



# STEMI Receiving Center Designation Process

Rev. 2-6-2013

## PURPOSE

To define requirements for designation of a hospital as a ST-elevation myocardial infarction (STEMI) receiving center for the Austin-Travis County EMS (ATCEMS) System. This designation authorizes the EMS System to transport patients with an identified or suspected “STEMI” to the designated facility and to bypass closer non-designated facilities.

## STANDARD

This standard has been developed in conjunction with regional Mission Lifeline initiatives to ensure all EMS patients with STEMI are transported to designated facilities that are appropriately staffed, equipped and prepared to provide specialized care. The goal is to establish a partnership between EMS and receiving facilities to create STEMI Systems of Care in conjunction with regional and national initiatives designed to reduce morbidity and mortality from STEMI.

## DEFINITIONS

- A. STEMI: EKG evidence of ST-Segment elevation, as defined by regional AHA Mission Lifeline criteria, suspected to be due to Acute Coronary Syndrome (ACS).
- B. STEMI Alert: A communication from EMS personnel that provides early notification to STEMI Receiving Center that a patient with a prehospital 12-lead interpretation of STEMI is in route to their institution.
- C. STEMI Receiving Center: A hospital facility licensed for cardiac catheterization by the State Department of Health and Human Services, is able to provide emergency services and is approved by the Office of the Medical Director. Open heart surgical backup is not a requirement for the Center.

## SYSTEMS OF CARE APPROACH

A well-organized approach to STEMI care requires system-wide integration between the community, EMS, emergency department services and the cardiac catheterization lab. Mission Lifeline recommendations acknowledge the importance of a multidisciplinary approach including early identification of STEMI by pre-hospital providers and transport to facilities with specialized resources and experience to optimize patient outcomes. In accordance with these guidelines, the Office of the Medical Director (OMD) defines STEMI receiving facilities to allow the EMS System to bypass non-designated facilities and transport potential STEMI patients to the most appropriate receiving facility for definitive treatment. Mission Lifeline also emphasizes the importance of a multidisciplinary approach to implementation of evidence based practice and continuous improvements to the STEMI care process. The STEMI Receiving Center designation process includes a commitment by the OMD and the designated receiving facilities to conduct cooperative review of performance in order to identify opportunities for continuous improvement.

## APPLICATION PROCESS

This section provides interested hospitals with a description of the process and requirements for seeking and obtaining designation as an EMS System STEMI Receiving Center.

### A. Prerequisites for Designation

- a. The facility is currently designated as an OMD Basic Emergency Department Level 1 receiving facility with the ability to manage Delta and Echo EMS patients (high acuity patients);
- b. The facility has been designated an OMD Basic Emergency Department Level 1 receiving facility for a period not less than six months.
- c. The facility meets all requirements for Mission Lifeline Participation Level.

### B. Initiation of Designation Process

- a. An administrative representative should initiate the process by submitting a letter of intent to seek designation via e-mail, US mail, or courier service to the ATCEMS Office of the Medical Director;
- b. The letter should identify the chosen point of contact for the purposes of the designation process and information indicating how the contact may be reached.
- c. The facility may withdraw from the process at any time by indicating their withdrawal in writing. Withdrawal does not bias or prohibit future application.

### C. Designation Process

- a. As required by this process, the STEMI Receiving Center must provide documentation of policies, procedures, protocols and/or processes related to STEMI Systems of care in an electronic format, preferably in a PDF file format. **(See Initial Designation Criteria)**
- b. Submitted documents and/or included explanations should indicate whether the document is a current or proposed practice for the facility. Proposed practice should include a planned implementation date.

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- c. After receipt of the hospital's letter of intent and prior to formal designation, representatives of the Office of the Medical Director and multidisciplinary representatives from the STEMI Receiving Center meet to discuss questions, concerns, capabilities and next steps.
- d. Facilities will receive a written notification of designation status within 45 days once all the required documents are submitted to the Office of the Medical Director.
- e. Notification will be directed to the Center's identified designation process point of contact and STEMI Champion(s) (Please see Criteria regarding Leadership & Designated Staff).

## **INITIAL DESIGNATION CRITERIA**

There are two main pathways for initial designation - Hospitals with current Mission Lifeline accreditation and all other Hospitals.

### **Hospitals with current Mission Lifeline Accreditation**

Hospitals with current Mission Lifeline accreditation will be granted designation as an EMS System STEMI Receiving Center by completing the following:

1. Submit a letter from the Hospital CEO demonstrating commitment to the designation criteria listed in this document.
2. Submit the STEMI Receiving Center points of contact information requested in Appendix D.

### **Hospitals without current Mission Lifeline Accreditation**

Hospitals without current Mission Lifeline accreditation must demonstrate the ability to consistently and reliably meet each of the following requirements.

1. Provide written commitment for 24/7/365 availability of cardiac catheterization lab with available interventional cardiology services.
2. Provide written commitment to pre-arrival activation of the cardiac catheterization team, to include the interventional cardiologist, once a possible STEMI Alert is communicated from EMS to the STEMI Receiving Center.
3. Demonstrate implementation of the CATRAC Regional Mission Lifeline Guidelines for STEMI Receiving Centers including best practices for PCI centers contained within the Mission Lifeline Field Guide.
4. Agree to a non-diversion policy except in situations of a hospital internal disaster (e.g. fire, hazardous material emergency, facility lockdown, loss of catheterization lab equipment etc.)
5. Submit a plan for triage & treatment for simultaneous presentation of STEMI patients.
  - a. Provide documentation of the Center's plan for triage and treatment of simultaneous presentation of STEMI patients.

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- b. Meet the minimum requirements outlined in the Regional Mission Lifeline Guidelines
6. Provide the required data (See Appendix B) for the two most recent and consecutive quarters.
  - a. Demonstrate at least 85% compliance with door-to-first device time within 90 minutes every quarter.
  - b. Applicable STEMI data includes EMS scene transports and walk-in patients but excludes transfers.
7. Actively participate in CATRAC Cardiac Care Workgroup (AHA Mission Lifeline) initiatives including active participation in at least one subgroup.

## **MAINTENANCE CRITERIA**

1. Demonstrate at least 85% compliance with door-to-first device time within 90 minutes every quarter.
2. Active participation in the American Heart Association (AHA) Mission Lifeline RAC initiatives including attending quarterly meetings. (Defined as attendance of at least 75% of all CATRAC Cardiac Care Workgroup quarterly meetings and attendance of at least 50% meeting attendance of either the regional Mission Lifeline QI, Education or Protocols subgroups.)
  - a. Attendance of Subgroup meetings is met when at least one of the STEMI Receiving Center's direct staff participates in at least 50% of the Subgroup's meetings for the calendar year.
  - b. Attendance of Workgroup meetings is met when at least one of the STEMI Receiving Center's direct staff or network staff participates in at least 75% of the Subgroup's meetings for the calendar year.
3. Provide STEMI case feedback in a timely manner as defined by the QI Subgroup (No PHI) to the EMS Agency's Office of the Medical Director for distribution to appropriate prehospital providers including dispatchers and first responders.
4. Continue to meet all criteria required of the initial designation.

## DESIGNATION STATUS

There are three STEMI Center designation levels.

### A. Temporary Designation

- a. The OMD may grant a 1-year temporary designation to facilities that have not completed the Mission Lifeline Accreditation process or for new facilities that lack sufficient data to demonstrate performance measures for initial designation.
- b. At the conclusion of the temporary designation period a facility that meets criteria will be granted Full Designation. If the facility does not meet criteria they may be placed on probation or denied STEMI Receiving Center Designation. This will be determined on a case-by-case basis after review by the OMD.

### B. STEMI Receiving Center Designation

- a. Facilities with a current AHA Mission Lifeline Accreditation, those that meet the requirements outlined in this document and those that have successfully completed the designation requirements under Temporary Designation status will be designated as an ATCEMS System STEMI Receiving Center.
- b. Designation is valid for a period of three years from the date of full STEMI Receiving Center Designation as long as maintenance criteria are met. At the end of the three year period facilities may renew their designation with a letter of intent to renew.

### C. Probationary Designation

- a. Designated STEMI Receiving Centers that fail to meet the defined performance criteria for two consecutive quarters will be placed on a Probationary Designation Status for a minimum of 6 months to allow implementation of a performance improvement plan.
- b. Probationary status is a performance improvement designation only and does not affect the published status of the facility as a STEMI receiving center. Facilities are expected to develop performance improvement plans with or without the assistance of the OMD. Facilities will continue to receive STEMI patients while they implement their performance improvement plan.
- c. At the conclusion of the probationary period the facility may:
  - i. Return to full STEMI Receiving Center designation;
  - ii. Continue in a probationary status for a minimum of 3 months.
  - iii. Be removed from the Designated STEMI receiving facility list for a period of 1 year. (See Loss of Designation)

## LOSS OF DESIGNATION

The Office of the Medical Director may deny, suspend or revoke the designation of a STEMI Receiving Center. Facilities that lose designation status cannot reapply for a minimum of 1 year. Loss of designation may result from failure to maintain compliance with the criteria for designation including but not limited to:

- A. Failure to meet all designation requirements following a probationary period;
- B. Failure to provide required data;
- C. Failure to participate in STEMI performance improvement activities with the OMD.

**DATA MANAGEMENT & REPORTING:** Quality improvement is a vital component of successful STEMI Systems of Care. The AHA/ACC guidelines recommend the use of quality improvement processes that includes measurement, benchmarking, and feedback.

### A. Data Sharing

- a. Designated facilities will provide written agreement to:
  - i. Share key performance data and patient outcomes with the OMD on a quarterly basis. (See Appendix B)
  - ii. Provide individual STEMI case feedback to the OMD for distribution to appropriate prehospital providers including dispatchers and first responders.
  - iii. Provide aggregate data as outlined in Appendix B. Submission of an Action Registry or Mission Lifeline report may be used to meet a part of this data requirement
- b. The OMD agrees to share aggregated outcomes reports with all designated centers in a blinded fashion.
- c. Data is submitted during the following time periods:
  - Quarter 1 - June 1 through June 30 of same year
  - Quarter 2 - September 1 through September 30 of same year
  - Quarter 3 - December 1 through December 31 of same year
  - Quarter 4 - March 1 through March 31 of following year

### B. Data Analysis

- a. The STEMI Receiving Center and EMS System agree to cooperative identification of performance improvement opportunities based on data analysis or to address provider or patient concerns.
- b. The STEMI Receiving Centers and the OMD agree to meet as a group twice a year to review STEMI performance data (System, blinded or aggregate data only).

## PERFORMANCE IMPROVEMENT

- A. Designated receiving facilities:
  - a. Commit to meeting the agreed upon STEMI systems of care performance measures.
  - b. If unable to meet quarterly performance measures agree to develop and implement a written performance improvement plan and to share that plan with the OMD
  - c. Agree to participate in Office of the Medical Director STEMI Systems of Care performance improvement initiatives.
- B. The Office of the Medical Director:
  - a. Commits to meeting the performance metrics identified by the CATRAC Cardiac Care Workgroup and the practices outlined within the Field Guide.
  - b. If the EMS System is unable to meet the performance improvement metrics, the OMD will develop a written performance improvement plan and provide that plan to the designated receiving facilities.
  - c. Agrees to participate in designated STEMI receiving center performance improvement initiatives when necessary.

## EDUCATION & COMMUNICATION

- A. For a STEMI System of care to be successful providers from each organization must be knowledgeable in the clinically meaningful elements of STEMI care with the shared goal of optimizing that care.
  - a. Education
    - i. The STEMI Receiving Center agrees to provide education to its clinical staff members directly involved in STEMI care to facilitate the implementation of and changes to key components of a successful STEMI System of care and the designation criteria in this document.
    - ii. The Office of the Medical Director will supervise the provision of education to prehospital providers involved in STEMI care to facilitate the implementation of and changes to key components of STEMI management.
  - b. Communications
    - i. The STEMI Receiving Center communicates the Designation process and general requirements to its affected staff.
    - ii. The identified STEMI champion(s) and Data Coordinator are the points of contact for the STEMI receiving center.
    - iii. The Performance Improvement Coordinator is the point of contact for the OMD.

## **LEADERSHIP & DESIGNATED STAFF**

To be a successful, a STEMI Receiving Center must have strong advocacy and leadership as well as staff to manage the day to day requirements.

- A. Hospital Leadership
  - a. The facility identifies at least one clinical person to serve in the role of STEMI Champion.
  - b. The OMD will designate one person to serve in the role of the primary point of contact for the designation process and ongoing communication.
- B. Data Coordinator
  - a. The facility identifies at least one person serving in the role of data coordinator. The role may be served by the STEMI Champion.
  - b. The OMD will designate at least one person serving in the role of data coordinator.
  - c. The STEMI center and OMD data coordinators comply with data requests in a timely manner.
- C. Contact Information
  - a. The STEMI Receiving Center provides the names and contact information for STEMI Champion(s) and Data Coordinator(s) and updates this information in the event of a change.
  - b. The ATCEMS Office of the Medical Director will designate a point of contact and provide the name(s) and contact information to existing STEMI Receiving Centers and to those in the designation process. Any changes will be reported to the appropriate facilities.

## **APPENDICES**

- A. Appendix A – Checklist for STEMI Receiving Center Designation
- B. Appendix B - Required Data
- C. Appendix C – STEMI Case Feedback Form/Data
- D. Appendix D – STEMI Receiving Center Point of Contact Information



## Appendix – A

### Checklist for Initial STEMI Receiving Center Designation<sup>1</sup>

No.	Criteria	Documentation Provided <sup>1</sup>	Meets Criteria
1	Provide written commitment for 24/7/365 availability of cardiac catheterization lab with available interventional cardiology services.		
2	Provide written commitment to pre-arrival activation of the cardiac catheterization team, to include the interventional cardiologist, once a possible STEMI Alert is communicated from EMS to the STEMI Receiving Center.		
3	Provide STEMI case feedback as defined by the Mission Lifeline QI Subgroup (No PHI) to the Office of the Medical Director for distribution to appropriate prehospital providers including dispatchers and first responders.		
4	The STEMI receiving center agrees to a non-diversion policy except in situations of a hospital internal disaster (e.g. fire, hazardous material emergency, facility lockdown, loss of catheterization lab equipment etc.)		
5	<p>Submit a plan for triage &amp; treatment for simultaneous presentation of STEMI patients.</p> <ul style="list-style-type: none"> <li>• Provide documentation of the Center’s process for managing STEMI patients while another patient is prepped in the cardiac catheterization lab.</li> <li>• Provide documentation of the Center’s process for notifying ATCEMS when the catheterization lab will be unavailable for an extended period of time (45 minutes or longer)</li> </ul>		
6	Demonstrate at least 85% compliance with door-to-first device time within 90 minutes every quarter.		
7	Hospital has dedicated comprehensive ICU services and staff		

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8	Participation in the CATRAC Cardiac Care Workgroup (AHA Mission Lifeline) initiatives including active participation in at least one subgroup.
9	Provide a minimum of 2 most recent and consecutive quarters in which performance measures were met.
10	Demonstrate implementation of the CATRAC Regional Mission Lifeline Guidelines for STEMI Receiving Centers including best practices for PCI Centers included in the regional Field Guide.

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<sup>1</sup>**Not applicable to Hospitals currently accredited by AHA Mission Lifeline**

Documentation should also include (Also see Appendix D):

- STEMI Champion (Primary Point of Contact after designation) (Name, Position, Phone, Email)
- Alternate STEMI Champion (if applicable) (Name, Position, Phone, Email)
- STEMI Center Data Coordinator (if different than the STEMI Champion)
- Hospital Designation Process Primary Point of Contact (if different than the STEMI Champion)
- LOA for Data sharing between the OMD and STEMI Receiving Center

## Appendix – B

### Data

Data Number	Data Element or Measure	Definition	Reporting Frequency
1	Total Number of STEMI Alerts rec'd via EMS (preferred data)	The total number of patients communicated to the STEMI Center by any EMS agency as meeting the regional definition of STEMI	Quarterly
2	Total Number of CANCELLED STEMI Alerts rec'd via EMS (preferred data)	The total number of patients communicated to the STEMI Center by any EMS agency as meeting the regional definition of STEMI that are subsequently cancelled prior to arrival in the cardiac cath lab	Quarterly
3	Proportion of STEMI patients with first medical contact to first device time < 90 minutes (required data)	The total number of STEMI patients with a first medical contact by (EMS or ED) to first device time interval < 90 minutes divided by the total number of STEMI patients who arrive at the hospital ED by any means including EMS and walk-in patients (excludes transfers from another facility) (expressed as a %)	Quarterly
4	Proportion (%) of ALL STEMI patients with Hospital Door to First Device Time < 90 minutes (required data)	The total number of STEMI patients with a hospital door-to-first device time interval less than 90 minutes divided by the total number of STEMI patients who arrive at the hospital ED by any means including EMS and walk-in patients (expressed as a %)	Quarterly
5	Proportion (%) of ALL STEMI patients receiving any reperfusion (PCI or fibrinolysis) (required data)	The total number of STEMI patients treated with a reperfusion technique (including both primary PCI and fibrinolysis) divided by the total number of STEMI patients who arrive at the hospital ED by any means including EMS and walk-in patients (expressed as a %)	Quarterly

*Note: STEMI patients include all that meet the Mission Lifeline Action Registry definitions and exclusions. Data elements #3 – 5 should be derived from Action Registry data. A Mission Lifeline or Action Registry quarterly report may be used to meet requirements #3-5.*

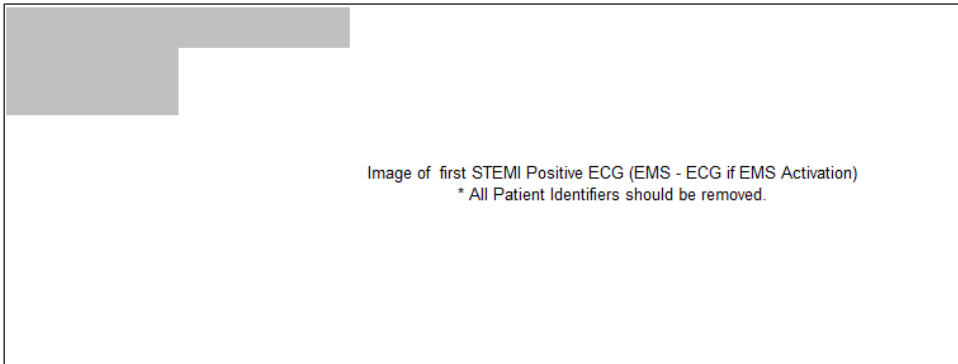
# Appendix – C

## STEMI Case Feedback Form/Data

### EMS STEMI Alert Feedback Template

Date of Service -  
 Agency Name -  
 Hospital Name -

EMS Run Number -



Interventionalist ECG Interpretation:

Data element	Clock time	Notes
First Medical Contact (FMC)		
1 <sup>st</sup> Field 12 lead ECG		
1st Positive Field ECG for STEMI		
Cath lab activated by PCI Hospital		
PCI Hospital Door		
1st Device / balloon		

Interventionalist Findings	Notes
STEMI Confirmed per M-L Criteria	
Culprit Artery or Possible Confounder	

Data Measure	Time Interval (mins)	Notes
FMC to 1st Field 12 lead ECG		
FMC to 1st Device/balloon		
1st Positive Field ECG for STEMI to Cath lab activated by PCI hospital		
PCI hospital door to device balloon		

CATRAC Cardiac Care Workgroup (Mission Lifeline) approved EMS Feedback Template, Version 6, Sept 2012

## Appendix – D

### STEMI Receiving Center Point of Contact Information

Hospital Points of Contact			
Name	STEMI System Role	Phone	Email
	STEMI Champion - <i>Primary Point of Contact</i>		
	STEMI Champion – <i>Secondary Point of Contact (if applicable)</i>		
	<i>Designation Process Point of Contact (if applicable)</i>		
	<i>STEMI Data Coordinator (if different than the STEMI Champion)</i>		

Note: Please complete the shaded boxes for each STEMI Receiving Center seeking designation.

OMD Points of Contact			
Name	STEMI System Role	Phone	Email
Louis Gonzales	<i>Primary Point of Contact &amp; Data Coordinator</i>	512-978-0011 O 512-563-6882 C	Louis.gonzales2@ austintexas.gov
Jose Cabanas, MD	<i>Secondary Point of Contact</i>	512-978-0000 O	Jose.cabanas@ austintexas.gov

**Send Clinical Concerns regarding Austin/Travis County EMS System providers to:**

Louis Gonzales → [Louis.gonzales2@austintexas.gov](mailto:Louis.gonzales2@austintexas.gov)

and

Adam Johnson → [Adam.Johnson@austintexas.gov](mailto:Adam.Johnson@austintexas.gov)

or

[tellemsmd@austintexas.gov](mailto:tellemsmd@austintexas.gov)