Use of Simulation to Prepare for Medical Emergencies in an Inpatient Geropsychia
University Of Maryland Medical Center Department of Geropsychiatry

Program/Project Description.
Because of increasing medical co-morbidities in the geropsychiatric patient population, the number of medical emergencies in the inpatient geropsychiatric unit has increased. The geropsychiatric unit is a locked unit comprised of a multidisciplinary psychiatric health care team. The unit staff identified the need for clarification of the rapid response process and the expectations of staff in a code situation. The goal was to educate the staff, increase awareness of the rapid response process, and develop teamwork among the unit multidisciplinary team to manage an emergent situation until appropriate medical help arrives.

Process.
Evidence-based practice methods were used to ensure best practice. A rapid cycle PDSA was used to implement and evaluate practice changes.

Solution.
A case study scenario was developed. The scenario was a case that required a rapid response followed by a mock code. The scenario required the team to manage the patient until the hospital code team arrived. The simulator was brought to the unit and the simulation exercise was held. After the simulation exercise, a debriefing and education session was held to identify team strengths and areas of needed improvements. A repeat simulation exercise was then conducted.

Measurable Outcomes.
Post simulation evaluations revealed a multidisciplinary perception of improved teamwork, improved understanding of the rapid response process, and greater staff comfort level with emergent situations (please see attached evaluation summaries). The physician leadership response was very favorable and a decision was made to offer the simulation exercises twice a year.

Sustainability.
The simulation exercise scenarios will be updated and revised twice a year to include actual medical emergencies that have occurred in the geropsychiatric unit. Plans are underway to implement the simulation exercises in the child psychiatry unit and the medical intermediate care unit.

Role of Collaboration and Leadership.
Team work was crucial to ensure that the nursing and physician teams worked collaboratively during emergent situations. The physician and nursing leadership shared the vision to promote patient safety as demonstrated by their commitment of staff, resources, and course attendance requirements.

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Evaluation – Acute Coronary Syndrome (ACS)

Summary

Results are on a scale out of 5

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<table>
<thead>
<tr>
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<tbody>
<tr>
<td>1. As a result of this course, my medical knowledge of acute coronary syndrome (ACS) has improved.</td>
<td>4.6</td>
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<tr>
<td>2. After attending this class, I am more comfortable performing a nursing assessment on a patient with ACS.</td>
<td>4.6</td>
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<tr>
<td>3. After attending this class, I am more aware of critical interventions necessary to manage a patient with chest pain.</td>
<td>4.5</td>
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<td>4. The course challenged me to evaluate my interpersonal and team communication skills (e.g. nurses, MHA’s, physicians)</td>
<td>4.45</td>
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<tr>
<td>5. The time allotted for hands on simulation was adequate.</td>
<td>4.4</td>
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<td>6. The instructors effectively delivered the information.</td>
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<td>7. Debriefing after the scenario was beneficial.</td>
<td>4.7</td>
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<tr>
<td>8. The use of simulation enhanced my learning.</td>
<td>4.6</td>
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<tr>
<td>9. This course was well organized.</td>
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<tr>
<td>10. This training session was effective and I would recommend it to others who will perform these skills in clinical practice.</td>
<td>4.7</td>
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What did you like best about the course?
- Course was liked
- Actual code situation and then replay of code situation after pointing out what could be improved
- Instructors were not punitive in constructive criticism

How can we improve the course?
- Practice more often
- Could be beneficial to have mock code biannually if not at least annually
Evaluation – Acute Coronary Syndrome (ACS)

What have you learned that you will apply in the future?
- You never stop learning
- Teamwork and communication

Other comments
- I need to get more used to the “sim people”
- I am “sim person” impaired
- I feel more comfortable on real people
### Evaluation – Acute Coronary Syndrome (ACS)

**Summary**

DATE: 11/19/10

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<td>1. As a result of this course, my medical knowledge of acute coronary syndrome (ACS) has improved.</td>
<td>3.67</td>
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What did you like best about the course?

- Simulation
- The “patient” having noticeable breathing, pulses etc
- How everyone was working together
- Use of Dummy essential
- Instructor very helpful in debriefing
- Good practice
- Chance to see AED in practice
Evaluation – Acute Coronary Syndrome (ACS)

How can we improve the course?

- Pre-educate team members
- Nothing
- Define the role of the physicians prior to the code
- Teach physicians/staff how to use the AED/EKG machine eg analyze shock and how to switch to lead mode
- Explain process prior to course
- Explain expectations prior to start
- Clarify role of other physicians and doctors
- Clarify role of other staff

What have you learned that you will apply in the future?

- Running a code
- How to use an AED
- What rapid response means
- Think critically about how to manage a team code on a psych floor
- I am going to refresh my knowledge
- Communication, essential roles to be filled