Introduction:
The STRAC Regional Cardiac Systems Committee meets to provide an open, consensus-driven environment across all relevant disciplines in the development of regional guidelines, processes and educational opportunities to facilitate efficient and appropriate pre-hospital and hospital care of patients who are suffering acute cardiac events.

The benefit of timely reperfusion in patients with acute ST-segment elevation myocardial infarction (STEMI) has been well documented. Primary percutaneous coronary intervention, which has proven mortality benefit over fibrinolysis in clinical trials, is the preferred reperfusion strategy. A substantial proportion of patients with STEMI cannot be transported directly to pPCI due to geographic distance.

An objective of the STRAC Cardiac Systems Committee is a focus on the cohort of patients for whom fibrinolytic therapy or should be initiated based on estimated interhospital drive times.

Goal 1: Direct to PCI Transport by EMS
911 to PCI Center <45 minutes and early notification with ECG transmission
• EMS obtains and transmits 12 ECG to PCI Center?
• Early PCI center notification of the Heart Alert
• Emergency Physician activation of Cath Lab upon EMS notification of “Heart Alert”
• EMS Aspirin Administration
• Pain management (opioids and nitrates)

Goal 2: Interfacility Transfer
Door to Thrombolytic in < 30 minutes and urgent transfer to PCI

EMS Commitment
• 12-Lead Acquisition/Interpret/Transmission
• Adherence to Heart Alert Criteria
• < 20 minute Scene time
• < 45 minute 911 to PCI Center time
• Data submission
• Active Participation in PI Process

PCI Center Commitment
• ED Physician Activates the Cath Lab based on EMS Report of “Heart Alert”
• One Call Activation of Cath Lab
• < 25 minute ED Time
• < 60 minute D2B
• Data Submission to include self presenters and IFT’s
• Encourage Physician (EM and Cardiology) involvement in PI Process

Heart Alert Criteria
1. Patients with signs and symptoms of an Acute Coronary Syndrome (ACS)
AND
2. ST segment Elevation of 1mm or more in 2 contiguous leads

Deployment Plan:
• Flyers to facilities
• Local and regional education sessions
• Case review through Cardiac PI Committee

Pitfalls:
• Facility turnover leading to lack of knowledge with protocol
• Hesitation to give thrombolytics based on unfamiliarity

Confirmed STEMI?
• Begin thrombolytic contraindications checklist immediately
  a. Onset of symptoms <12 hours: administer full dose thrombolytic followed by urgent PCI
  b. Onset of symptoms > 12 hours: consider thrombolytic and contact receiving facility for further input.
  ❖ Fore ease of administration prior transport – retaplace (10 units) is recommended