  - “Pre-Education” ie. new protocol, checklist etc.

- **Set ground rules:**
  - “Everything that happens in Vegas, stays in Vegas.”
  - Basic assumptions.

- **Confidentiality agreement**

- **Suspend disbelief**

- **Functionality and orientation to the space**
  - Can I use equipment? Can I start an IV? How do I get feedback? (ex: vitals, changing condition, etc.)
#4. Conducting Drills

Simulation

- Checklist of expected behaviors based on objectives- ex: learner will recognize that the patient is experiencing a post delivery hemorrhage and utilize the hemorrhage checklist to treat.

Debrief

- Facilitated discussion about what went well, what didn’t go well and what can we do to improve.

- Participant evaluation- How did the simulation go? What can we do better?
Maintaining the gains

- Simulation newsletter
- Publish metrics
- Use participant feedback to improve
- Discuss in staff meetings/clinical practice counsel
- Require for 100% of labor and delivery staff regardless of role
- Run simulations outside of L&D unit to generate interest/buzz
How to keep things exciting

Add levels of complexity, while still maintaining realism

• Simulate a post-partum hemorrhage with a power failure (only emergency power on, simulate in the dark).
• Re-create an M&M scenario that the staff is unfamiliar with.
• Blindfold the team leader.
• Run simulation with a critical equipment failure, missing critical medications, or missing key personnel (test staff resourcefulness).
• Perform post-partum hemorrhage simulation that goes from delivery suite to an emergency hysterectomy in the OR.
• Fire in the OR during a scheduled C-section.
• Post-partum eclamptic seizure on the floor of bathroom in a delivery suite.
• Amniotic fluid embolism/ACLS resuscitation.
• 3rd Trimester Motor Vehicle Collision in the trauma bay requiring a group simulation with the Emergency Medicine and Neonatal resuscitation staff (perimortem c-section, code pink NRP resuscitation, and ATLS resuscitation).
#5. Debriefing

- Debriefing: Occurs after a simulation episode and involves faculty-facilitated discussion to allow participants to reflect on the exercise and experience deeper processing of the learned material.

- Allows learners to connect the lessons learned from the challenging exercise to future actions in the actual clinical arena.

- Provides an opportunity for the learner to navigate through the all the stages of Kolb’s experiential learning cycle.
Debriefing

- Although the scenario itself is engaging and educational, the most important learning occurs during debriefing.

- The focus of the debriefing should be on teamwork and communication, not on individual technical skills.

- *Debriefing is not feedback from the instructor.* It is a team-centered discussion where the participants themselves discern what went well during the scenario and what needs improvement.
Effective Debriefing Principals

- Self-discovery is key. Team members do most of the talking to each other.
- For complex debriefings, help the team develop an agenda. What issues will be covered.
- Link simulation to real-life practice.
- Question Statement ratio = (3:1).
- Use active listening. Look and sound interested.
Effective Debriefing Principals

- Debrief constructively
  - Hold your teaching points until the team has finished. The debriefer enables the team to figure things out, then enhances understanding of the key points they might have missed.

- Maintain confidentiality.
  - What happens here, STAYS here.

- A complex debriefing can last up to 30 minutes. You probably have 5-10 minutes. Choose the most important objectives to discuss. You may not be able to cover everything.
Conceptual Frameworks for Debriefing

**The 4E Method**

**Events**: Request a narrative from the team and/or clarifying/supplemental information from the team.

**Emotions**: Facilitate participants reflection and analysis on their own actions.

**Empathy**: Provide supportive commentary on the effort of the team to meet its educational objectives.

**Explanations**: Facilitate identification and review of lessons learned.
Conceptual Frameworks for Debriefing

The GAS method

**Gather**: Request a narrative from the team and/or clarifying/supplemental information from the team.

**Analyze**: Facilitate participants reflection and analysis on their own actions.

**Summarize**: Facilitate identification and review of lessons learned.
### Structured and Supported Debriefing Course

#### G.A.S. Job Aid

<table>
<thead>
<tr>
<th>Phase</th>
<th>Goal</th>
<th>Actions</th>
<th>Time</th>
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| G     | Gather | Listen to participants to understand what they think and how they feel about the simulation session.  
- Request narrative from team leader.  
- Request clarifying or supplemental information from team. | 2.5 Minutes |
| A     | Analyze | Facilitate participants’ reflection on and analysis of their actions.  
- Review an accurate record of events.  
- Report observations (correct and incorrect steps).  
- Ask a series of questions that help to reveal the participants’ thinking processes.  
- Assist participants to thoroughly examine (reflect on) their performance during the simulation and their perceptions during the debriefing.  
- Direct/redirect participants during the debriefing to assure continuous focus on session objectives. | 4 Minutes |
| S     | Summarize | Facilitate identification and review of lessons learned.  
- Instructor summarizes comments or statements.  
- Participants identify positive aspects of team or individual behaviors.  
- Participants identify areas of team or individual behaviors that require change or correction. | 3.5 Minutes |
Sample debriefing questions

• Tell me in a few sentences what happened to this baby?
• What was your thought process when..
• What did the group do well? How did that behavior help the team?
• What could have gone better?
• What would you do differently next time?
• What did you do to help the team?
• What did you learn?
Most common debriefing mistakes by faculty

• “Teaching” the participants rather than allowing for self-discovery through open ended questions (instructor’s lack of discipline).

• Marching through the very basic framework of “How did you feel? What went well? What could you improve?” without truly allowing an opportunity to understand the learner’s frame of reference.

• Not allowing learners an opportunity to truly debrief/de-stress in challenging simulations because it does not fit the instructor’s rigid predetermined line of questions.

• Not asking questions with genuine curiosity as to why participants acted in a certain fashion.

• Forgetting the “Basic Assumption.”
Summary

1) Preparation is of paramount importance.
2) Develop drills that help meet objectives.
3) Team development is enhanced with a conceptual framework (CRM, SBAR).
4) Drill execution success is contingent on planning, rehearsal, and incorporating feedback from previous simulations.
5) Debriefing is not feedback from the instructor. It is a team-centered discussion where the participants themselves discern what went well during the scenario and what needs improvement.
6) Hold your teaching points until the team has finished. The debriefer enables the team to figure things out, then enhances understanding of the key points they might have missed.
Questions and Team Discussion
What Does This Really Mean?

Evan
1 Month
Upcoming Education Sessions


- **October 1**\textsuperscript{st} Premier OB Coaching Call & NCD/Maternal Affinity Group: 1-2:30 pm EST: “Implementing Quantification of Blood Loss”: Amy Scott and Jennifer McNulty, Miller Children's Hospital, CA. (Link coming soon)

- **November 11th** Premier Coaching Call & NCD/Maternal Affinity Group: 1-2:30 p.m. EST: “New” Maternal Bundles by Dr Elliott Main, Director; California Maternal Quality Care Collaborative. (Link coming soon)