

Monterey County EMS System Policy



Policy Number: 5150
Effective Date: 7/1/2018
Review Date: 6/30/2021

STEMI RECEIVING CENTER

I. PURPOSE

To define requirements for designation as a Monterey County STEMI Receiving Center (SRC) for patients transported, through the Monterey County EMS and Emergency Communications (9-1-1) Systems, with ST-elevation myocardial infarction (STEMI) who may benefit by rapid assessment and percutaneous coronary intervention (PCI).

II. POLICY

- A. A hospital requesting designation as an SRC shall apply to the Monterey County EMS Agency following the application process outlined in this policy. The application (attached) shall be submitted at least three (3) months prior to desired date of implementation.
- B. Designation as an SRC shall be made by the Monterey County EMS Agency following a review of the application and after ensuring that all designation criteria are met.
- C. Monterey County STEMI Receiving Centers shall accept all ambulance transported patients with a suspected STEMI except in situations of internal disaster.
- D. Once a hospital is notified that a possible STEMI patient is en route to their facility and an ECG is received from the field and confirmed to be a STEMI by the STEMI Receiving Hospital, the SRC shall activate their internal STEMI response.

III. APPLICATION PROCESS

To apply for designation as an EMS SRC for Monterey County, an interested hospital shall:

- A. Submit SRC application (attached) and documentation to the Monterey County EMS Agency.
- B. Submit applicable designation fees to cover initial and ongoing Monterey County EMS Agency costs to support the STEMI program.
 1. STEMI Receiving Center Application Fee: A STEMI Receiving Center application fee will be established. This fee will cover the costs associated with the designation process. These costs may include contract costs for plan development, Requests for Proposal development, review of proposals, out of area site team costs, legal reviews and agency costs in excess of the costs associated with the day to day STEMI system regulation. The STEMI Receiving Center application fee will be assessed for hospitals applying for STEMI Receiving Center designation. Fees paid that are in excess of actual costs will be returned to applicants.

2. STEMI receiving center designation fee: The Monterey County Board of Supervisors will establish a STEMI receiving center annual fee. This fee covers the cost of monitoring the operation of the STEMI System in compliance with Monterey County policies. The fee will be based on the time requirements of the STEMI System Medical Director, STEMI System Coordinator, and other staff activity dedicated to STEMI issues as well as associated overhead and program support costs.

Monterey County EMS Agency will provide the designated STEMI Receiving Centers written notice of any increase in the designated fee at least 180 days (6 months) prior to the effective date of the increase with an explanation for the increase and the basis on which it was calculated.

- C. Develop agreements with other Monterey County hospitals to accept any STEMI patients from those facilities. A copy of these agreements shall be included in the application packet.

IV. DESIGNATION CRITERIA

- A. Current California licensure as an acute care facility providing Basic or Comprehensive Emergency Medical Services.
- B. Ability to enter into a written agreement with Monterey County identifying SRC and Monterey County EMS Agency roles and responsibilities.
- C. Meets SRC Designation Criteria as defined in the STEMI Designation Application. The criteria include the provision of the following resources:
 1. Hospital Services
 - a. Special permit from Department of Health for cardiac catheterization laboratory.
 - b. Intra-aortic balloon pump capability.
 - c. Special permit for cardiovascular surgery service.
 - 1) Conformance with the American College of Cardiology/American Heart Association/Society for Cardiovascular Angiography and Intervention (ACC/AHA/SCAI) guidelines for centers without backup cardiovascular surgery will be evaluated in consideration of the waiver.
 - 2) The Monterey County EMS Medical Director may waive this requirement for patient or system needs.
 - d. Continuous availability of PCI resources (24-hours/7-days a week).
 2. Hospital Personnel
 - a. STEMI Receiving Center Medical Director
 - b. STEMI Receiving Center Program Manager
 - c. Cardiac Catheterization Lab Manager/Coordinator

- d. Intra-aortic balloon pump technician(s)
- e. Appropriate Cardiac catheterization nursing and support personnel
- f. Physician Consultants
 - 1) Cardiology interventionalist
 - 2) CV Surgeon
- 3. Clinical Capabilities
 - a. Performance (timeliness) and outcome measures will be assessed initially in the EMS survey process, and will be monitored closely on an ongoing basis.

D. Appropriate internal (hospital) policies including:

- 1. Cardiac interventionalist activation with the on-call cardiologist immediately available.
- 2. Cardiac catheterization lab team activation with team arrival within thirty minutes of activation.
- 3. Activation of the cardiac interventionalist and catheterization lab team upon notice that a patient with STEMI is being transported to their facility.
- 4. STEMI contingency plans for personnel and equipment to include activation of a second cardiac interventionalist and catheterization lab team should this be needed.
- 5. Coronary angiography.
- 6. PCI and use of fibrinolytics.
- 7. Interfacility transfer STEMI policies/protocols.
- 8. Collection of data and a process for sharing requested data with the Monterey County EMS STEMI QI Committee.
- 9. Developing and maintaining a hospital STEMI QI Committee.

E. Performance Improvement Program

- 1. Participation in Monterey County EMS STEMI QI Committee. The Committee shall include:
 - a. EMS Medical Director
 - b. Designated EMS Agency staff member
 - c. Designated cardiologist from each SRC
 - d. Designated quality improvement representative from each SRC
- 2. Meetings to be held on a quarterly basis initially. Meeting frequency to be reviewed following the first year.

3. Written internal quality improvement plan/program description for STEMI patients shall include appropriate evidence of an internal review process that includes:
 - a. Death rate (within 30 days, related to procedure regardless of mechanism)
 - b. Emergency CABG rate (result of procedure failure or complication)
 - c. Vascular complications (access site, transfusion, or operative intervention required)
 - d. Cerebrovascular accident rate (peri-procedure)
 - e. Post-procedure nephrotoxicity (increase in serum creatinine of >0.5)
 - f. Sentinel event, system and organization issue review and resolution processes
4. Participation in Prehospital STEMI related educational activities.

F. Data Collection, Submission and Analysis

1. Participation in National Cardiac Data Registry (NCDR)
Participation in Monterey County EMS Agency data collection.
2. DESIGNATION

- A. SRC designation will be provided to a hospital following satisfactory review of written documentation and initial site survey by Monterey County EMS staff.
- B. SRC designation period will coincide with the period covered in the written agreement between the SRC and the County.


V. BASIS FOR LOSS OF DESIGNATION

- A. Inability to meet and maintain STEMI Receiving Center Designation Criteria
- B. Failure to provide required data and/or to participate in STEMI system QI activities
- C. Other criteria as defined and reviewed by the SRC QI Committee

VI. ATTACHMENTS

- A. SRC Application
- B. SRC Application Checklist
- C. SRC Documentation Checklist

END OF POLICY


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EMS Medical Director


Michael Petrie, EMT-P, MBA, MA
EMS Bureau Chief

The EMS Agency shall receive this application and supporting documentation at least **six (6)** months prior to the anticipated start date.

Hospital Name: _____ **Date submitted:** _____

Mailing Address: _____ **Phone Number:** _____

_____ **FAX Number:** _____

STEMI Program Manager: _____ **Phone Number:** _____

e-mail address: _____

STEMI Program Medical Director: _____ **Phone Number:** _____

e-mail address: _____

Hospital Administrator: _____ **Phone Number:** _____

e-mail address: _____

The hospital named above requests Monterey County EMS Agency designation as a STEMI Receiving Center for EMS transported patients. This hospital and STEMI program agrees to comply with Monterey County EMS policies regarding STEMI Receiving Centers. This hospital will maintain all licenses, certifications, and designations required by any and all laws, regulations, certifying authorities, and designating authorities that apply to STEMI care services. This hospital will cooperate fully with, and actively participate in, the Monterey County EMS Quality Improvement program. This hospital will accept all STEMI identified patients except in case of internal disaster. Failure to comply may result in EMS Agency revocation of STEMI Receiving Center designation.

Signatures:

STEMI Program Manager: _____ **Date:** _____

STEMI Program Medical Director: _____ **Date:** _____

Hospital Administrator: _____ **Date:** _____

Date Received by the EMS Agency: _____ **Date Approved:** _____

The EMS Agency shall receive the application and supporting documentation at least **six (6)** months prior to the anticipated start date.

Please submit the following documents:

___ **Application.** Signed and completed.

___ **License to provide Basic Emergency Medical Services.** Copy of license.

___ **License to operate a Cardiac Catheterization Lab.** Copy of license.

___ **Cardiac Catheterization Lab on-call schedule.** Copy of first three (3) months on-call schedule.

___ **Intra-aortic balloon pump capability.** Provide the number of patients for which this service can be provided.

___ **Base hospital phone number.** Provide the base hospital phone number.

___ **Transfer agreements.** Provide a copy of transfer agreements with non-STEMI hospitals.

___ **Cardiovascular surgery services.** Provide the California permit number for this service.

___ **STEMI Program Medical Director.** Provide job description.

___ **STEMI Program Manager.** Provide job description.

___ **Cardiac Catheterization Lab Manager.** Provide job description.

___ **Policy for STEMI activation.** Provide policy for STEMI activation.

EMS Agency staff will contact the STEMI Receiving Center program manager to schedule a date and time for an on-site program review upon receipt of the application packet. EMS Agency staff will conduct a review of the STEMI Receiving Center using the Monterey County EMS STEMI Receiving Center Designation Criteria. Following the review process, the EMS Agency Director will designate the applicant hospital as a Monterey County STEMI Receiving Center should all designation criteria be met.

STEMI Application – Receiving Center

STANDARD	MEASUREMENT	YES	NO	COMMENTS
HOSPITAL SERVICES				
Current license to provide Basic Emergency Medical Services	Copy of license.			
Operate a cardiac catheterization lab licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions.	Copy of license.			
Cardiac Catheterization lab available 24/7/365.	On-call schedules for three (3) months. On-call policy and procedures documented.			
Intra-aortic balloon pump capability with staffing available 24/7/365.	Staffing policies demonstrate support of operations. Intra-aortic balloon pump capability for # of patients.			
Dedicated phone line for base hospital contact by paramedics.	Operational dedicated base hospital phone line.			
Notification of cardiologist and staff of a STEMI alert.	Establish an internal communication plan to ensure the immediate notification of all necessary individuals.			
Interfacility transfer agreements with hospitals that do not have STEMI designation.	Transfer agreements to allow automatic acceptance of all STEMI patients transferred from Monterey County hospitals.			
Cardiovascular surgery services available.	California permit-number.			
Accept all patients identified as STEMI by EMS personnel.	Policy in place.			
STEMI team activation by ED physician upon notice of STEMI patient by EMS personnel.	Policy in place.			
Contingency plans.	Contingency plans in place for second patient.			
HOSPITAL PERSONNEL				
STEMI Receiving Center Program Medical Director qualifications: 1. Board Certified in Cardiovascular Disease. 2. Board Certified in Interventional Cardiology. 3. Credentialed member of medical staff with privileges for Primary PCI.	Copy of Board Certification in Cardiovascular Disease.			
	Copy of current Board Certification in Interventional Cardiology.			
	Documentation of training in radiographic imaging and radiation protection.			
	Job description.			

Monterey County EMS Agency

4. Trained in cardiac radiographic imaging and radiation protection; job description; participates in Monterey County STEMI QI activities.	QI program participation.			
STEMI Receiving Center Program Manager. Current RN License. STEMI program experience. Participates in the County STEMI QI Program	Current RN license.			
	STEMI program experience.			
	QI program participation.			
Cardiac Cath Lab Manager	Job description.			
Cardiology interventionalist	On-call schedule for three months			
	Current Board certification			
	On-call policy			
Cardiothoracic surgery	Current Board certification			
	On-call policy			
CLINICAL CAPABILITIES				
Process performance	Door to balloon time in less than 90 minutes for 90% of STEMI patients.			
Cath Lab and interventionalist activation	Policy for STEMI activation			
Cath Lab team availability	Cath lab team available within 30 minutes			
Policy identifying criteria for patients to receive emergent angiography or emergent fibrinolysis, based on physician decisions for individual patients.	Policy and criteria in place.			
PERFORMANCE IMPROVEMENT				
Program review	Policy for QI review of Deaths Complications Sentinel events System issues Organizational issues			
Program review	Written QI Plan			
EMS QI program participation	Written agreement to participate in EMS QI program			
Data submission to the EMS Agency	STEMI report submitted for each case			
	Quarterly STEMI report submitted			
	Annual STEMI report submitted			
EMS education	Plan for EMS educational activities			
ADMINISTRATION				
Application submitted to the EMS Agency	Date application received by the EMS Agency		Date of approval	
Written agreement with the EMS Agency	Date agreement received		EMS signature	