STRAC Regional Cardiac Systems Committee
STEMI Management Guidelines

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Southwest Texas Regional Advisory Council

SCHOOL OF HEALTH PROFESSIONS
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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.

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

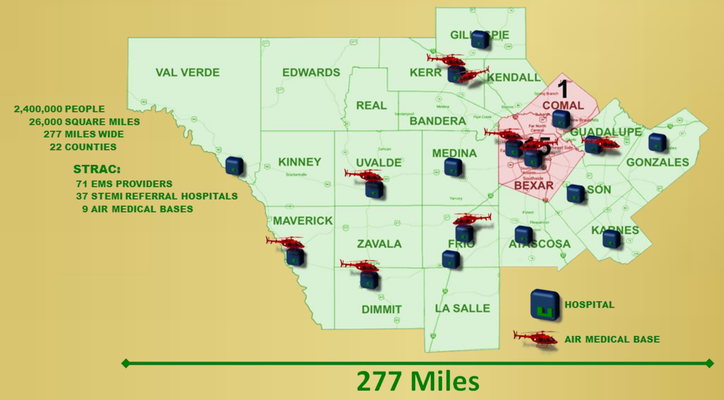
Goal 1: Direct to PCI Transport by EMS

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



STRAC Regional PCI Centers:

- Baptist Medical Center
- Baptist North Central
- Baptist Northeast
- Baptist St. Luke's
- Christus Santa Rosa Medical Center
- Christus Santa Rosa Westover Hills
- Christus Santa Rosa New Braunfels
- Methodist Hospital
- Methodist Metropolitan
- Methodist Northeast
- Methodist Stone Oak
- Methodist TexSan
- Nix Medical Center
- SAMMC
- Southwest General
- University Hospital

- 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 – retaplase (10 units) is recommended

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

If your patient does not meet Criteria 1 AND 2, a consult should be done with the receiving ED physician prior to declaring a Heart Alert

*ACS Symptoms include but are not limited to chest pain/tightness; radiation to back, abdomen, arm(s), neck, jaw or any combination; dyspnea; diaphoresis; nausea/vomiting; fatigue; weakness; palpitations; indigestion; syncope; pulmonary edema

**Heart Alert Criteria are regionally approved clinical and analytical findings which result in early activation of Interventional Cardiology services. The criteria identify a sub-group of cardiac patients who benefit from these time sensitive treatments. The criteria do not identify, or address other cardiac disorders/diseases that may require Emergency Department admission, evaluation and treatment.

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