**Solution:** Rapid Response Team as a Patient Safety Strategy in the Community Hospital Setting

**Organization:** Upper Chesapeake Health (UCH): Upper Chesapeake Medical Center (UCMC) and Harford Memorial Hospital (HMH)

**Type:** Acute Care

**Primary Contact:** Nancy Howard, MS, RN, Coordinator, Performance Improvement

**E-mail:** nkh.01@ex.uchs.org **Phone:** 443.843.5634

**IDENTIFICATION:**
During participation in the IHI 100,000 Lives Campaign and the MPSC’s ICU Patient Safety Collaborative, it was suggested that hospitals implement a rapid response emergency system that brings critical care expertise to the bedside to assist the caregivers with assessing and treating patients when a change is noted in the patient’s physiologic condition. In 2006, a Rapid Response Team (RRT) was implemented as a patient safety initiative to rescue patients who are exhibiting a decline in their physical condition. The goal is to prevent deterioration leading to cardiac or respiratory arrest; to reduce the number of code blue events occurring outside the ICU and the total number of code blue events in the hospital; and to reduce acute inpatient mortality. Baseline data related to the number of code blue events and the inpatient mortality rates were available at the time of implementation of the RRT.

**PROCESS:**
A multidisciplinary Steering Committee met for the first time in July 2005, to plan implementation of a rapid response system in both community hospitals within the UCH system. The goal was to develop a process that would be consistent at both hospitals and would use available staffing resources, i.e., nursing, respiratory therapy, and physician resources. Membership on the steering committee included representatives from Senior Leadership and the Intensivists, and from the departments of nursing, respiratory therapy, performance improvement, and education. The steering committee met monthly for one year during which time the PDCA model was used to develop the response system, pilot the implementation on one unit at each hospital, revise the process and associated order set and other forms, and spread the patient safety initiative throughout the two hospitals. The Steering Committee continues to meet quarterly to assure sustainability and to monitor process and outcome measures.

**SOLUTION:**
The Rapid Response Team (RRT) at each hospital was defined to include the ICU Charge Nurse, a Respiratory Therapist, the patient’s primary nurse and the Intensivist if requested by the ICU nurse responder following his/her patient assessment. Several of the committee meetings were spent discussing how to implement a consistent process at the hospitals since ICU patient census and nurse staffing levels differed at the two organizations. A plan was developed for implementation without the need to increase staffing resources.

The Nurse Practice Council, the Medical Executive Committee, and the Policy Oversight Committee approved the related Policy and Procedure, order set, and report forms. Education was done with providers, clinicians, and non-clinical team members via multiple methods including self-learning packets, discussions during departmental meetings, communication via
storyboards, team member and physician newsletters, in a blast fax to physicians, and via a sign-on message on the electronic medical record screen.

The RRT was piloted during May and June 2006 and then spread hospital-wide at both organizations in July 2006. Utilization of the RRT has continued to increase during the past two and one-half years since implementation and a trend is noted in a decreasing number of cardiac/respiratory arrests. Team member satisfaction with this emergency response process remains high.

Currently, the RRT responds to inpatients at any location within the hospitals. On November 17, 2008, this patient safety initiative was enhanced to permit patients and family members to directly request the RRT by contacting the telephone operator via a specific phone extension.

In an effort to assure sustainability, data related to the RRT process and outcome measures are posted on the nursing units quarterly. The goal continues to be increased utilization and this goal and related data are discussed in focused huddles. The annual Performance Improvement plans for clinical departments include goals related to this patient safety initiative. Quarterly reports are provided to the Quality Council, the Accreditation Compliance Council, and the Board of Directors.
Results for Harford Memorial Hospital (HMH):

- **Total # of RRT Calls - HMH**
- **# RRT Calls/1000 Discharges HMH**
  - Goal = 15
- **# Codes Outside ICU (exc ED & NB) HMH**
- **# Codes Outside ICU/1000 Discharges HMH**
- **# InHouse Codes per 1000 IP discharges (includes ICU; excludes ED & Newborns) HMH**
- **Survival Rates - HMH**
  - % RRT Pts Surviving at Discharge
  - % Code Blue Pts Outside ICU Surviving at DC (excludes ED & NB)
Results for Upper Chesapeake Medical Center:

**Total # RRT Calls - UCMC**

**# RRT Calls/1000 Discharges - UCMC**

Goal = 22

**# Codes Outside ICU (exc ED & NB) - UCMC**

**# Codes Outside ICU/1000 Discharges UCMC**

**# InHouse Codes per 1000 IP discharges (includes ICU; excludes ED & Newborns) - UCMC**
Survival Rates - UCMC

- %RRT Pts Surviving at Discharge
- %Code Blue Pts Outside ICU Surviving at DC (excludes ED & NB)