

SIERRA-SACRAMENTO VALLEY EMS AGENCY PROGRAM POLICY

REFERENCE NO. 506

SUBJECT: CARDIOVASCULAR “STEMI” RECEIVING CENTERS

PURPOSE:

A Cardiovascular STEMI Receiving Center (SRC) will be the preferred destination for patients who access the 9-1-1 system meeting defined criteria and who show evidence of a ST-elevation myocardial infarction on a 12 Lead electrocardiogram.

AUTHORITY:

Health and Safety Code, Division 2.5, Chapter 2 § 1797.67 & 1797.88, Chapter 6 § 1798.102, 1798.150, 1798.170 & 1798.172

California Code of Regulations, Title 13, § 1105©, Title 22, Division 9, Chapter 4, § 100169

DEFINITIONS:

- A. **STEMI** – ST Elevation Myocardial Infarction
- B. **PCI** – Percutaneous Coronary Intervention
- C. **Cardiovascular STEMI Receiving Centers (SRC)** – S-SV EMS designated facilities that have emergency interventional cardiac catheterization capabilities
- D. **STEMI Referring Centers** – Facilities that do not have emergency interventional cardiac catheterization capabilities

POLICY:

The following requirements must be met for a hospital to be designated as a Cardiovascular STEMI Receiving Center by S-SV EMS:

- A. Licensure as a Cardiac Catheterization Laboratory.
- B. Intra-aortic balloon pump capability.
- C. Cardiovascular surgical services permit:
This requirement may be waived by the EMS Agency Medical Director when appropriate for patient or system needs. The Medical Director will evaluate conformance with existing American College of Cardiology / American Heart Association or other existing professional guidelines for standards.
- D. Communication system for notification of incoming STEMI patients, available twenty four (24) hours per day, seven (7) days per week including a dedicated 12 Lead ECG receiving station and an in-house paging system.

Effective Date: 01/01/2010

Date last Reviewed / Revised: 09/2009

Next Review Date: 09/2012

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Approved:

SIGNATURE ON FILE

S-SV EMS Medical Director

SIGNATURE ON FILE

S-SV EMS Regional Executive Director

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- E. Provide CE opportunities, minimum of four (4) hours per year, for EMS personnel in areas of 12 Lead ECG acquisition and interpretation, as well as assessment and management of STEMI patients.
- F. Provide public education about STEMI warning signs and importance of early utilization the 9-1-1 system.

G. STAFFING REQUIREMENTS

The hospital will have the following positions designated and filled prior to becoming a SRC:

1. Medical Directors

The hospital shall designate two physicians as co-directors of its SRC program. One physician shall be a board certified interventional cardiologist with active PCI privileges. The co-director shall be a board certified emergency medicine physician with active privileges to practice in the emergency department.

2. Nursing Director

The hospital shall designate two SRC nursing co-directors. One nursing director shall be an RN trained or certified in critical care nursing and affiliated with the Cardiac Catheterization Laboratory. The co-director shall be an RN trained or certified in critical care nursing and affiliated with the emergency department.

3. On-Call Physician Consultants and Staff

A daily roster of the following on-call physician consultants and staff must be maintained:

- a. Cardiologist with percutaneous coronary intervention (PCI) privileges.
- b. Cardiovascular Surgeon, if cardiovascular surgical services are offered.
If cardiovascular surgical services are not available on site, the facility must have a rapid transfer agreement in place with a facility that provides this service. This agreement must be on file with the S-SV EMS Agency. This agreement must include the requirement that the cardiac surgical hospital cannot “refuse” transfer based on limitation of resources (e.g. lack of available beds, or staff to care for the patient) for true emergent patients. Additionally, the facility must have a rapid transport agreement with an S-SV EMS approved transport provider agency. The expectation will be that the patient will arrive at the cardiac surgical hospital within one (1) hour of the decision to operate, in emergency cases.
- c. Cardiac Catheterization Laboratory team.
- d. Intra-aortic balloon pump capabilities 24/7.

H. INTERNAL HOSPITAL POLICIES

The hospital shall develop internal policies for the following situations:

1. Fibrinolytic therapy protocol to be used only in unforeseen circumstances when PCI for a STEMI patient is not possible.

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2. Diversion of STEMI patients **only** during times of an incapacitating internal disaster. A written notification describing such events must be submitted to S-SV EMS within twenty four (24) hours of occurrence.
3. Prompt acceptance of appropriate STEMI patients from other STEMI referral centers that do not have PCI capability.

I. DATA COLLECTION / CONTINUOUS QUALITY IMPROVEMENT PROGRAM / PERFORMANCE STANDARDS

S-SV EMS designated SRC’s shall comply with all data collection, continuous quality improvement and performance standards as defined in individual SRC facility contracts. These requirements will be the same for each SRC.

DESIGNATION

- A. The Cardiovascular STEMI Receiving Center applicant shall be designated after satisfactory review of written documentation and an initial site survey by S-SV EMS or its designees and completion of an contract between the hospital and S-SV EMS.
- B. Initial designation as a SRC shall be for a period of two (2) years. Thereafter, re-designation shall occur every four (4) years, contingent upon satisfactory review.
- C. Failure to comply with the criteria and performance standards outlined in this policy and individual SRC facility contracts may result in probation, suspension or rescission of SRC designation. Compliance will be solely determined by the S-SV EMS Agency.

PATIENT DESTINATION

The following factors should be considered with regards to choice of destination for STEMI patients:

- A. An S-SV EMS designated SRC should be considered as the destination of choice if all of the following criteria are met:
 1. Identified STEMI patients based on machine interpretation of field 12 Lead ECG, verified by paramedics.
 2. Total transport time to the SRC is thirty (30) minutes or less.
 3. Paramedics shall notify the SRC emergency department of the patient’s pending arrival by advising of a “STEMI ALERT” as soon as possible, to allow timely activation of the Cardiac Catheterization Lab team at the SRC.
- B. SRC destination will be in accordance with the guidelines used from the S-SV EMS Patient Destination Policy, Reference No. 505.
- C. Base / modified base hospital contact and consultation is mandatory in these and similar situations:

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1. Patients with an unmanageable airway, refractory ventricular fibrillation, or in cardiopulmonary arrest should be considered for transport to the closest receiving hospital.
2. Patients with unstable ventricular tachycardia, ventricular fibrillation, second degree type II heart block and third degree heart blocks may be considered for transport to the closest receiving hospital, based on specific clinical scenario.
3. Patients with obvious contraindications to thrombolytic therapy should be considered for transport to the closest SRC.
4. In the rare instance when the closest SRC Cardiac Catheterization Laboratory is unavailable, the patient should be transported to the next closest SRC if the total transport time to the alternate SRC is 30 minutes or less.

CROSS REFERENCES:

Prehospital Care Policy Manual

12 Lead Program, Reference No. 440

Patient Destination, Reference No. 505

Base Hospital / Modified Base Hospital Contact, Reference No. 812

Chest Pain / Discomfort of Suspected Cardiac Origin, Reference No. C-8