RAPID RESPONSE TEAMS
AT OUR CAH
AND
WHY YOURS NEEDS ONE TOO

Suzi Bean, RN, BSN
Director of Quality and Risk
Mountain View Hospital
Madras, Oregon

- 25 bed Critical Access Hospital
- ED – 900 visits / mo
- OB – 250 births / year
- Acute care, ICU

- PT / OT / Home Health / Hospice
- Surgery
- Long term care
- Lab / Radiology / RT
Before I lose your attention:

Overall mortality rate down more than 40%
More importantly:

Inpatient Codes Outside the ICU

2005: 5
2006: 1
2007: 2

RRT Teams Formed

Codes outside the ICU decreased more than 60%
What is a Rapid Response Team?

- Team of trained clinicians who bring critical care expertise to the bedside or wherever it is needed, in order to assess, stabilize, assist with communication, educate, support and assist with transfer if necessary (PRE-CODE TEAM)
Why do we need Rapid Response Teams?

- People die unnecessarily every single day in our hospitals. It is likely that each of you can provide an example of a patient who, in retrospect, should not have died during their hospitalization.
Why do we need Rapid Response Teams?

- The goal is to respond to a “spark” before it becomes a “forest fire.” Organizations are able to muster resources when patients progress to cardiac arrest.
- The challenge is to find resources to prevent such cardiac arrests from occurring in the first place.
Ultimate Purpose of the Rapid Response Team:

- **Reduction of emergency transfers, cardiac arrests and deaths (in non-ICU patients) by intervening with a specially trained team before there is a code**
RRT Challenges

- Staff and MD buy-in for 100K program
- Determining team makeup - 24/7/365
- Getting contracted ED physicians involved
- Territorial issues with MD’s
- Resources: TIME
How we got started:

- Administration driven and supported
- Excellent Physician Champion
- Cross functional team formed
Rapid Response Teams

Team:
- Physician Champions
- Staff Nurses
- Respiratory Therapy
- Acute Care Manager
- ED Manager
- Director of Quality
How we got started:

- Used IHI tool kit (Awesome!)
- IHI info out to team in advance
- Draft policy and protocols out to team in advance
- Plans made at first face to face meeting
- Follow up through group emails

(first meeting in May, Teams started July 1)
How we got started:

• Rolled out to ALL staff at mandatory training

• Nurses training emphasized recognizing clues to impending code (more to follow)

• Team training included scenarios and emphasis on teamwork (more to follow)
The following are slides adapted from our RRT Trainings
Institute for Healthcare Improvement:

- During the last several years the Institute for Healthcare Improvement has done a lot of work to understand the causes of unnecessary hospital deaths and develop potential improvement strategies.

- 100K and 5M Lives Campaigns
Three main systemic issues contributing to the problem: (according to IHI)

- Failures in planning (including assessments, treatments, and goals.)
- Failure to communicate (patient-to-staff, staff-to-staff, staff-to-physician, etc.)
- Failure to recognize deteriorating patient condition
These fundamental problems can often lead to a failure to rescue.
Clinical Instability Prior to Arrest:

• Several studies indicate that patients often exhibit signs and symptoms of physiological instability for some period of time prior to a cardiac arrest:

• 70% (45/64) of patients show evidence of respiratory deterioration within 8 hours of arrest.
Clinical Instability Prior to Arrest:

- 66% (99/150) of patients show abnormal signs and symptoms within 6 hours of arrest and MD is notified in 25% of cases.
- These include MAP <70, >130, Heart rate <45, >125, Respiratory rate <10, >30, chest pain, altered mental status

**(studies available on IHI website)**
What Difference Can a Rapid Response Team Make?

- 50% reduction in non-ICU arrests
- Reduced post-operative emergency ICU transfers (58%) and deaths (37%)
- Reduction in arrest prior to ICU transfer (4% vs. 30%)

**(studies available on IHI website)**
What is the Role of the Rapid Response Team?

• Assess
• Stabilize
• Assist with communication
• Educate and support
• Assist with transfer if necessary
Team Members

At MVH the team consists of the

- House Supervisor
- Emergency Room Physician
- Respiratory Therapist

In house staff responds immediately, with no more than a 5 minute delay (unless involved in a higher priority situation.)
Procedure for calling; How to activate the team:

- **Activation starts by notifying the House Supervisor.**
- **Once notified, the HS contacts the ER MD and RT.**
- *(may also be paged overhead)*
The team may be summoned at anytime by anyone in the hospital (including family) to assist in the care of a patient who appears acutely ill, before the patient has a cardiac arrest or other adverse event.
The team **should** be activated for the following:

- **Any staff member** concern about the patient
- **Unexpected acute change in vital signs**
  - Pulse <45, >125
  - Blood pressure <90
  - Respiratory rate <10, >30
  - O2 sat <90% despite Oxygen
- **Acute change in urinary output to <50ml in 4 hours**
- **Acute change in conscious state**
- **Chest pain**
## Rapid Response Teams

**Activation Criteria:**

<table>
<thead>
<tr>
<th>Activation Criteria:</th>
<th>Infant: &lt;1 year</th>
<th>Child: 1-10 years</th>
<th>Adolescent: &gt;10 years</th>
<th>Adult</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>less than</td>
<td>greater than</td>
<td>less than</td>
<td>greater than</td>
</tr>
<tr>
<td><strong>Pulse</strong></td>
<td>80</td>
<td>200</td>
<td>60</td>
<td>180</td>
</tr>
<tr>
<td><strong>Systolic BP</strong></td>
<td>60</td>
<td>80</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td><strong>Resp rate</strong></td>
<td>12</td>
<td>80</td>
<td>10</td>
<td>60</td>
</tr>
<tr>
<td><strong>O₂ sat (on O₂)</strong></td>
<td>90</td>
<td>90</td>
<td>90</td>
<td>90</td>
</tr>
<tr>
<td><strong>UO in 4 hr</strong></td>
<td>&lt;0.5cc/kg/hr X 4 hours</td>
<td></td>
<td>&lt;50cc in 4 hours</td>
<td></td>
</tr>
</tbody>
</table>

**OTHER CRITERIA TO ACTIVATE:**

* **ANY STAFF MEMBER CONCERN ABOUT THE PATIENT**
* **ACUTE CHANGE IN CONCIOUS STATE**
* **CHEST PAIN**
* **AIRWAY: RESPIRATORY DISTRESS/THREATENED AIRWAY**
* **DYSRHYTHMIAS**
* **REPEATED OR PROLONGED SEIZURES > 15 MINUTES**

TO ACTIVATE: CONTACT YOUR HOUSE SUPERVISOR AND STATE "I NEED TO ACTIVATE THE RAPID RESPONSE TEAM FOR: (GIVE PATIENT NAME AND ROOM #)"
TEAM PROCESS ONCE ACTIVATED: SBAR

- SITUATION
- BACKGROUND
- ASSESSMENT
- RECOMMENDATION
The team has established interventions/protocols they can initiate immediately, before contacting the physician. Protocols were presented and adopted per usual protocol at the Medical Staff Meeting.
Interventions per protocol include:

- Any ACLS protocols
- Nebulizer treatment
- ABG
- CXR
- Labs: CBC, CMP, troponin
- EKG
- O2 protocol
• The team documents their assessment, MD response, interventions and patient response on the Rapid Response Team Record.

• The team provides non-punitive, non-judgmental feedback to the staff member activating the team.
<table>
<thead>
<tr>
<th>Date:</th>
<th>Room#/Location:</th>
<th>Time Called:</th>
<th>Arrival Time:</th>
<th>Event Ended:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Primary Reason for Call:**
- □ Staff concerned/worried
- □ Unexpected acute change in vital signs:
  - □ HR less than 45
  - □ HR greater than 125
  - □ SBP less than 90
  - □ Acute mental status change
  - □ RR less than 10
  - □ RR greater than 30
  - □ SpO2 less than 90% (on O2)
  - □ Acute change in u.o. to less than 50ml in 4 hours
  - □ Chest pain
  - □ Seizure

**Situation:**

**Background:**

**Assessment:**
- Temp: __________
- BP: __________
- HR: __________
- RR: __________
- SpO2: __________
- GCS: __________

**Recommendations/Interventions:**
- □ Labs
- □ CXR
- □ EKG
- □ ABG
- □ O2 protocol
- □ Nebulizer treatment
- □ ACLS Protocol: __________

**Outcome:**
- □ Stayed in room
- □ Admit to ICU
- □ Admit to IMCU
- □ Transfer to: __________
- □ Other: __________

**Follow-Up Report:**

**Signatures:**
- ER Physician: __________
- House Supervisor: __________
- RT (if applicable): __________

**Date:** __________

**Room#/Location:** __________

**Time Called:** __________

**Arrival Time:** __________

**Event Ended:** __________
SBAR is not just for the RRT

Anyone can use it, it’s a great tool for communicating with the physician
Our Physicians love it!

- It gives them the information they need in an organized manner.
- It encourages the caller to say what they want.
- We trained all of our staff on SBAR when we did RRT training.
Appropriate Expectations regarding activation of the RRT:

- Call even if you’re unsure.
- “It’s better to call than not.”
- Call when any criteria are met
- Not calling may ultimately result in a negative outcome for your patient
Appropriate Expectations regarding activation of the RRT:

• The team will respond in a non-judgmental, non-punitive way
• You should have information available to the team, such as chart, MAR, assessments, etc.
• The person who calls the Rapid Response Team should become a key member of the team and assist the RRT. The RRT is NOT there to take over and assume care of the patient.
EDUCATION:

• Information to spark interest was published in the employee newsletter
Dear ClaraBelle,
I have been hearing people around the hospital talking about “Rapid Response Teams” and saving “100,000 lives”. What’s all this about? Shoot, we don’t even have that many people in Jefferson County, do we? And do we have to save them from the rapids of Willow Creek or what? I mean I can’t even float to save my own life, let alone save someone drowning in fast water! Should I sign up for swimming lessons to save my job?
Signed,
S.O.S. in Sahalee Park

Dear S.O.S.,
ClaraBelle wants you to know that, while it’s always a good idea to know how to swim, you don’t need to sign up for lessons to save your job. ClaraBelle will share her “pearls” with you to help you understand:
EDUCATION:

• All House Supervisors and ER MD’s (RRT members) received specialized training.

• All Nursing, RT and other ancillary staff were educated at Staff Meetings and other scheduled trainings. (This education was mandatory for ALL caregivers)
Team Member Training:

- ACLS required as prerequisite
- Protocols approved by Medical Staff
- SBAR method of communicating and receiving communications about patient condition.
Team Member Training:

- **Setting appropriate expectations**
  - responding in a timely manner (e.g. within 5 minutes)
  - providing non-judgemental, non-punitive feedback to the person that initiated the call to the RRT.
- Staff MUST feel comfortable activating RRT
Team Member Training:

- **Advanced Critical Assessment and Management Training**
  - *In-depth ACLS training and testing at MVHD*
  - *Scenario training*

  Communication skills, including responding in a professional and friendly manner:

  **CANDY BAR**
WHEN RESPONDING TO RRT ACTIVATION
USE THE CANDY BAR GUIDELINES:

• (C) Come to bedside immediately if able
• (A) Appreciate the nurses’ concern and decision to call- no judgments
• (N) Nice: BE NICE OR LEAVE
• (D) Direct the show, get the problem solved, AND use the nurse as part of your team
• (Y) Yes, really, be nice. Really, really NICE.
WHEN RESPONDING TO RRT ACTIVATION USE THE FOLLOWING GUIDELINES:

• (B) Behave (are you getting the theme?)
• (A) Advise: teach Nurse if opportunity or need
• (R) Respectful communication to all team members is absolutely essential
MEDICAL STAFF EDUCATION:

- Medical Staff was educated by MD Champion and CNO at Medical Staff Meeting.
- RRT was presented as another tool to assist physicians in providing the best possible care for their patients.
- The education included outlines from Staff and Team trainings and articles showing effectiveness of RRT's.
Benefits:

- Fast and accurate critical patient assessment 24 x 7
- Clear and concise communication using SBAR method of communicating
- Linked to fewer codes and lower mortality
**Myths:**

- *Rapid Response Team does not take the place of immediate consultation with the physician if able/needed.*
- *The intention is to help patients in the time window of clinical instability and not to replace physician involvement in that process.*
EVALUATION OF PROGRAM:

- The first six months of the program was considered a trial period. At that point the program was re-evaluated with input from all staff and MD’s, and the decision was overwhelming by all to continue the program.
EVALUATION OF PROGRAM:

• All RRT activations are reviewed at Acute Care and ED Committee, and recommendations are considered.
• The team, staff and MD’s involved in the activation provide feedback on an established form.
• These are reviewed by the Nurse Managers and staff, and changes are considered based on recommendations.
Celebrating Success:

- **First activation, all team members received a candy bar and recognition.**
- **Subsequent activations, activating caregiver received a candy bar and thank-you**
- **Celebrated as major accomplishment at staff, managers and board meetings**
Make it Fun!!!
Celebrating Success:

- Listed as major accomplishment at yearly caregiver recognition (Fall Harvest Celebration)
- Related statistics published in employee newsletter on biannual basis
MVH is Admired for Their Hard Work

After the Salmon presentation for the 5M Lives Campaign kickoff celebration, we wanted to show you some of the great things that are being said about Mount View Hospital from representatives at the Institute for Healthcare Improvement, and the Oregon Patient Safety Commission.

“We understand that Mount View Hospital is doing exemplary work with your Rapid Response Team and we appreciate your willingness to help promote the shared learning that is at the heart of the 5 Million Lives Campaign. With your invaluable hands-on experience — particularly as a critical access hospital — you have much to offer in the way of advice, tips for success, and inspiration to others involved in the Campaign.” — Jo-Ann Edmo, MSH, Communications Specialist, Institute for Healthcare Improvement

“On behalf of the Oregon 5M Lives Network, I would like to thank you for your terrific presentation at the 5 Million Lives Kickoff at the Capitol! The wonderful spirit you infuse into your safety and quality work is inspiring, as are the results you are able to achieve.” — Mike Machan, Oregon 5M Lives Network

“Let me be third on the list to offer my heartfelt thanks for all the wonderful work you do in Mountain View. It’s wonderful to hear from places that just get it. I have been in Boise this past week, and I have to say, I much prefer Oregon weather. I look forward to speaking with you in the future. If you have any questions of concerns, please feel free to contact me.” — Gabriel Kleinman, Western Region Field Coordinator, 5 Million Lives Campaign Institute for Healthcare Improvement

“Thank you for your presentation! I returned to the office with thoughts and ideas that I have practiced the following day.” — Connie Roberts, RN, Patient Care Coordinator, Saint Joseph’s Hospital, Marshfield, Oregon

“Thank you for your presentation! I returned to the office with thoughts and ideas that I have practiced the following day.” — Connie Roberts, RN, Patient Care Coordinator, Saint Joseph’s Hospital, Marshfield, Oregon

“Thank you for your presentation! I returned to the office with thoughts and ideas that I have practiced the following day.” — Connie Roberts, RN, Patient Care Coordinator, Saint Joseph’s Hospital, Marshfield, Oregon

The Community Value IndexSM (CVI) is a leading healthcare financial consulting firm specializing in operational benchmarking and performance enhancement strategies.

MVH was recently recognized nationally as a top-ranked Community Value Provider by Cleverly + Associates (Columbus, OH). Cleverly + Associates is a top-ranking Community Value Provider by Cleverly + Associates (Columbus, OH). Cleverly + Associates is a top-ranking Community Value Provider by Cleverly + Associates (Columbus, OH). Cleverly + Associates is a top-ranking Community Value Provider by Cleverly + Associates (Columbus, OH).

As a Sage achiever, Mary Smith, RN, is a national leader. She has been a mentor to co-workers and participants in many great community events such as the Warm Springs A-H Camp and Relay for Life. Mary has received meaningful accolades from co-workers, friends, and patients because of her caring touch and demeanor. She serves on many quality committees and has an active smile that is contagious. Thank you Mary for your dedication and commitment to professionalism. You make Mountain View Hospital a fantastic place to work!
Celebrating Success:

- Mentor status after one year brought on new celebrations and got MVH on the local news!
- Further celebration when IHI came to visit our hospital
- Updates continue in our newsletter at regular intervals
Rapid Response Teams Turn Two!

As of July 2008, our Rapid Response Teams (RRT’s) have been in place for two years! Now seems like a good time for an update and a reminder about the teams:

What is an RRT? A team of caregivers that can quickly respond when a patient shows initial signs of an unexpected problem. The team evaluates the patient, orders tests and makes recommendations about the care of the patient until their primary care physician arrives.

The use of the team helps to intervene quickly with an overall goal of preventing further deterioration of the patient and preventing code situations, which typically have poor a outcome.

Who is on the team? Our team consists of the ED physician, the House Supervisor, the Respiratory Therapist and the patient care nurse assigned to the patient.

Who calls an RRT? Any caregiver can call when they see any signs of a problem or if they have a feeling that something is just not right. The team is activated by notifying the House Supervisor, who then contacts the other members of the team. New in the past year: family members may also activate the team. Family members tend to know the person so well that they often notice changes even before caregivers do.

<table>
<thead>
<tr>
<th>RRT Statistics:</th>
<th>Year Prior to RRT formation</th>
<th>Year 1</th>
<th>Year 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Codes on the medical floor</td>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Number of activations of team</td>
<td>n/a</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>Overall mortality rate</td>
<td>1.63%</td>
<td>0.78%</td>
<td>1.02%</td>
</tr>
</tbody>
</table>

What about our Mentor status? We are one of only four CAH mentors across the nation. Many other small hospitals are interested in starting the teams and need to hear how similar hospitals have implemented and managed their projects. We have given information and advice to more than 10 small hospitals in the past year and will be providing information statewide through an Oregon Office of Rural Health webinar on October 7th.

RRT’s save lives! Even if you are not the direct caregiver you may be the first one to notice changes in a patient. Please don’t hesitate to call an RRT if you have any concerns.

—Suzi Bean, Director of Quality
RRT Bonuses

- Nurses are encouraged and empowered to ask for help without fear.
- Caregivers have a heightened awareness for earlier interventions.
- There’s more emphasis on shared learning.
- Everyone gets the message that support is a critical component in clinically challenging situations.
What’s Next for Our RRT:

- Early Warning Scoring Systems
- Family Involvement, education, handouts
- Continuing Communication

ClaraBelles’s Quality Corner
“We’re all ignorant, just on different subjects,” so don’t be afraid to ask ClaraBelle

Dear ClaraBelle,
You told us awhile back about the campaign to save 100,000 lives. Now I heard we need to save 5 million!! Won’t the world get over populated real fast that way?
Questions?

Suzi Bean

sbean@mvhd.org

541-475-3882 ext 2511