

AMI 'D2B' – Rapid Review and Improvement

The Problem

The early use of primary angioplasty in patients with acute myocardial infarction who present with ST-segment elevation or LBBB results in a significant reduction in mortality and morbidity. The earlier primary coronary intervention is provided, the more effective it is (Brodie, 1998 and DeLuca, 2004). National guidelines recommend the prompt initiation of PCI in patients presenting with ST-elevation myocardial infarction (Antman, 2004). Initiation of intervention is dependent on clinical staff communication between the Emergency Department and the Cardiac Cath Lab. The AMI D2B measure is used to assess care processes, decision making and team-based communication related to this important intervention.

Aim/Goal

Increase the use of evidence-based strategies to improve an interdepartmental alliance and coordination of care between the ED and Cath Lab related to STEMI D2B times aiming to ensure $\geq 75\%$ D2B time ≤ 90 minutes. (ACC D2B Alliance).

Improve collaboration and communication between departments to ensure:

- Prompt data feedback – realtime/close to realtime review of outliers to identify process failures and need for change
- Protocols/Expected Time Frames for Assessment are known
- One Call Activation of CathLab;
- Leadership/Senior management commitment

The Team

- Cardiac Cath Lab Physicians and Nursing
- Emergency Medicine Physicians & Nursing
- Health Care Quality Process Improvement–Director /Data Abstractors

The Interventions

- Realtime notification via ED Omnicell to D2B Team based on pull of STEMI Meds.
- Chronologic review and documentation provided to ED/CathLab Clinicians within 24-48 hours of event by HCQ, allowing timely feedback to involved clinical staff.
- Monthly Team Meeting reviews process segments and outliers. Focus on process/system analysis 'to root' - Noted process improvements include:
 - Improving patient triage & rapid ECG
 - More rapid/direct activation of cath lab
 - More rapid transport from ED to Cath Lab

Progress to Date

PCI Within 90 minutes

