“Failure to Rescue”

- Term coined in Australia in 1992
  - Associated with hospital not patient characteristics
- In response RRTs championed by
  - IHI (100,000 Lives Campaign) 2004
  - The Joint Commission NPSG 16, 16A
- Costs:
  - 22,000 post op Medicare deaths (HealthGrades, 2011)
  - Cost of respiratory failure - $2B
- Linked to Triple Aim
### How would you define “failure to rescue”?

1. Death after an adverse event
2. A trajectory of increasing risk with the possibility that clinical decline can be altered to prevent progression to higher levels of risk
3. The inability of clinicians to save a patient’s life by timely diagnosis and treatment when a complication develops
4. Factors that lead to health deterioration or death, such as an underlying disease or complication of medical care, and response to an acute situation

### Failure to rescue is caused by:

1. Failure to plan or be ready for an unexpected deterioration in a patient’s condition
2. An inability to recognize early signs and symptoms of deterioration in a patient’s condition
3. Failure to implement an intervention too late to prevent a cardiac/respiratory arrest or other adverse event
4. All of the above
Signs of deterioration develop 6-8 hours prior to a cardiac or respiratory arrest?

A. True
B. False

Up to 17% of cardiac arrests occur on inpatients placed in an inappropriate setting?

A. True
B. False
Most RRT calls occur...

A. Within 24 hrs of admission
B. Within 48 hrs of admission
C. Within 72 hrs of admission

What model of decision making increases the frequency of RRT activation?

A. Analytical
B. Intuitive
C. Analytic/Intuitive
Decision Making Models and RRT Calls

- Analytical decision-makers activate the RRT more frequently.
- Analytical decision-makers tend to be older, with more years of experience as an RN, than intuitive or mixed model decision-makers.

Case Study
Case Study – Key Points

- Risk Factors for Bowel Injury
- Protocol-based Care
- Clinical Triggers
- Leadership, Communication and Teamwork
- Culture of Safety

Other Case Examples

<table>
<thead>
<tr>
<th>Condition</th>
<th>Potential Failure</th>
<th>Proactive Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse Drug Event</td>
<td>Over sedation from opioids</td>
<td>• Use sedation assessment scales regularly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Proactive rounding on recent post-op patients</td>
</tr>
<tr>
<td>Sepsis</td>
<td>Sepsis development from hospital acquired infection</td>
<td>• Do sepsis screening assessment on all appropriate patients</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Ensure bundles of care are reliably followed</td>
</tr>
<tr>
<td></td>
<td></td>
<td>for sepsis, CAUTI, CLABSI and VAP</td>
</tr>
<tr>
<td>Iatrogenic Cardiac</td>
<td>Lack of recognition of physiologic signs prior to arrest</td>
<td>• Watch for physiologic signs up to 6 hours prior to arrest</td>
</tr>
<tr>
<td>Arrest</td>
<td></td>
<td>• Communicate signs and obtain EKG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Activate care team (&quot;time is muscle&quot;)</td>
</tr>
<tr>
<td>OB Harm</td>
<td>Stroke due to severe eclampsia or shock due to post-partum hemorrhage</td>
<td>• Do risk screening assessments on all mothers to determine risk for hemorrhage</td>
</tr>
</tbody>
</table>
How to Prevent Failure to Rescue?

Apply interventions that deal with reasons for failure at each step

Recognition  Communication  Response  Recovery

Failure = Deterioration  Success = Complication  Rescue

Best Practices – Recognition

What processes do you have to support staff in early recognition of deterioration?

Sniffing for early signs of deterioration!
Best Practices – Recognition

• Incorporate Risk Prediction into Care Model
  – Identify high risk patients
  – Implement care bundles and clinical pathways

• Proactively Find Patients
  – Educate staff to read early signs - Critical Thinking!
  – Target patient rounding to recognize deterioration

Create Systems for Ongoing Surveillance
  – Employ electronic systems to identify patients with early signs of deterioration
  – Conduct routine severe sepsis screening
  – Implement an “Early Warning System”

Sample Clinical Criteria
Trigger RRT when 1 or more of following values are noted
  – Staff member is worried about patient
  – Acute change in Heart Rate <40 or >130 bpm
  – Acute change in systolic BP <90 mmHg
  – Acute change in RR <8 or >28 per min or threatened airway
  – Acute change in saturation <90% despite O2
  – Acute change in level of consciousness
  – Acute change in Urine Output to <50 ml in 4 hours
What methods are in place to foster timely and effective communication?

- Eliminate barriers to escalation
  - Foster safe environment for escalation
  - Structure methods for communication
  - Optimize mobile technology to facilitate rapid communication
- Activate Rapid Response Systems
  - Assure methods for activation based on clinical judgment, vital sign changes and/or family concern
Best Practices – Response

How do you assure timely response to patient deterioration?

We are coming!

Best Practices – Response

Execute Rapid Response Systems
– Evaluate RRT or MET structure and assure member availability
– Develop workflow based on clinical triggers

EXAMPLE: Workflow for Positive Sepsis Screen
Best Practices – Recovery

How do you know you have an effective process for “rescuing” patients?

- Complication Rescue
  - Implement multi-disciplinary care plan to address complication and support recovery
- Learn from other “failure to rescue” events and patients with unplanned transfer to ICU
  - What happened?
  - Why did it happened (systems lens)?
  - What could you do to reduce the risk?
  - How do you know risk was reduced?
  - How will you share the learnings?
Best Practices – Response

Monitor Success
– Measure impact of rapid response systems and identify opportunities for improvement
– Evaluate Complication Rate vs. Mortality Rate

<table>
<thead>
<tr>
<th>Complication Rate</th>
<th>Mortality Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
</tr>
</tbody>
</table>

- High Complications, Low Mortality = Complication Rescue
- High Complications, High Mortality = Failure to Rescue

What Learning Will You Take Home?
1. Understand what Failure to Rescue means
2. Causes are multifactorial (include failures in recognition, communication and/or response)
3. Multiple strategies should be employed
   – Risk prediction and proactively finding patients
   – Vigilance, early recognition, and critical thinking
   – EHR/analytics to provide decision support at point of care
   – Protocol-based care delivery
   – Rapid Response Systems
   – Teamwork, communication, and leadership skills
The Physical State of Deterioration

Window of Opportunity?

Early Warning System

Early S&S of Deterioration

RRT

Code Team

Risk of Death

0 8 hrs Time

Recognize Communicate Respond Recovery Monitor

Monitoring & Improving

• Monitor/Analyze
  – FTR measure (PSI -4)
  – Unplanned transfers to higher level of care
  – Code Blues
    • Number of Code Blues with no RRT calls
  – Deaths due to HACs

• Improve
  – Update Physical Assessment Education
  – Train RRT/MET to coach and educate
  – Call Code Blue Rounds
  – Protocols for high risk diagnoses
### Failure to rescue does not necessarily imply wrong doing?

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A. True</td>
<td>B. False</td>
</tr>
</tbody>
</table>

---

### Thank You for Sharing!

Contact information:

Nancy Schanz, nschanz@ncha.org
Kara Lyven, klyven@ncha.org