# Rapid Response Team Training: Using Interprofessional Simulation As A Guide For Responders

Michelle I. Schweinfurth, DNP, RN, CCRN; Amy Taylor, BSN, CCRN; John Brinson, RRT

University of Mississippi Medical Center; 2500 North State, Jackson, MS 39216 • 601-984-5559 • mschweinfurth2@umc.edu

## Introduction

ICU charge nurses (CNs) often function as a vital member of a Rapid Response Team (RRT) when called upon to evaluate a patient who shows clinical deterioration on an adult ward. *How to function* as a member of this team is not included in any unit-based charge nurse training at the University of Mississippi Medical Center; nor is it a part of a competency for a respiratory therapist. Therefore, staff are unprepared to respond to a rapid response call.

Solution: Develop an orientation program, using an interprofessional collaborative partnership with simulation colleagues, to provide training to ICU CNs. The authors developed a competency tool to be used for orientation of both new and substitute CNs and therapists.

**Objective 1:** State the purpose of a RRT in a hospital setting.

**Objective 2:** Identify competency skills needed by RRT members

**Objective 3:** Indicate how interprofessional simulation training can be used to improve partnerships between the RRT members.

Dr. Michelle Schweinfurth chairs the UMMC Code Blue Committee; Amy Taylor is the Unit Educator for the Medical ICU; John Brinson is the Adult Respiratory Coordinator and RRT Supervisor.

## Background

The groundbreaking 100,000 lives campaign launched by the Institute for Healthcare Improvement (IHI) in December 2004 contained a set of six evidence-based healthcare interventions that have been shown to improve standards of care. Deploying RRT's at the first sign of patient decline is one of those six (Berwick, Calkins, McCannon & Hackbarth, 2006). In support of the IHI campaign, and to coincide with its national patient safety goals, the Joint Commission joined forces with the IHI and encouraged hospitals to develop an appropriate rapid response system (TJC, 2008).

The University of Mississippi Medical Center (UMMC) developed guidelines and implemented a RRT in the adult hospital in November 2007. The UMMC RRT is comprised of a critical care registered nurse and a registered respiratory therapist. The ICU charge nurse acts as a back up team member. This is shared amongst the four adult ICU's on a weekly rotating call schedule. There are an average of 45 adult rapid response calls each month at UMMC. In preparation for this training, background information about Rapid Response systems, the UMMC Code Blue/RRT policy and activation criteria were provided to the ICU CNs via PowerPoint using the Healthstream learning system.

## Materials and Methods

The competency tool outlined baseline performance criteria that all RRT members needed to possess; and was based on the adult RRT record that makes use of the SBAR documentation format. Incomplete documentation is a frequent issue with actual patient events. Tracking outcomes is a reportable item to TJC, and thus a challenge for the UMMC Code Blue committee. Thus, consistent and accurate documentation was a key part to emphasize on the orientation competency tool.

Two additional competency forms grew from the original one; to measure competency of RRT events of Code Stroke and Code STEMI.

The authors met with the UMMC Interprofessional Simulation and Education Center to set the schedule. Three scenarios were written: one for Code Stroke, Code STEMI and a Seizure in a visitor in a waiting room. Due to the critical times involved in the triage and management of a stroke or STEMI, these two scenarios were included since they are not frequent reasons for RRT calls. To add to the realism of the scenarios, a confederate patient was used rather than a high-fidelity manikin, and a medical-surgical unit nurse educator played the role of the staff nurse who activated the RRT. The goal during each scenario was for the ICU nurse to achieve the minimum passing competency.

Sessions lasted 90 minutes, with 3 CNs scheduled per session. A current respiratory therapists on the RRT participated in each session to assist as needed. Nurses were in-briefed upon arrival and signed a confidentiality statement agreeing to keep the sessions private and allowing Simulation staff to video tape each scenario for debriefing purposes. They were allowed to use the actual RRT record for documentation during the scenario. Simulation staff who played the role of patients all have healthcare backgrounds (paramedics, recent medical school graduates) and were very convincing in their roles of patient with chest pain or symptoms of a stroke or seizure.

### Competency Form for STEMI

The University of Mississippi MEDICAL CENTER
Education • Research • Healthcare

| Employee Name: | Employee # | |
|---|---|---|
| Job Title: RN/RT | | Date: |

**Key for Validation:**
O – Observation in Sim Center
P – Policy review on Healthstream

| Performance Criteria | Competency Validation | | |
|---|---|---|---|
| **RRT Code STEMI Competency Verification** | How Validated | Date | Evaluator's Initials |
| **A. Review of Adult Rapid Response Policy with understanding of roles** | | | |
| 1. Identifies self when responding to a call | | | |
| **B. Accurately completes all sections of the Adult RRT Record (SBAR format)** | | | |
| Date – Time – Location –Physician notified | | | |
| **C. Obtains details of clinical situation and primary reason for call** | | | |
| **D. Gathers pertinent background information** | | | |
| 1. Medical history | | | |
| 2. Surgical history | | | |
| **E. Performs Rapid Assessment of patient** | | | |
| 1. Obtains full set of vital signs: HR, BP, SpO2, RR, Temp, pain | | | |
| 2. Initiates "BLUE ORY STEMI" protocol from Epic Table? | | | |
| 3. Obtains new 12 lead ECG | | | |
| a. Fax to MedCom at 4-4504 per protocol | | | |
| b. Call 4-6367 to notify ruling physician in ASD. Remain on phone for results | | | |
| 4. Documents heart rate and rhythm, and note if regular or irregular | | | |
| 5. Documents presence or absence of chest pain | | | |
| **F. Based on the Situation/Background/Assessment, makes Recommendations as needed** | | | |
| 1. | | | |
| 2. Administer ASA and discussion | | | |
| 3. Administer 2L o2 nasal as needed to maintain O2 saturation >92% | | | |
| **G. If STEMI confirmed, Medicine activated Code Lab Team for "Inpatient Code STEMI".** Initiates STEMI protocol from Epic? | | | |
| **H. Secure IV access - avoid right radial/ hand area** | | | |
| **H. Have patient empty bladder** | | | |
| **I. Request for Resident to use Inpatient STEMI-PCI planned orders** | | | |
| **J. If STEMI not confirmed, draw one Troponin T level** | | | |
| **K. Considers Cardiology Consult and Telemetry monitoring???** | | | |
| **H. Sign-form with date and end time** | | | |

| Verified By | Title | Initials |
|---|---|---|
| | | |
| | | |
| | | |

## Results

Three sessions were held with 14 of 18 nurses completing the orientation training. Those who were unable to attend had conflicts due to night shift rotation. Several of the nurses were fixated on the SBAR form during the scenario, looking at the paper, but not writing any information down. Based on clinical experience, 2 of the nurses quickly suspected stroke or STEMI and fell into typical protocol for management. However they were unfamiliar with how to escalate the call to expedite patient care, or where to locate order sets within the charting system. Almost all of the nurses left completion of the SBAR rapid response record for the very end of the scenario. Emphasis on accurate completion of vital signs and all sections of this form was stressed to all. Several stated that charting at the end was out of habit to get all the needed information first, as well as not being familiar with the form.

**Evaluation comments on Strengths of the training:**

"the hands on aspect helped cement my learning of the appropriate procedures/protocols during a rapid response" / "very informative; like the hands on; great feedback" / "I learned several different aspects of the RRT that I did not know" / "Very informative and helpful" / "Realistic, Relevant" / "Simulation felt real" / "one on one interaction"/ "knowledgeable instructors" / "Helping me be more confident"

**Comments on Weaknesses of the training:**

"Sim lab in general; not knowing protocols" / It's hard to get into "real" mode during a simulation"
"No way to predict all scenarios that you will come across"

## Follow Up After Training

The Code Blue Committee held a routine Mock training 1 week later as a follow-up to an in-service on one of the Medical-Surgical floors in the Women's hospital. The STEMI scenario was utilized with a confederate patient. The ICU nurse who responded on the RRT was one of the orientees who had attended the training just one-week prior. Our actress on that day was so good he believed it was a real event (she had been the stroke patient in his scenario for the earlier training). His actions that day in ordering a 12-lead ECG and aspirin were right in alignment with the order set. Once we revealed 15 minutes into the scenario (after the ECG tech finally arrived) that it was a mock – he told us how much that earlier training helped him know what to do.

## Conclusions

Staff nurses and residents are encouraged to make Rapid Response calls when a patients condition has changed, and the expert opinion of an ICU nurse or respiratory therapist can help to stabilize the patient. Placing a back-up charge nurse into the role of that ICU responder with little or no training on the paperwork or RRT protocols puts patients at risk. This orientation training will now become a standard part of the required competencies the nurse (and therapist) must complete in order to participate on the RRT at UMMC. Consideration for review of current RRT members has been made for mastery of skills.

## Acknowledgements

The authors would like to thank the UMMC Interprofessional Simulation and Education Center Staff for their time and contributions to this training project: Dr. Anna Lerant; Dr. Jeff Orledge, Mr. Patrick Parker, Dr. Chadwick Mayes, and Dr. Danielle Parker.

## References

Berwick, D. M., Calkins, D. R., McCannon, C. J., & Hackbarth, A. D. (2006). The 100,00 Lives campaign: Setting a goal and a deadline for improving health care quality. *Journal of the American Medical Association, 295*, 324-327.

The Joint Commission Hospital national Patient Safety Goals (2008). Retrieved from http://www.unchealthcare.org/site/Nursing/servicelines/aircare/additionaldocuments/2009npsg