Improving the Culture of Safety Through the Use of Simulation and Debriefing: Our Story

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Disclosures
- Leslie Allen
  - Nothing to disclose
- Nikki Wiggins
  - Nothing to disclose
- JoDee Anderson
  - Consultant, Simhealth Consultants, S.T.A.B.L.E. Simulation

“Ours is a team sport, but with 2 key differences from the kinds with lighted scoreboards:
The stakes are people’s lives and we have no coaches.”
Atul Gawande

A DIFFICULT STORY

1998
AN INTERN’S STORY
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Video 1

2002
A NEONATAL FELLOW’S STORY

THROUGH MY NOVICE LENS
WHAT WAS I LEARNING?
• Avoid fixation errors
• Prioritize well
• No open air commands
• Avoid mitigated speech
• Ask for help

AT WHOSE EXPENSE?

FIONA

THROUGH MY “COMPETENT” LENS
WHAT WAS I LEARNING?
• Take direction
• Collaborative leadership and followership
• Trust your resources
• Accept questioning, redirect when needed
• Anticipation errors

AT WHOSE EXPENSE?
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2014 THE DOERNBECHER NICU TEAM STORY

PERMISSIVE - The creation of a permissive environment, window into actual performance

DISCOVERY – The use of simulation to uncover the thought processes that lead to cognitive error and assumption

LEARNING - Teaching and training in the behaviors requisite to effective teamwork

RE-EVALUATION - Guided deliberate practice to improve performance

LEARNING AAP - NRP

ALGORITHM

CPR IN TERM INFANTS AFTER BIRTH

400,000 infants will be born in the United States this year

40,000 of them require some assistance after birth (10%)

Less than 1% will require CPR

CPR IN PRETERM INFANTS AFTER BIRTH

Decreasing gestational age is associated with increasing need for resuscitative interventions

7-28% of preterm infants undergo CPR immediately after birth

Why?
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RESUSCITATION OF THE PREMATURE INFANT

- Are we over-resuscitating our preterm infants?
- Are we losing focus during the acute phase of resuscitation?
- Are we performing as a team?
- Are we prioritizing as a team?
- Are we communicating effectively?
- Can we reduce unnecessary intervention and thereby protect our preterm infants through more effective education?
- Are we willing to ask the question?

EDUCATIONAL EFFECTIVENESS

<table>
<thead>
<tr>
<th>Level</th>
<th>Participation in educational experiences</th>
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<tbody>
<tr>
<td>Level 1a</td>
<td>Change of attitudes</td>
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**Adapted from Issenberg et al, Features and uses of high-fidelity medical simulations that lead to effective learning a BEME systematic review, Medical Teacher Vol 27, No. 1, 2005, pp 15

TEAM BEHAVIOR TRAINING

- Know your environment
- Anticipate and plan
- Leadership/followship
- Communicate effectively
- Distribute workload optimally
- Allocate attention wisely
- Utilize all available information
- Utilize all available resources
- Call for help early enough
- Maintain professional behavior

COMMUNICATION

Novice: States problem in incorrect or confusing terminology; does not speak clearly; voice is either too soft or too loud; talks down to team members; does not clearly identify to whom he/she is speaking (thin air communications).

Competent: Identifies problem but may not communicate clearly to others; tone of voice varies from soft to loud but audible by others in team; clearly identifies those to whom he/she speaks; cooperation and listens to others.

Expert: Identifies problem definition; speaks clearly, succinctly, and in even tones; can easily be heard by the other members; clearly identifies those to whom he/she speaks; clears up any ambiguity with others.

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COMMUNICATION

Novice
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Competent
- Identifies problem but may not communicate clearly to others; tone of voice varies from soft to loud but audible by others in team; clearly identifies those to whom he/she speaks the majority of the time; requests cooperation and listens to others.

Expert
- Specific in problem definition; speaks clearly, succinctly, and in even tones; can easily be heard by the other members; clearly identifies those to whom he/she speaks; listens to others; clarifies ambiguous communications.

Support/Challenge

High
- RETREAT

Low
- STASIS

THE GOLDEN HOUR PROTOCOL

- THE 1ST 90 SECONDS -

SIMULATION-BASED PRACTICE FOR PRETERM DELIVERIES

- video

REAL PATIENT OUTCOMES...
EVERYTHING MATTERS

- video

November 2, 2014
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WHEN YOUR STORY Became MY STORY

Conversation Simulation Scenario Design

Simulation in the DNCC
- S.T.A.B.L.E. Recertification
- Bedside Report Simulation
- Case specific Simulation
- Cardiac Tamponade
- Simulation of the month

Clinical Simulation Scenario Design

Why Simulate? Why Debrief?
- Patient Safety
- Human factors
- Communication concerns
- Identify ways to improve patient care
- System issue identification
- Relevant and timely
- Focused on real events
- Unit to unit handoffs
- Recognize Successes

Debriefing Defined
- Facilitated discussion; guided self-reflection
  - Bridges the gap between experiencing an event and making sense of it.
  - Leads to better transfer of content to practice.
- "A conversation between two or more people to review a real or simulated event in which participants analyze their actions and reflect on the role of thought processes, psychomotor skills, and emotional states to improve or sustain performance in the future."

From Center of Simulation, Cambridge, MA www.harvardmedsim.org
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Debriefing in the DNCC

- Do’s and Don’ts
  - Include the whole team
  - Listen
  - Reflect & Share
  - Inspire to understand
  - Use “I” terminology
  - Recognize areas of success
  - Recognize areas for improvement
  - Summarize

Debriefing Assessment

- Modified DASH Tool

Debriefing Outcomes

- Working together
- Learning together

Changing the culture... together...

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THROUGH MY "EXPERT" LENS

WHAT AM I LEARNING?
- 10 years
- 10,000 hours
- 10,000 babies

AT WHOSE EXPENSE?

SIMULATION

Simulation is an incredibly powerful educational strategy when used to achieve specific objectives based learning needs.

DEBRIEFING

Debriefing is an incredibly powerful way to facilitate self-reflective learning via discussion with the whole team.

RESPONSIBLE

We are responsible for creating transformative learning experiences, the effectiveness of our instruction will reach a patient. you. your child. your mother. We must be held accountable for the effectiveness of our instruction.

TRUST IN TEAM

Our individual behaviors exist on a spectrum of expertise, contribute to the performance of a team, and deserve continual, deliberate examination and improvement.

FIONA
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HOW DO WE INSPIRE OURSELVES TO GREATNESS WHEN NOTHING LESS WILL DO?

Find a meaningful way to measure performance

“This search demands a willingness to recognize failure and to change. It arises from deliberate, even obsessive, reflection on failure and a constant searching for new solutions.”

Atul Gawande

THANK YOU