STRAC
Southwest Texas Regional Advisory Council for Trauma

Southwest Texas Regional Advisory Council
Regional EMS Heart Alert Agencies

LETTER OF ATTESTATION

BACKGROUND

The Southwest Regional Advisory Council (STRAC) formed a Regional Cardiac Systems Committee in January 2008. This was done after the Methodist Health System, Baptist Health System, Christus Santa Rosa Health System and University Hospital came together with STRAC in late 2007 to work on a solution to enable the San Antonio Fire Department EMS to begin transmitting 12-lead EKG's to receiving hospitals when they encountered a patient with an ST-segment Elevation Myocardial Infarction (STEMI).

During this process, it was determined that the entire region could better be served if this level of cooperation was continued across the entire spectrum of STEMI care. As a result, this Committee was formed, led by EMS Leaders and the STRAC Chairperson to avoid any issues of system favoritism during the initial stages of our system development.

The Committee has met monthly and has quickly formed the basics of a regional system. First, was the determination that patients with a STEMI would be known as "Heart Alerts", mimicking the familiar "Trauma Alert" used throughout our regional trauma system. Then, participants developed the definition of what a "Heart Alert" was and had this criteria approved by EMS, Hospitals and Cardiologists across the region.

After this, the Committee began working on what would be the requirements of healthcare facilities that desired to have these Heart Alert patients transported to their Emergency Departments by EMS agencies. This step is vital to ensure that these patients with time dependent pathology receive the quickest definitive care possible. After much discussion, the Committee concluded that since there was no regulatory body currently accrediting or certifying facilities as STEMI treatment facilities, that our region would best be served by having facilities that desired to provide STEMI care sign a letter of attestation that they would work to meet all criteria on an ongoing basis.

Lastly, it was determined that for facilities to have an increased comfort level with EMS agencies playing a critical role in this process, that not only should healthcare facilities strive to meet criteria, but EMS agencies desiring to have an active role in this process should also have criteria that they would meet so that there would be consistency in care for these patients from their 911 call through their journey through the catheterization lab.

The Regional Cardiac Systems Committee sees this document as a work in process. These criteria are built from the recommendations of the national Door 2 Balloon Alliance as a preliminary measure for Facilities to work to achieve as State and

National Designations are designed and built. It is the intent of the Committee that these criteria will be reviewed annually and adjusted to better meet the needs of our Region based upon the relevant science at that time.

Facilities that complete this letter are attesting to their ability to achieve these criteria and maintain these capabilities twenty-four hours a day, seven days a week. Regional EMS agencies will use this information in determining destinations for STEMI patients and future work will be done to establish methods and procedures to rapidly move patients from outlying facilities in our Region to Regional PCI Centers.

ABBREVIATIONS/DEFINITIONS

1. **ACS** – Acute Coronary Syndrome, as defined by the American Heart Association, is any patient showing signs and symptoms including but 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
2. **Heart Alert** – Term used to classify a subset of patient's who meet the Heart Alert Criteria. This term will be used in telephone and radio communications between EMS agencies and hospital and within hospitals to signify patients who are having a STEMI.
3. **Heart Alert Criteria** – A patient who: 1.) is having signs and symptoms of ACS AND have a 12-lead ECG showing either: 2.) ST Segment elevation of 1mm or more in 2 contiguous leads OR 3.) new or presumed new Left Bundle Branch Block. (See Appendix A)
4. **EMS agency** - means 911 EMS providers, although in general, it refers to the EMS agencies throughout the STRAC region.
5. **MEDCOM** – Medical Communication Center housed in San Antonio AirLife's Communications Center whose purpose is to facilitate inter-facility trauma transfers rapidly across STRAC. This center has also developed into a regional center for disaster response requests of regional rescue resources and regional EMS mutual aid.
6. **Regional PCI Center** – A hospital who has signed this letter of attestation and is working towards meeting and maintaining the criteria as laid out in this document. Regional PCI Centers are the facilities ALL Heart Alert patients will be transported to as soon as possible after a STEMI is recognized.
7. **STEMI** – A specific type of myocardial infarction signified by signs and symptoms of Acute Coronary Syndrome with the presence of elevation in the patient's ST segment in 2 or more contiguous leads on a 12-lead ECG.

HEALTHCARE FACILITIES AGREE TO ACHIEVE THESE CRITERIA IN TREATING STEMI PATIENTS TO BE RECOGNIZED AS "REGIONAL PCI CENTERS"

1. ED physician activates the cath lab:

Whenever an Emergency Department is notified of a Heart Alert by either EMS 12-lead transmission or telephone/radio report from a participating* EMS agency; or a patient presenting to the ED, the Emergency Department physician on-duty shall activate the cath lab without any consult. This does not preclude the ED physician from obtaining a consult for borderline or questionable cases, but a PCI Center shall not require a consult before cath lab activation by an ED physician.

2. Utilize Heart Alert Criteria for Field activation of cath lab:

Whenever a hospital is notified by any participating EMS transport agency that they are enroute with a patient that meets the STRAC regional criteria for a Heart Alert, the ED shall immediately activate the cath lab for an incoming Heart Alert following all established in-house procedures.

3. One call activates the cath lab:

As a Regional PCI Center, a facility will employ methods as needed to insure that their cath lab team and physicians are notified via a "one call" activation system from the Emergency Department. The methods each facility utilizes to accomplish this are their own, however compliance is achieved by methods involving as few steps as possible to notify the entire team needed for successful PCI in accordance with all PCI Center criteria.

4. Complete Cath lab team (with cardiologist) ready in 30 minutes of activation:

As a Regional PCI center, facilities should employ methods appropriate to have their entire cath lab team ready within 30 minutes. There has been much discussion regarding this criterion to include what "ready" means, cardiologist vs. interventionalist present at the start of the procedure, and other alternative means of facilities reaching this goal. The Regional Cardiac Care Committee has determined that each PCI Center will have to employ their own methods to achieve this criterion, but as our system comes on-line this item will continue to be discussed and a sharing of best practices is expected to evolve in our Regional Cardiac Care PI discussions.

5. PI process with D2B times as core component:

All Regional PCI centers shall have an in-house PI Process specific to their STEMI processes. A main component of these processes shall be to achieve Door to Balloon times that meet or exceed current goals as proclaimed by the American Heart Association. This currently is D2B times under 90 minutes, 75% of the time. The times used to calculate D2B times shall be defined as per the Regional Cardiac Systems Registry data definitions. As with other criteria, best practices learned in achieving this criteria should be shared in the Regional Cardiac Care PI discussions.

6. Participation in Regional Cardiac Care PI Committee:

All Regional PCI Centers shall have a designated representative that regularly attends and participates in the Regional Cardiac Care PI Committee.

7. Participation / Compliance with Regional Cardiac System Registry:

All Regional PCI Centers shall submit data on all patients meeting the criteria as established by the Regional Cardiac Care Committee to the Regional Cardiac System Registry. This data shall be in a format and contain all data elements as defined by the Committee. At a minimum this shall include all STEMI patients, but further cases may be included as the system matures.

8. Senior Administration and Cardiology Commitment:

Facilities that desire to stand up as a Regional PCI Center, shall have commitment from their senior administration as well as their cardiology physicians. This shall be signified by signatures on this Letter of Attestation that each facility will complete prior to being identified as a Regional PCI Center.

EMS AGENCIES AGREE TO ACHIEVE THESE CRITERIA IN TREATING STEMI PATIENTS TO BE RECOGNIZED AS "REGIONAL EMS HEART ALERT AGENCIES"

1. **12-lead Capability:**
EMS Agencies wishing to be designated as Regional EMS Heart Alert Transport Agencies shall have 12-lead EKG capability on all in-service transport units at all times unless maintenance issues preclude it. The EMS Agency should have a documented plan and process in place for 12-lead interpretation initial and continuing education for appropriate field personnel. Lastly, EMS Agencies should have a plan in place or be working towards one that allows the Agency to transmit 12-lead EKG's to Regional PCI Centers.

2. **Utilize Heart Alert Criteria:**
EMS Agencies will agree to develop protocols and transport plans to deliver patients who meet Regional Heart Alert Criteria to Regional PCI Centers. Outlying Agencies shall work with their local facilities to integrate their plans with those of the non-PCI Centers to facilitate rapid treatment and transfer to a Regional PCI Center.

3. **On Scene Times:**
EMS Agencies should employ methods appropriate to minimize On Scene Times with Heart Alert patients. This includes developing procedures for:
   - Rapid recognition of Heart Alert candidates
   - 12-lead acquisition and communication as soon as possible
   - Departing the scene with a Heart Alert patient in under 20 minutes.

Best practices learned in achieving this criterion should be shared in the Regional Cardiac Care PI discussions.

4. **Participation in Regional Cardiac Care PI Committee:**
All participating EMS Agencies shall participate with the Regional Cardiac Care PI Committee and work to implement its recommendations.

5. **Participation / Compliance with Regional Cardiac System Registry:**
All participating EMS Agencies shall submit data on all patients meeting the criteria as established by the Regional Cardiac Care Committee to the Regional Cardiac System Registry. This data shall be in a format and contain all data elements as defined by the Committee. At a minimum this shall include all STEMI patients, but further cases may be included as the system matures.

TERM

This Letter of Attestation is in effect on the date on which it is signed and remains in effect for a period of three (3) years or if written notification is received revoking the Letter of Attestation with the Regional Cardiac Systems Committee. All parties reserve the right to terminate this Letter at any time, with or without cause. Thirty (30) day written notification is required for termination of this Letter.

City of
New Braunfels

FIRE DEPARTMENT

Organization: *New Braunfels Fire Department*

Primary EMS Agency POC: Mark Eliot

Primary EMS Agency POC Contact number: 830 660 3413

EMS Medical Director: John R Flanagan, MD

EMS Medical Director Contact number: 210 887 7692

EMS Agency Head signature: _____

Name: John Robinson, Fire Chief, New Braunfels Fire Department

Date: 01-22-09

EMS Medical Director Signature: _____

Date: 1/15/9

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APPENDIX A

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

OR

3. New or Presumed New onset Left Bundle Branch Block

If your patient does not meet Criteria 1 AND 2 OR 3, 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.

Ver. 06-06-08

Ver. 08/2008