Southwest Texas Regional Advisory Council

Southwest Texas Regional Advisory Council
Regional Percutaneous Coronary Intervention Facility
& EMS Heart Alert Agencies

LETTER OF ATTESTATION

August, 2015

BACKGROUND

The Southwest Regional Advisory Council (STRAC) formed a Regional Cardiac Systems Committee 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 be better served if this level of cooperation was continued across the entire spectrum of STEMI care. As a result, this Committee was formed, let by EMS Leaders and the STRAC Chairperson to avoid any issues of system favoritism during the initial stages of our system development.

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

Subsequently, the Committee worked on the requirements of healthcare facilities desiring Heart Alert patients transported to their Emergency Departments by EMS agencies. This step was vital to ensure these patients with time dependent pathology received expedient care. After much discussion, the Committee concluded there was no regulatory body currently accrediting or certifying facilities as STEMI treatment facilities. Therefore, our region would be best served by having facilities desiring to provide STEMI care sign a Letter of Attestation indicating they would work to meet all criteria on an ongoing basis.

It was recognized that EMS has a critical role in this process. Criteria were developed in order to provide consistency in care for these patients beginning with the 911 call through their intervention.

The Regional Cardiac Systems Committee sees this document as a work in process. The criteria were developed from the recommendations of the national Door 2 Balloon Alliance as a preliminary measure for facilities to work to achieve State and National Designations. It is the intent of the Committee that criteria will be reviewed annually and adjusted to better meet the needs of our region based upon the relevant science at that time.

PURPOSE

Regional PCI Receiving Centers that complete this letter are attesting their ability to achieve these criteria and maintain the capabilities twenty-four (24) hours per day, seven (7) days per week.

PCI Referral Centers that complete this letter are attesting their ability to achieve these criteria and maintain the capabilities as outlined within this LOA.

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 Receiving Centers.

ABBREVIATIONS / DEFINITIONS

1. **ACS**: Acute Coronary Syndrome, as defined by the American Heart Association (AHA), 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, or pulmonary edema.
2. **CPG**: Clinical Practice Guidelines
3. **Heart Alert**: Participants developed the term to classify a subset of patients 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.
4. **Heart Alert Criteria**: Criteria developed collaboratively by EMS, Hospitals, and Interventional Cardiologists across the region and is defined as a patient having signs and symptoms of ACS AND have a 12-lead ECG showing ST segment elevation of 1mm (millimeter) or more in 2 contiguous leads (refer to www.strac.org for the most current criteria based on national standards) and regional outcomes based data.
5. **ED**: Emergency Department
6. **EMS Agency**: means 911 EMS providers, although in general refers to the EMS providers throughout the STRAC region.
7. **RCSC**: Regional Cardiac Systems Committee
8. **Regional PCI Receiving Center**: a hospital that has signed this Letter of Attestation and is meeting and maintaining the criteria as laid out in this document. Regional PCI Receiving Centers are facilities ALL Heart Alert patients will be transported to as soon as possible after a STEMI is recognized.
9. **PCI Referral Center**: a hospital that has signed this Letter of Attestation that is working towards meeting and maintaining the criteria as laid out in this document.
10. **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 THE FOLLOWING CRITERIA IN TREATING STEMI PATIENTS TO BE RECOGNIZED AS "REGIONAL PCI RECEIVING CENTERS."

Facilities that desire to standup as a **Regional PCI Receiving 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 Receiving Center**. The following tenets represent the core of this LOA for Regional PCI Receiving Centers. Refer to Appendix-B for Clinical Practice Guidelines and Appendix-C STRAC RCSC Goals and Participation Guidelines:

- **A. ED Physician or designee 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 or designee 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.
- **B. Utilize Heart Alert Criteria for field activation of Cath lab**: whenever a hospital is notified by any participating EMS transport agency that they are en route with a patient that meets the STRAC regional criteria for Heart Alert, the ED shall immediately activate the Cath lab for an incoming Heart Alert following all established in-house procedures.
    1. Regional PCI Receiving Centers shall have a communication plan in place to indicate diversion when their PCI capability is overloaded or otherwise unavailable.
    2. Communication of diversion status to EMS should occur at the time of EMS report.
- **C. One call activates the Cath lab**: as a **Regional PCI Receiving 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 ED. 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 **Regional PCI Receiving Center** criteria.

HEALTHCARE FACILITIES AGREE TO ACHIEVE THE FOLLOWING CRITERIA IN TREATING STEMI PATIENTS TO BE RECOGNIZED AS "PCI REFERRAL CENTERS."

PCI Referral Centers shall have commitment from their senior administration as well as their emergency physicians, and/or cardiology physicians. This shall be signified by signatures on this Letter of Attestation that each facility will complete prior to being identified as a **PCI Referral Center**. The following tenets represent the core of this LOA for Regional PCI Referral Centers. Refer to Appendix-B for Clinical Practice Guidelines and Appendix-C for STRAC RCSC Goals and Participation Guidelines:

- **A. ED Physician or designee evaluates patient for appropriateness for Thrombolytic administration and initiation of immediate transfer to a Regional PCI Receiving Center.**
- **B. ED Physician or designee will notify Regional PCI Receiving Center of Heart Alert and initiate transfer process.**
- **C. PCI Referral Center administering Thrombolytic must have a plan in place for rapid transportation to a Regional PCI Receiving Center by a critical care transport agency.**

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

The following tenets represent the core of this LOA for EMS Heart Alert Agencies. Refer to Appendix-B for Clinical Practice Guidelines and Appendix-C for STRAC RCSC Goals and Participation Guidelines:

A. 12-lead Capability:

1. 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.
2. The EMS agency should have a documented plan and process in place for 12-lead interpretation initial and continuing education for appropriate field personnel.
3. 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.
4. EMS agencies shall have a process to ensure the 12-lead EKG is part of the EMS medical record.

B. 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 Receiving Centers**. Outlying EMS agencies shall work with their local facilities to integrate their plans with those of the PCI Referral Centers to facilitate rapid treatment and transfer to a **Regional PCI Receiving Center**.

TERM

This Letter of Attestation (LOA) is in effect on the date on which it is signed and remains in effect for a period of three (3) years. All parties reserve the right to terminate this LOA at any time, with or without cause. Upon expiration thereof, this agreement will continue in force until either party notifies the STRAC Regional Cardiac Systems Committee in writing of its intent to terminate this agreement in which case it shall terminate thirty (30) days from the date of the notice.

Facilities signing this LOA are attesting that their facility or facilities meets the criteria and they will maintain the capabilities as specified in this LOA.

Facility: _____

Designation (Choose Level): _____ **Regional PCI Center** _____ **PCI Referral Center**

Cardiac Center Representative: _____

Cardiac Center Representative Contact Number: _____

Senior Administrative Representative: _____

Senior Administrative Representative Contact Number: _____

Cardiac Center Medical Director: _____

Cardiac Center Medical Director Contact Number: _____

Southwest Texas Regional Advisory Council	
By: _____ Dudley Wait, Cardiac Committee Chair _____ Date	By: _____ Eric Epley, Executive Director _____ Date
Organization Name:_____	
By: _____ CEO Name _____ Date	By: _____ _____ Date

EMS Organization: _____

Primary EMS Agency Representative: _____

Primary EMS Agency Representative Contact Number: _____

EMS Medical Director: _____

EMS Medical Director Contact Number: _____

Southwest Texas Regional Advisory Council	
By: _____ Dudley Wait, Cardiac Committee Chair _____ Date	By: _____ Eric Epley, Executive Director _____ Date
Organization name: _____	
By: _____ EMS Agency Head _____ Date	By: _____ _____ Date

APPENDIX A*

Heart Alert Criteria

***Refer to www.strac.org for the most recent criteria based on national standards and regional outcomes based data.**

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.

Ver. 02-11-2010

APPENDIX B
Clinical Practice Guidelines

PCI RECEIVING CENTER

- **A.** The current recommendation of the STRAC RCSC is full dose Thrombolytic therapy for patients being transferred to a Regional PCI Receiving Center from a PCI Referral Center.
- **B.** Regional PCI Receiving Centers agree to accept patients that receive Thrombolytic therapy prior to transport.

PCI REFERRAL CENTERS

Refer to Appendix-D for the STRAC RCSC STEMI Management Guidelines.

APPENDIX C
STRAC RCSC Goals and Participation Guidelines

Regional Cardiac Systems Committee Goals
And Participation Guidelines

HEALTHCARE FACILITIES AGREE TO ACHIEVE THE FOLLOWING CRITERIA IN TREATING STEMI PATIENTS TO BE RECOGNIZED AS "REGIONAL PCI RECEIVING CENTERS."

A. **The goal of the region is ED length of stay should not exceed twenty-five (25) minutes 75% of the time**.
B. **Complete Cath lab team including cardiologist/interventionalist ready in 30 minutes of activation**: as a Regional PCI Receiving Center, facilities should employ methods appropriate to have their entire Cath lab team ready within thirty (30) minutes. There has been much discussion regarding this criterion to include what "ready" means, cardiologist versus interventionalist present at the start of the procedure, and other alternative means of facilities reaching this goal. The STRAC RCSC has determined that each Regional PCI Receiving Center will have to employ their own methods to achieve this criterion.
C. **PCI process with Door to Balloon (D2B) times as core component**: all Regional PCI Receiving Centers shall have an in-house PI Process specific to their STEMI processes. A main component of these processes shall be to achieve D2B times that meet or exceed current goals as defined by the AHA. This currently is D2B times under ninety (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 STRAC Regional Cardiac Systems Performance Improvement (PI) Committee discussions.
D. **Participation in STRAC RCSC and Regional Cardiac Systems Registry:**
    1. Cardiac Service Line Representative must be physically present for 50% of the STRAC RCSC Meetings. A physician representative is highly recommended as well.
    2. Hospitals shall submit data as defined by the STRAC RCSC to the Regional Cardiac Registry monthly and be no later than one quarter behind in submission.
    3. 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 additional cases may be included.
E. **The regional goal is to report 100% of walk-ins and EMS patients that are activated as heart alerts.**

HEALTHCARE FACILITIES AGREE TO ACHIEVE THE FOLLOWING CRITERIA IN TREATING STEMI PATIENTS TO BE RECOGNIZED AS "PCI REFERRAL CENTERS."

A. **The regional ED Door-In to Door-Out (DIDO) goal is thirty (30)-minutes 75% of the time**.
B. **Participation in STRAC RCSC and Regional Cardiac System Registry:**
    1. Cardiac Service Line Representative must be physically present for 50% of the STRAC RCSC Meetings. A physician representative is highly recommended as well.
    2. Hospital shall submit data as defined by the STRAC RCSC to the regional cardiac registry monthly and be no later than one quarter behind in submission.

3. 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 additional cases may be included.

C. The regional goal is to report 100% of walk-ins and EMS patients that are activated as heart alerts.

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

A. 12-lead Capability:

1. 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.
2. The EMS agency should have a documented plan and process in place for 12-lead interpretation initial and continuing education for appropriate field personnel.
3. 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.
4. EMS agencies shall have a process to ensure the 12-lead EKG is part of the EMS medical record.

B. 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 EMS 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.

C. On Scene Times: EMS Agencies should employ methods appropriate to minimize on scene times with Heart Alert patients. This includes developing procedures for:

1. Rapid recognition of Heart Alert candidates.
2. Early notification of Heart Alert.
3. 12-lead acquisitions and communication within 5 minutes.
4. Departing the scene with a Heart Alert patient in under twenty (20) minutes Best practices learned in achieving this criterion should be shared in the STRAC Regional Cardiac Systems PI Committee discussions.

D. Participation in Regional Cardiac Care PI Committee: all participating EMS agencies shall participate with the STRAC Regional Cardiac Systems PI Committee and work to implement its recommendations.

E. Participation / Compliance with Regional Cardiac System Registry: all participating EMS agencies shall submit data on all patients meeting the criteria as established by the STRAC RCSC 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.

APPENDIX D*
STRAC RCSC STEMI Management Guidelines

***Refer to www.strac.org for the most recent guidelines based on national standards and regional outcomes based data.**

STEMI Management Guidelines for Inter-facility Transfer

Heart Alert Criteria

1. Patients with signs & 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.

Thrombolytic Algorithm

- Confirmed STEMI on 12 lead? → **NO:** patient not in STEMI guideline at this time.
  - ↓ **YES:** Activate "Heart Alert" as early as possible.
- Begin thrombolytic contraindications checklist immediately
  a. Onset of symptoms <12 hours: administer full dose thrombolytic* and transfer urgently to PCI Center.
  b. Onset of symptoms >12 hours: consider thrombolytic and consult with receiving facility.

*Fibrin-specific agents preferred: tenecteplase (TNKase) or reteplase (Retavase)

Green County Goal: Door to Thrombolytic in < 30 minutes and urgent transfer to PCI Center

- Counties that do not have a PCI Center: administer full dose thrombolytic

Red County Goal: Door to PCI in < 120 minutes

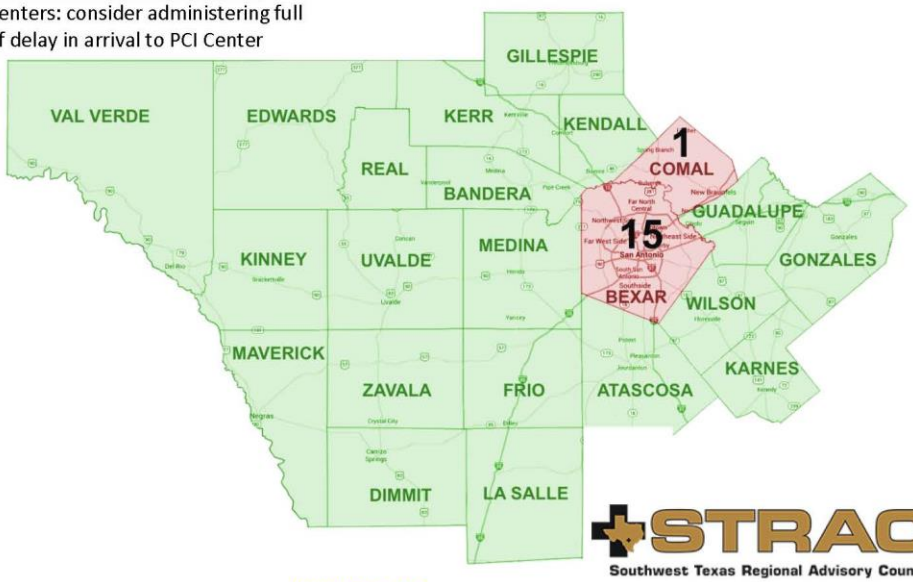
- Counties with PCI Centers: consider administering full dose thrombolytic if delay in arrival to PCI Center

Bexar County PCI Centers:

- **Baptist Medical Center**
- **Christus Santa Rosa Medical Center**
- **Christus Santa Rosa Westover Hills**
- **Methodist Hospital**
- **Methodist Stone Oak Hospital**
- **Methodist TexSan Hospital**
- **Metropolitan Methodist Hospital**
- **Nix Medical Center**
- **North Central Baptist Hospital**
- **Northeast Baptist Hospital**
- **Northeast Methodist Hospital**
- **San Antonio Military Medical Center**
- **Southwest General Hospital**
- **St. Luke's Baptist Hospital**
- **University Hospital**

Comal County PCI Centers:

- **Christus Santa Rosa New Braunfels**



STRAC
Southwest Texas Regional Advisory Council

STRAC Regional Cardiac Systems Committee, www.strac.org v5 OCT, 2015