

Transitioning from MET to RRS and Team Systems for Care

Third International Conference on Rapid Response Systems
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A patient in trouble...

- 34 year old after trauma surgery
- Became tachycardic gradually in ICU, received fluid
- After no improvement, hgb=3, stat pRBC ordered
- Patient deteriorated/coded, went to OR before blood available from blood bank
- Post hoc analysis:
 - O- blood, trauma pack, massive transfusion pack (available, not used), new blood bank location (runner lost), no staff to send while resuscitating & prepping
 - Procedures obscure, access variable/unknown by many: need faster/more reliable process

Overview

- Very brief history of team responses
- What's happening to team responses now: the system...
- Should team systems for resource/needs matching be a core safety process for the future?

A very brief history

- Patients in distress, undertreated: 1980's
- A few response teams to treat patients before cardiac arrest, late 1980's to mid 1990's
- Publication and spread of response teams with IHI, AHA, SCCM support
- MERIT study
- Consensus conference: *Rapid Response System*
- Winters commentary

What's Happening Now

- Reanalysis of MERIT data
- Rapid Response *System* as a standard of care for crisis patients: JCAHO/IHI
- Expanding RRS: other specialized teams:
 - Condition H: Patient needs help
 - Palliative Care/DNAR team: delayed EOL planning
 - Condition M: mental health/aggressive confrontations
 - DAT: Difficult airway team
 - BAT: Blood administration team
 - Chest pain team: Acute coronary syndrome/cath team

Case Study: Blood Administration Team

- Massive transfusions are high risk, error prone events
 - Variety of blood products available
 - Variety (potential) of locations
 - Nomenclature ambiguous: Trauma pack, Massive hemorrhage pack, uncrossmatched blood, O -
 - Work related to tracking, recording, checking
- A team of people specializing in this problem reduces error, work load during crisis, improves patient safety
- Why does a team improve safety?

**Teams systems:
A Plan For The Future**

- Specialized teams can:
 - Improve care: teams with multiple skills/knowledge more likely to address difficult issues than 1 person (effector arm)
 - Learn about issues: concentration of practice from many with low frequency, to few with high frequency (QI arm)
 - Think it through: identify problems, review process, plan protocols/triggers, observe for practice/outcome change (QI/admin/afferent arms)
- Specialized team become expert leaders!

The Rapid Response System

- Matching resources to needs... fast!
- Most obvious: patients with deterioration outside of ICU
- Also needed:
 - High risk, low volume patients,
 - High risk, high skill requirement problems