

Using an Electronic Health Record (EHR) to Address Findings of a Post Resuscitation Committee (PRC) in a Community Hospital

Pamela Donovan, RN, MSN, and
Elfrieda Saylor, RN, BSN
UPMC St. Margaret



Poster Objectives

- Summarize the electronic, educational and communication interventions of a PRC and EHR collaboration to improve patient outcomes.
- Outline data from monthly audits to show improved patient outcomes and areas of concern.

Background and Significance

- According to the Institute of Healthcare Improvement's 5 Million Lives Campaign literature, "hospitals with 20-25 rapid response team calls per 1000 discharges demonstrate a decrease in overall hospital mortality."
- UPMC St. Margaret's Condition C rate is approaching 45 calls per 1000 discharges with a corresponding decline in mortality.

PRC Roles & Responsibilities

- Established multi-disciplinary PRC in February 2004
- Reviews all resuscitation efforts, explores trends, ethical concerns, equipment needs, medication therapies/issues and policy development.
- Collects and analyzes data for quality improvements.
- Informatics Nurse Liaison reviews with Nursing Informatics Council to implement e-Record enhancements.
- Presents final recommendations for improvement to the Critical Care Committee.

PRC Recommendations

- Establish Rapid Response Teams.
- Implement standard ordersets and protocols to address hypo/hyperglycemic and stroke conditions.
- Insure code status has been identified.
- Improve patient transfer to lower level of care to release resources for potential code situations.
- Improve handoff communications in code situations.
- Improve use of flex monitoring resources to release resources for additional patient care.

Electronic Solutions Developed- Electronic Ordersets and Protocols

- Insulin Sliding Scale Ordersets
 - Humalog, Regular, Novolog
 - Auto orders, precautions, protocol
 - Allows choice of AC schedule or AC and HS schedule
- Hypoglycemic Ordersets and Protocol
 - Limited to one selection
 - Uses decision support rules -- to place order "FROM" nurses documentation
- Stroke Ordersets
 - Activase therapy only
 - Ischemic stroke care
 - Non activase ischemic stroke
- Code Status Orders
 - Provide three options
 - Full code status
 - Limited therapy
 - Comfort measures only

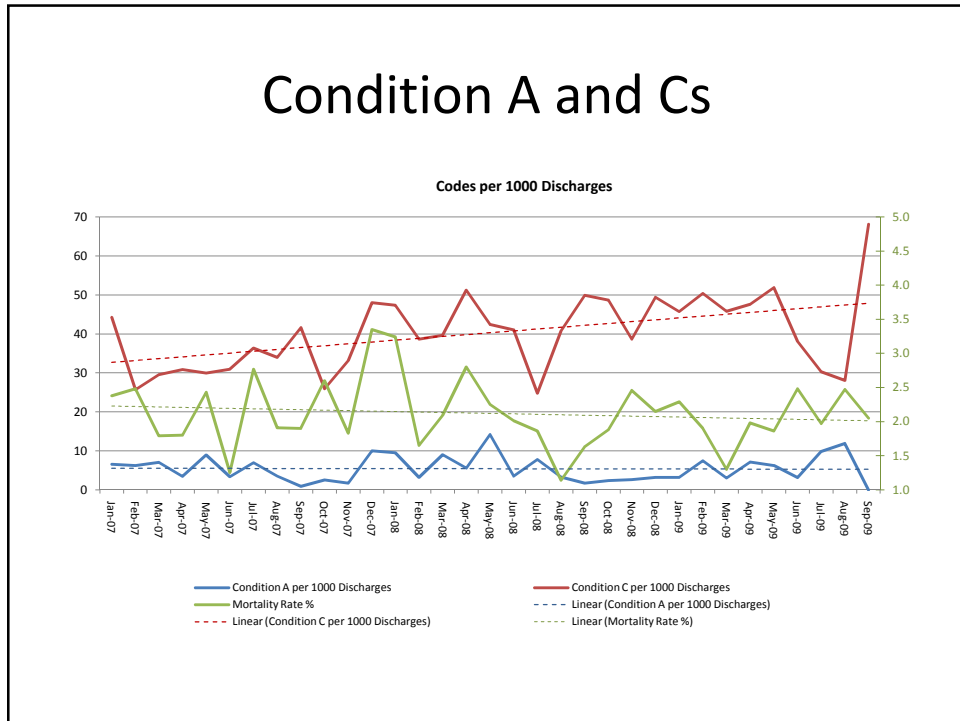
Decision Support Rules

- Code status alert
 - Alerts MD when code status not ordered.
 - Allows MD to place 1 to 3 orders from alert.
- Flex monitor alert
 - Prompts MD to review the need for continued monitoring \geq 48 hrs. from initial order.
 - Allows MD to reorder or D/C current order from alert.
- Transfer decision alert
 - Alerts MD in 48 hrs. of admission to ICU/IMCU or Telemetry unit to consider possible transfer.
 - Alert includes admission/transfer criteria.

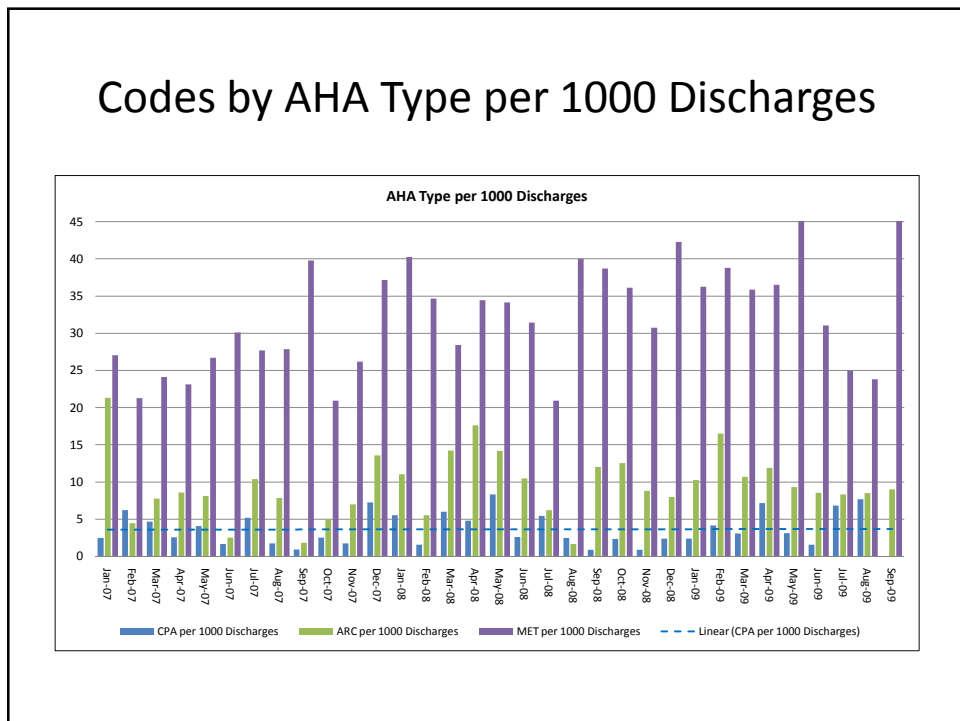
Educational Interventions for Electronic Solutions

- First Three Minutes – staff training program
- Critical Thinking – nursing focused inservice
- Resident Resuscitation Review with Medical Advisor – enhance skills competency
- Documentation Training for MD and Nurse
- Classroom code simulation
- Mock codes
- SBAR – system wide communication tool

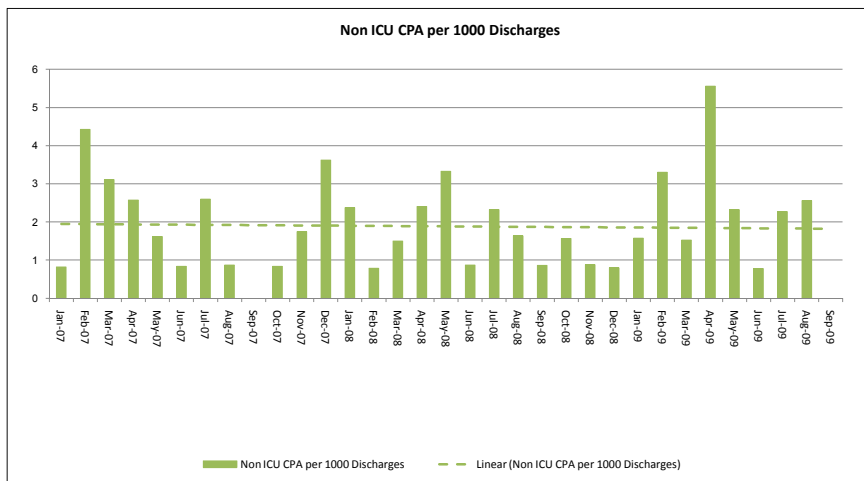
Condition A and Cs



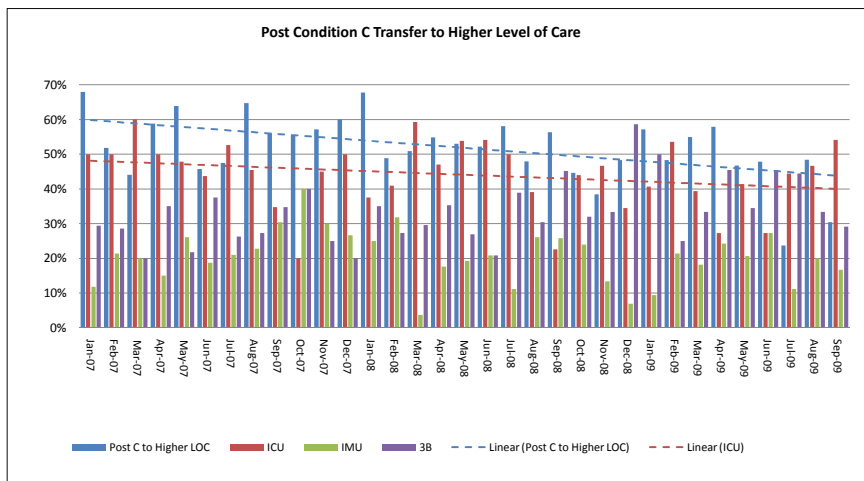
Codes by AHA Type per 1000 Discharges



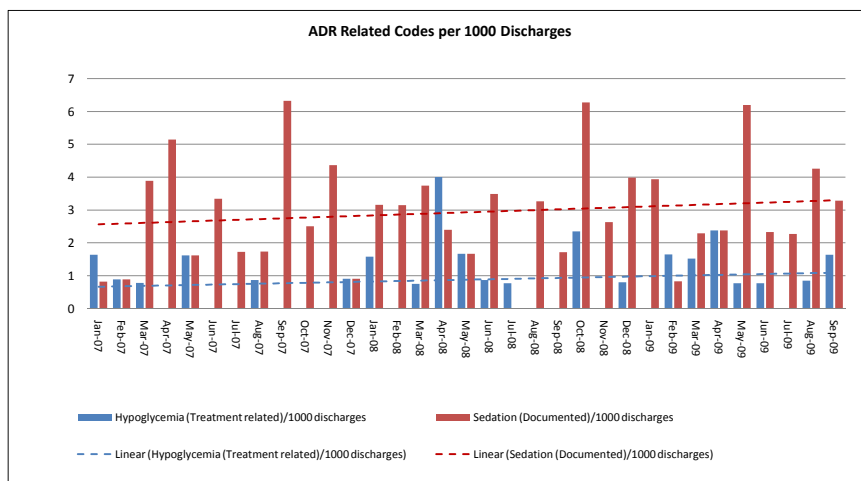
Non ICU Cardiopulmonary Arrests per 1000 Discharges



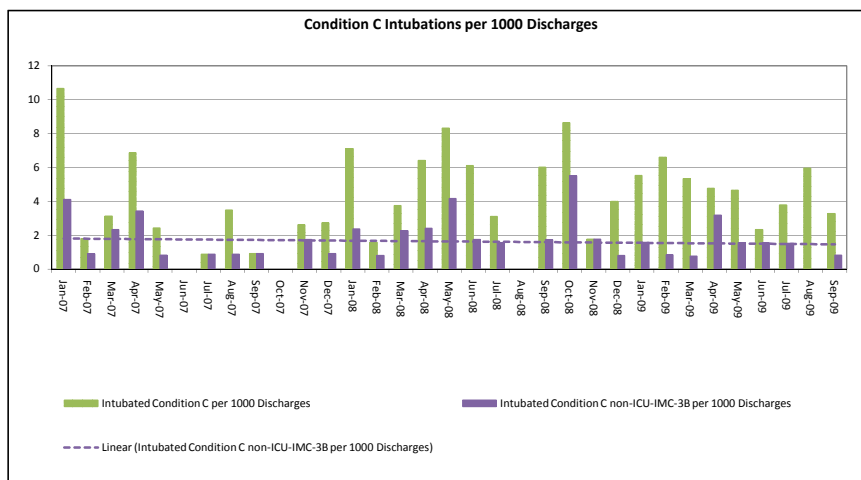
Post Condition C Transfer to Higher Level of Care



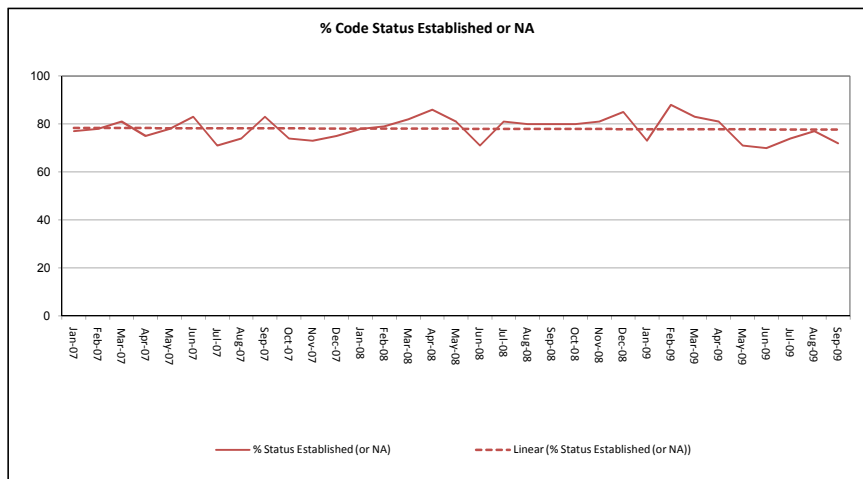
Adverse Drug Reaction (ADR) Related Condition Calls



Intubated Condition C on Non-Monitored Unit per 1000 Discharges



Percent of Patients with Code Status Established



Acknowledgments

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