

The Efferent Limb 2:  
Expanding the Rapid System  
Why other teams?

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Case 1

- In hospital acute coronary syndrome
- 65 year old man with diabetes, COPD and lung nodule, has wedge resection of the left upper lobe. Post op day 1 at 2:30 pm he develops chest tightness and dyspnea.
- How can we do “door-to-balloon” in 90 minutes?

Case 2

- Acute End of Life
- 82 yo CHF and LVEF of 11%, admitted 6 times in last 3 months for CHF exacerbation. At the end of her last hospitalization, the patient created an advance directive with her physician. She came to the hospital requesting relief from severe dyspnea and was admitted 5:30pm. After response to treatment, gets suddenly dyspneic at 7am. The intern is called. The attending is out of town. Intubation will help. Family is split on what to do.
- What to do?

Case 3

- Acute blood loss
- A 42 year old has vascular surgery and is taken to the ICU, where she is coagulopathic and oozing a little. She acutely becomes hypotensive and abdominal drains are venting blood. The ICU team is called, as is the surgical team, and anesthesiology who are currently in the OR. ICU nurses are requesting blood, taking off orders, charting, packing up to go to the OR, assisting with bedside procedures.
- Can we get and give blood safely and rapidly?

Case 4

- Acute airway difficulty
- A patient is extubated after neck surgery. After initially doing well and being transferred to the floor, some bleeding in the oropharynx is noted and the patient develops difficulty breathing. A MET is called, and the Critical Care Attending recognizes immediately that this will be a difficult airway to manage.
- How can we make sure that personnel, skills, and equipment match the patient's needs?

Other cases

- Acute confrontation
- Acute agitation
- Septic shock
- Acute obstetric emergency
- Acute ischemic stroke

What do these cases have in common?

- High acuity
- High Risk
- Low frequency
- Speed improves outcome
- Extra hands needed
- Multiple disciplines needed
- Special skills required
- Special process knowledge required
- Special equipment needed

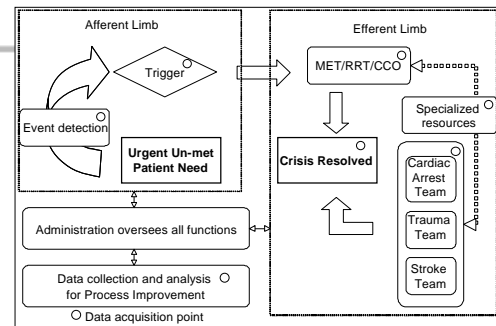
Crisis = Mismatch of Needs and Resources

The challenge is to rapidly correct the mismatch

Complex processes require planning and rehearsal

- Problem recognition: is this a problem?
- Response trigger: how do I get help?
- Planned response: what will happen?
  - Individuals
  - Equipment
  - Logistics: How to get it there
  - What to do
  - Practice, evaluate, and improve

Rapid Response System Structure



The Rapid Response System

- Other teams:
  - What are the opportunities?
  - What are the limits?
  - Objective analysis: benefit, cost, acceptance, etc.

Other cases

- Acute MI
- Acute hemorrhage
- Acute difficult airway
- Acute EOL crisis
- Acute confrontation
- Septic shock
- Acute obstetric crisis
- Acute ischemic stroke
- Cath lab team
- Blood admin team
- Difficult airway team
- Palliative care team
- Condition "M"
- Sepsis team
- Condition "O"
- Stroke team

### Why other teams?

- Planning, preparing, rehearsing, and measuring responses likely to result in better patient care.
- Minor Rapid Response System change has much less impact on culture.