

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

Pamela Donovan, RN, MSN; Elfrieda Saylor, RN, BSN
University of Pittsburgh Medical Center, UPMC St. Margaret

I. 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.

II. Background and Significance

- According to the Institute for 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.

III. PRC Roles and 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.

IV. PRC Recommendations

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

V. Electronic Solutions Developed- Electronic Ordersets and Protocols

- Insulin Sliding Scale Ordersets
 - Humalog, Regular, Novolog
 - Auto orders, precautions, protocols
 - Allows choice of AC schedule or AC and HS schedule
- Hypoglycemic Ordersets and Protocols
 - 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

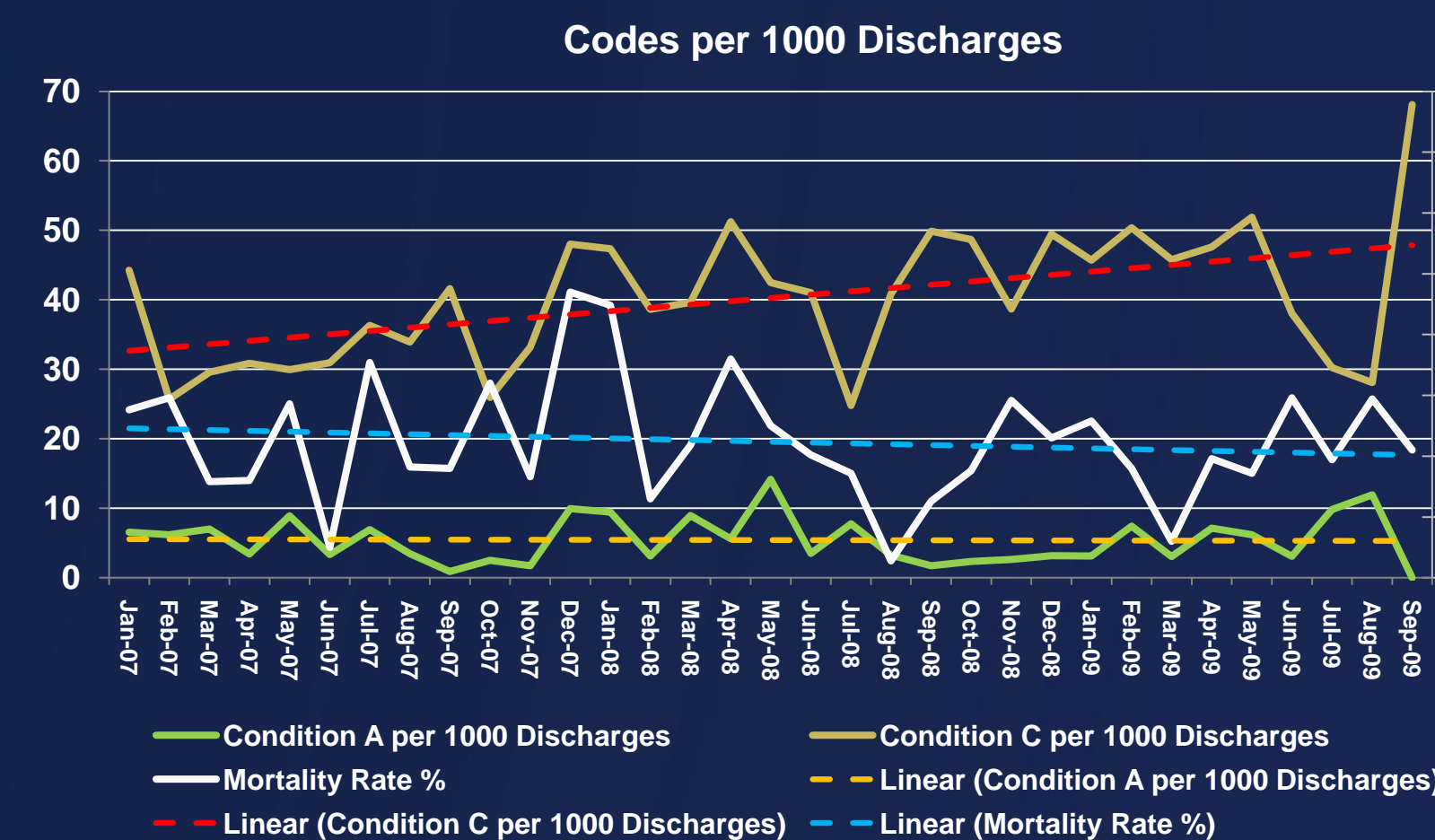
VI. Decision Support Tool

- 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 hours of admission to ICU/IMCU or telemetry unit to consider possible transfer.
 - Alert includes admission/transfer criteria.

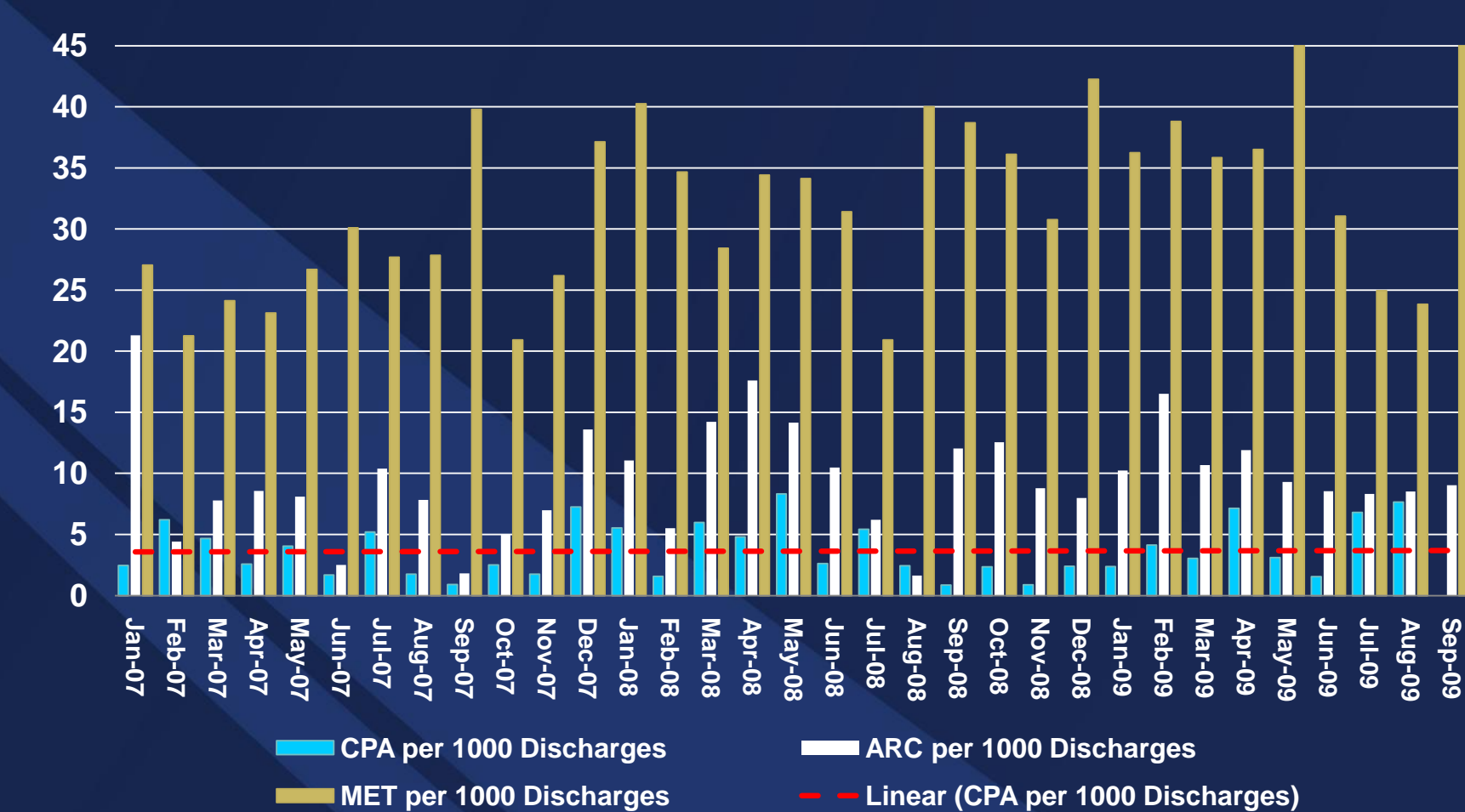
VII. Educational Interventions for Electronic Solutions

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

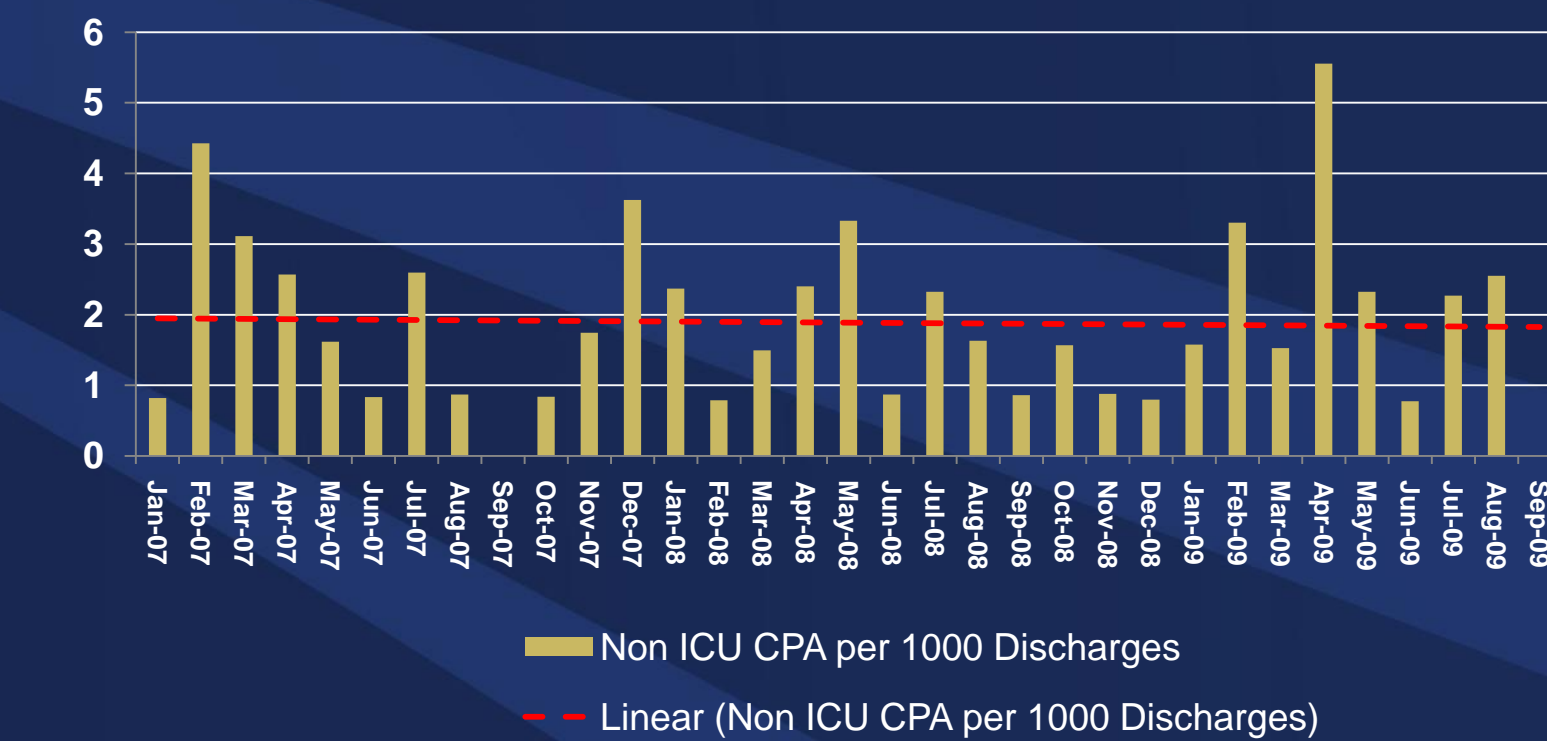
VIII. Condition A and C



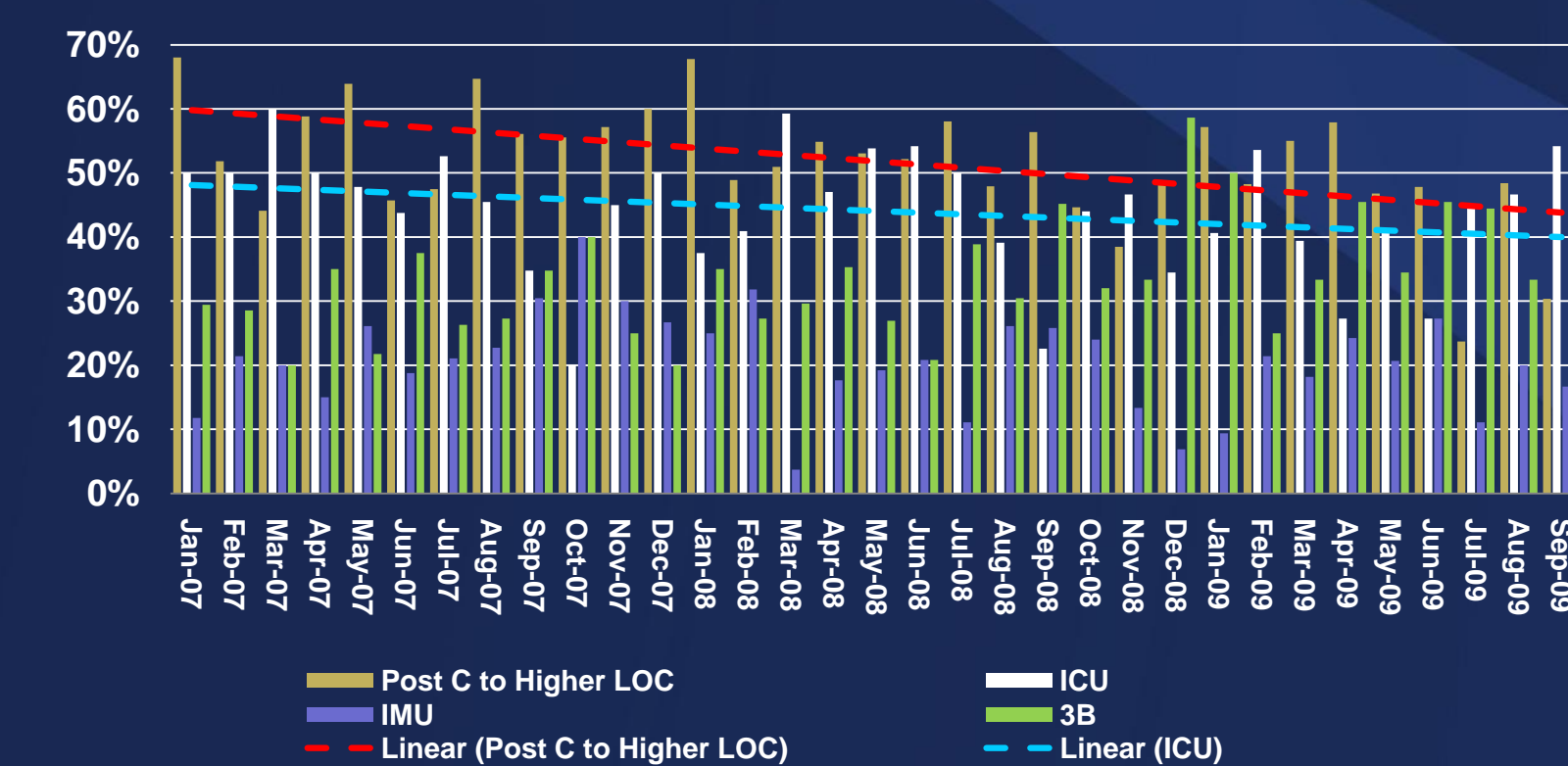
IX. Codes by AHA type per 1000 Discharges



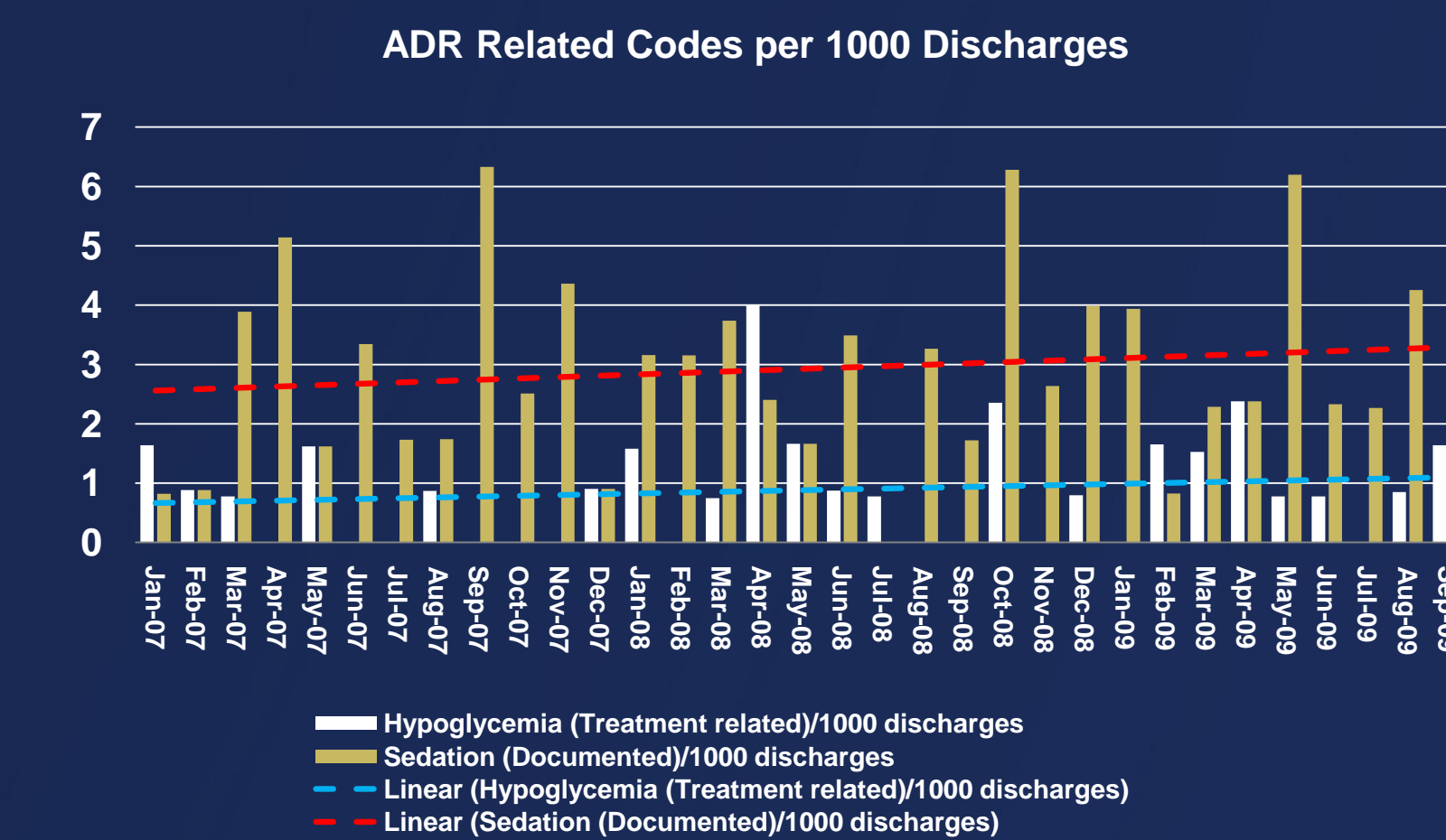
X. Non-ICU Cardiopulmonary Arrests per 1000 Discharges



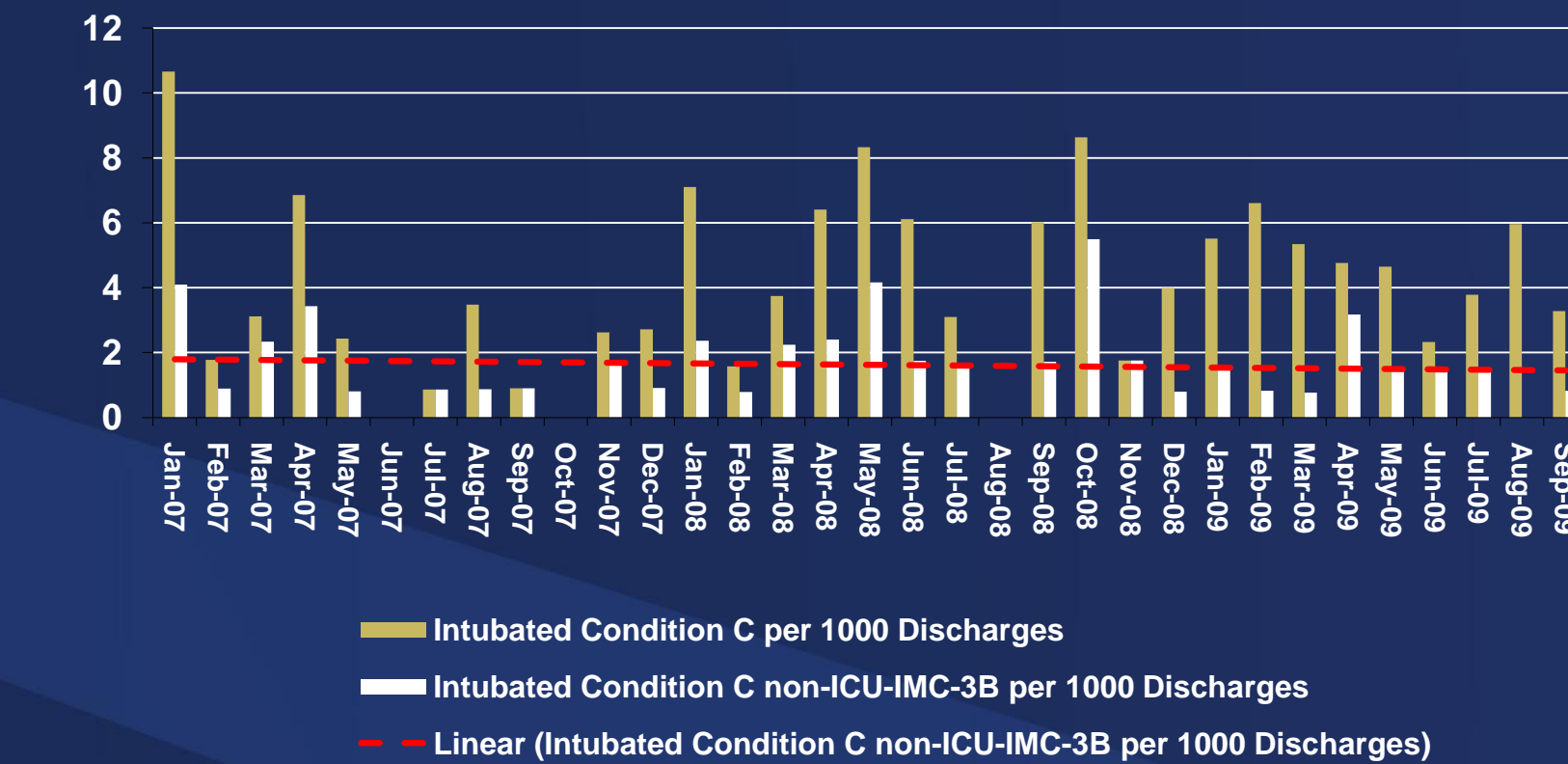
XI. Post Condition C Transfer to Higher Level of Care



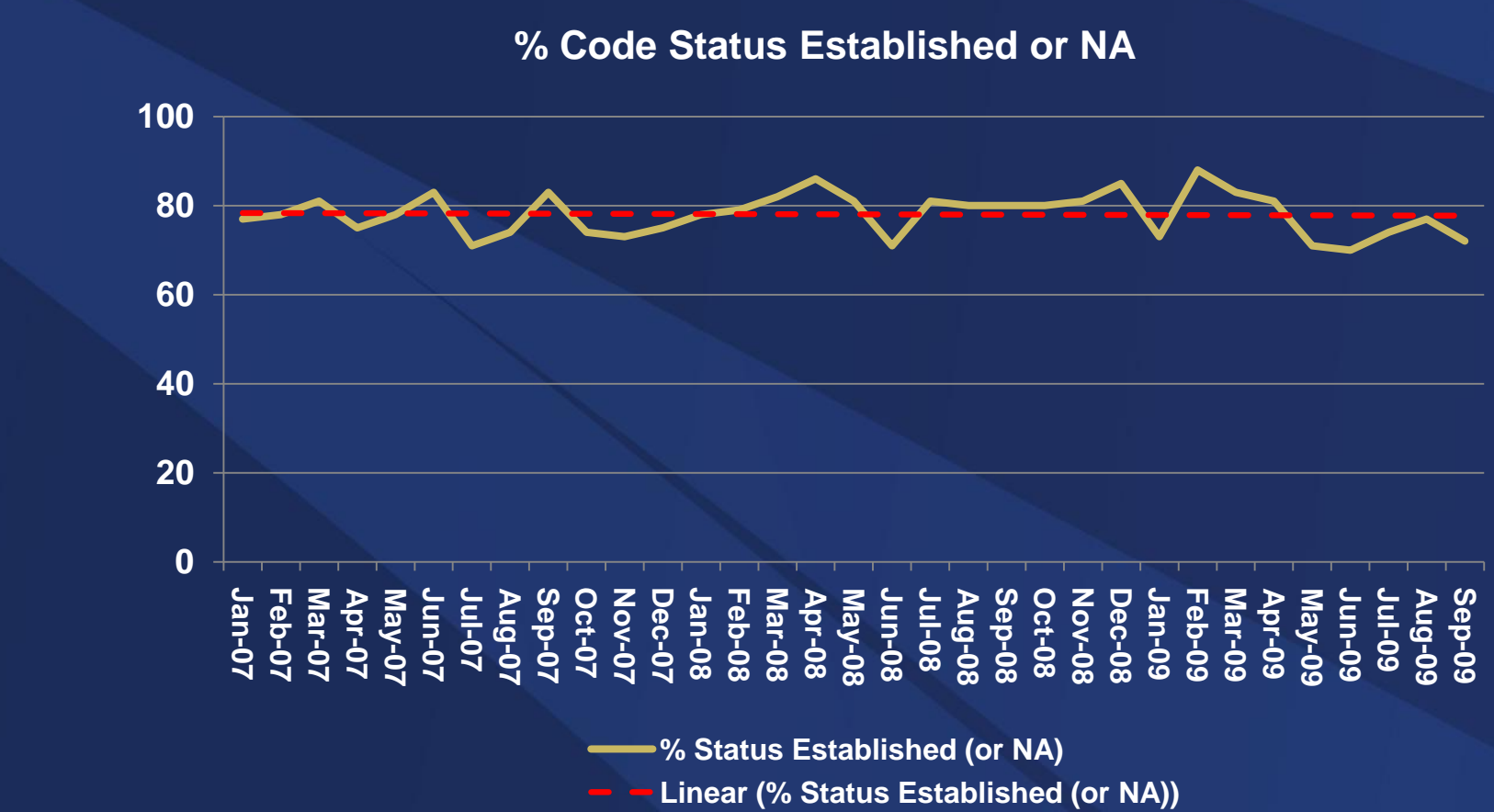
XII. Adverse Drug Reaction (ADR) Related Condition Calls



XIII. Intubated Condition C on Non-Monitored Unit per 1000 Discharges



XIV. Percent of Patients with Code Status Established



Acknowledgements

UPMC St. Margaret Executive Administration, UPMC St. Margaret Post Resuscitation Committee, and the UPMC eRecord Department for their support and guidance in perfecting patient care using technology.

