Training the Responders

MICHAEL A. DEVITA, M.D.
ST VINCENT’S HOSPITAL
BRIDGEPORT, CT
Overview

- Keys for a successful RRS
- Key concepts for successful RRS training
- Using simulation for teamwork training
Key points for a successful RRS

- Be prepared logistically: build an ICU around the patient
- Provide expert response (upgrade care)
Key points for a successful RRS:
Create a positive culture

- “Thank you for calling, how can I/we help?”
- There is no such thing as a “bad” RRS activation
- Increased calls decrease cardiac arrest rate
- Each person who calls for help is a hero
- Every call is an opportunity for education
- Every call is an opportunity to be a hero
- “This was a good call. Thank you for calling us.”
Key to a successful training program: Focus on behaviors

- Understand the response plan
  - Triggering, notification, responders, response equipment, interactions, wrap up.
- Design/choreograph the response:
  All responses are the same!
- Train towards the desired response actions
- Objective data for desired behaviors is important
- Safe training environment
- Objective performance evaluation is essential
- Correlate objective and subjective assessments
Medical Education

- New imperatives
  - Safe
  - Accountable
  - Comprehensive/Planned
  - Efficient

- How well does book/lecture/clinical rotation model work?
Simulation tools for success

- Realistic (enough) settings
- Real equipment, medications
- Video/audio recording with real time playback
- Objective scoring methodology
- Approved (standard) technique
- Standard feedback (with citations)
Teamwork: an important “system” skill

- Complex/difficult tasks require teamwork
- HCPs view themselves as individual resource, but not as a team member
- HCPs view themselves within a professional context and not as a “bundle of skills”
- For teams to be effective, team goals need to be identified, tasks divided equitably, choreographed, practiced
- Little precedent for this in healthcare education and healthcare delivery
Defibrillation: Choreographing a response
Team Roles and Goals

<table>
<thead>
<tr>
<th>Roles</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Airway Manager</td>
<td>Assess, assist ventilation, intubate</td>
</tr>
<tr>
<td>2. Airway Assistant</td>
<td>Assist airway manager, oxygen and suction setup, suction as needed</td>
</tr>
<tr>
<td>3. Bedside Assistant (usually Floor RN)</td>
<td>Assess enough patient IV’s, push meds, and check pulse.</td>
</tr>
<tr>
<td>4. Crash Cart Mgr (ICURN)</td>
<td>Deploy equipment, prepare meds, run defibrillator</td>
</tr>
<tr>
<td>5. Treatment Leader</td>
<td>Assess team, responsibilities, data, direct treatment, set priorities, triage patient.</td>
</tr>
<tr>
<td>6. Circulation</td>
<td>Check Pulse, place defib pads, perform chest compressions*</td>
</tr>
<tr>
<td>7. Procedure MD</td>
<td>Perform procedures IV, chest tubes, ABGs</td>
</tr>
<tr>
<td>8. Data Manager (ICURN)</td>
<td>AMPLEx, results, chart, record interventions, role tags</td>
</tr>
</tbody>
</table>

"Circles" denote "mini-teams" that must cooperate closely on similar goals.
## Task/Team Assessment: **60 seconds & 3 minutes**

<table>
<thead>
<tr>
<th>Station</th>
<th>Team Member</th>
<th>Items</th>
<th>CT</th>
<th>TD</th>
<th>CAO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Airway</td>
<td>White, Michael</td>
<td>Identify self</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check Airway</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Open airway &lt; 60 seconds</td>
<td>N</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Check Breathing</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assist ventilation &lt; 60 seconds</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Airway Assistant</td>
<td>Davis, Ed</td>
<td>Identify self</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set up oxygen</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set up oxygen bag</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Set up mask</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floor RN</td>
<td>Kennedy, Kristy</td>
<td>Identify self</td>
<td>Y</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Check pulse &lt; 30 seconds</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Place defib pads &lt; 60 seconds</td>
<td>N</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Check IV Access &lt; 60 seconds</td>
<td>Y</td>
<td></td>
<td></td>
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<tr>
<td>ICU RN</td>
<td>Fisher, Marilyn</td>
<td>Identify self</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team Leader</td>
<td>Kumar, Rani</td>
<td>Identify self</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assign Roles</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recorder ICU RN</td>
<td>Wagener, Melinda</td>
<td>Identify self</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hand ID stickers to responders</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procedure MD</td>
<td>Jackson, Joyce</td>
<td>Identify self</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Check Pulse</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assist CPR</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chest Compressions</td>
<td>Williams, Jack</td>
<td>Identify self</td>
<td>N</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Initiate chest compressions</td>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assess adequacy of compressions</td>
<td>N/A</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Assess pulse as requested</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aide</td>
<td>Allen, Gideon</td>
<td>Identify self</td>
<td>N</td>
<td></td>
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</tr>
</tbody>
</table>

60 second ct positives: 7
60 second total spots 25
28%
Task completion rate (role)

2004-2005
Benchmarking Performance: Treatment Tasks

Therapeutic Task Completion (Role)

- Critical incident, survive
- Death
- Critical incident, survive

Sessions

Completion %

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

This Class
Bench Mark

1 2 3 4
Perception of Teamwork and learning

Self & Peer Perceptions vs. Actual Performance

Unconsciously Incompetent

n=32 (4 different classes)
Perception of Teamwork and learning

Self & Peer Perceptions vs. Actual Performance

Consciously Incompetent

n=32 (4 different classes)
Perception of Teamwork and learning

Self & Peer Perceptions vs. Actual Performance

Consciously Competent

n=32 (4 different classes)
Team Training Debriefing

- **Problem:** ensure debriefing that is:
  - Safe
  - Effective in changing performance,
  - Reproducible so each class is taught the same material
  - Comprehensive in covering material

- **Approach:**
  - Confidentiality
  - Make debriefing points independent of performance,
  - Structure debriefing sequentially (building step by step),
  - Script the debriefing
### Teaching Points

- To avoid chaos, devote time and effort to organization.
- Choosing roles aids in organization.
- Best team performance requires not just ABC (Airway, Breathing, Circulation), but OABC (Organization, Airway, Breathing, Circulation).

### Tasks

- Complete all of the tasks prior to continuing to the next debriefing section.
- Display results of Perception of Team Work from Auto Debrief Tool.
- Review Questions with Participants.
- Teaching Points were made.

### Questions for Participants

- **Was the team response chaotic or organized?**
  - Elicit opinions and rationale.
- **What would improve your organization?**
- **What rules should you make to improve team organization?**
  - Elicit: some roles, list tasks and priorities, sense of division of labor.
- **What tasks should be accomplished within the first 60 seconds of a crisis response?**
  - Elicit as many tasks as possible.
- **Which of those tasks are organizational tasks and which are patient care tasks?**
  - Analyze priority trainees have placed on organization.
  - Often participants omit organization. Explore what organizational tasks should be done.
- **Which is a higher priority during the first 60 seconds?**
  - Explore rationale for prioritizing organizational tasks over treatment tasks.
  - Discuss OABC.
### Debrief 2:
**Roles and Tasks**

**Section 2 Focus:** Analysis of relationship between organization and task completion

<table>
<thead>
<tr>
<th>Teaching Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A prompt (mnemonic) for pursuing organization first is to state, &quot;Let's get organized&quot;. This will foster OABC.</td>
</tr>
<tr>
<td>Assuming the role rapidly focuses (organizes) your own performance, each role had delineated tasks. <strong>First assume a role, then complete the tasks for that role</strong></td>
</tr>
<tr>
<td>It is important to know the tasks associated with your role in order to complete all the goals of the role.</td>
</tr>
<tr>
<td>Communication impacts survival. Determine what information you have and who it needs to be communicated to.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TASKS:</th>
<th>Complete all of the tasks prior to continuing to the next debriefing section</th>
</tr>
</thead>
<tbody>
<tr>
<td>✔️ Complete analysis of scenario using 50 second and 3 minute sheets</td>
<td></td>
</tr>
<tr>
<td>✔️ Show score for organizational tasks and treatment tasks</td>
<td></td>
</tr>
<tr>
<td>✔️ Complete and review communication sheet</td>
<td></td>
</tr>
<tr>
<td>✔️ RULE REMINDER: Can't play the same role as before</td>
<td></td>
</tr>
<tr>
<td>✔️ NEW RULE: Choose your role now but don't discuss it with others until you get to the code</td>
<td></td>
</tr>
<tr>
<td>✔️ Teaching Points were made</td>
<td></td>
</tr>
</tbody>
</table>

### Questions for Participants

1. **In general was the scenario better or worse?**
   - Elicit reasons that the response was better
   - Elicit whether planning and organizing before the scenario improved performance.

2. **Did everyone choose a role?**
   - Elicit knowing that tasks associated with your own role
   - Also discuss planning, practice and communication

3. **Did completing organization tasks improve the team's ability to complete the treatment tasks?**
   - If yes, elicit why.
   - If no, elicit why not and suggest why it might have helped.

4. **Were there communication barriers?**
   - If yes, elicit why and discuss the impact.
   - If no, elicit why not and suggest why it might have helped.

5. **Were there communication barriers?**

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- Lecture
- Roles & Goals
- Video
- ScoreSheet
- Graphs
- **Continue**
Summary

- An RRS can be culturally more successful after team training
- Make training safe and behaviorally based using simulation
- Design the response and then train towards specific desired behaviors
- Video and utilize objective measures of performance