


Sierra – Sacramento Valley EMS Agency Program Policy			
STEMI Receiving Center Designation Criteria, Requirements & Responsibilities			
	Effective: 12/01/2019	Next Review: 01/2022	506
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PURPOSE:

To establish STEMI receiving center (SRC) designation criteria, requirements and responsibilities.

AUTHORITY:

- A. California Health and Safety Code, Division 2.5, Chapter 2 § 1797.67 & 1797.88, Chapter 6 § 1798.102, 1798.150, 1798.170 and 1798.172.
- B. California Code of Regulations, Title 13, § 1105 (c).
- C. California Code of Regulations, Title 22, Division 9, Chapter 7.1.

DEFINITIONS:

- A. **Percutaneous Coronary Intervention (PCI)** – A procedure used to open or widen a narrowed or blocked coronary artery to restore blood flow supplying the heart, usually done on an emergency basis for a STEMI patient.
- B. **Primary PCI** – Urgent balloon angioplasty (with or without stenting), without the previous administration of fibrinolytic therapy or platelet glycoprotein IIb/IIIa inhibitors, to open the infarct-related artery during an acute myocardial infarction with ST-segment elevation.
- C. **ST-Elevation Myocardial Infarction (STEMI)** – A clinical syndrome defined by symptoms of myocardial infarction in association with ST-segment elevation on EKG.
- D. **STEMI Receiving Center (SRC)** – A licensed general acute care facility that has emergency interventional cardiac catheterization capabilities, meets the minimum STEMI care requirements contained in California Code of Regulations (Title 22, Division 9, Chapter 7.1, § 100270.124), and is designated as a SRC by S-SV EMS.
- E. **STEMI Referring Hospital (SRH)** – A licensed general acute care facility that does not have emergency interventional cardiac catheterization capabilities, and transfers STEMI patients to SRCs for PCI services when necessary.

POLICY:

- A. Criteria for assessment, identification, treatment and transport of prehospital suspected STEMI patients shall be based on S-SV EMS Chest Pain/Suspected Symptoms of Cardiac Origin Protocol (C-6).
- B. The following shall be met for a hospital to be designated as a SRC by S-SV EMS:
 - 1. Be licensed by the California Department of Public Health Services as a general acute care hospital.
 - 2. Have a special permit for basic or comprehensive emergency medical service pursuant to the provisions of California Code of Regulations Title 22, Division 5.
 - 3. Be accredited by a Centers for Medicare and Medicaid Services approved deeming authority.
 - 4. Have a cardiac catheterization laboratory license.
 - 5. Have intra-aortic balloon pump capability.
 - 6. Have cardiovascular surgical services available on site. If cardiovascular surgical services are not available on site, the SRC must have a rapid transfer plan and written agreement in place with a facility that provides cardiovascular surgical services. The expectation is that for emergency cases, the patient will arrive at the cardiac surgical hospital within one (1) hour of the decision to operate.
 - 7. Be available for treatment of STEMI patients twenty-four (24) hours per day, seven (7) days per week, three hundred and sixty-five (365) days per year.
 - 8. Have a communication system for notification of a prehospital suspected STEMI patient, including 12-lead EKG receiving capabilities.
 - 9. Have established protocols for triage, diagnosis, and Cath lab activation following notification of a prehospital suspected STEMI patient.
 - 10. Maintain a STEMI team call roster (including a cardiologist with PCI privileges and other appropriate Cath lab team members).
 - 11. Have a single call activation system to activate the Cath lab team directly.
 - 12. Ensure the Cath lab team is available within 30 minutes of call activation.
 - 13. Have written protocols in place for the identification of STEMI patients.

14. Have a process in place for the treatment and triage of simultaneously arriving STEMI patients.
15. Agree to accept all prehospital suspected STEMI patients according to applicable S-SV EMS policies/protocols.
16. Agree to accept all STEMI patients from adjacent SRHs, and have transfer plans/agreements in place to ensure rapid transport of these patients to the SRC.
17. Perform a minimum of 36 Primary PCI and 200 total PCI procedures annually.
18. Have a STEMI program manager, who may also be one of the STEMI program medical directors or nursing directors listed below.
19. Have the following STEMI program co-medical directors:
 - One physician who is board certified/eligible in interventional cardiology with active PCI privileges at the SRC.
 - One physician who is a board certified/eligible emergency medicine physician with active privileges to practice in the emergency department at the SRC.
20. Have the following STEMI program co-nursing directors:
 - One RN trained or certified in critical care nursing and affiliated with the cardiac catheterization laboratory.
 - One RN trained or certified in critical care nursing and affiliated with the emergency department.
21. Have job descriptions and an organizational structure clarifying the relationship between the STEMI medical directors, STEMI program manager, and the STEMI team and hospital administration.
22. Have a quality improvement (QI) process in place to track and improve treatment (acutely and at discharge) with American College of Cardiology (ACC) and American Heart Association (AHA) guidelines based Class 1 therapies. At a minimum, this process will evaluate performance in meeting the AHA/ACC STEMI Receiving Center Achievement Measures:
 - SRC Arrival to PCI ≤ 90 minutes for patients arriving by non-EMS modes of transport.
 - EMS First Medical Contact (FMC) to PCI ≤ 90 minutes, or ≤ 120 minutes when transport time is prolonged (≥ 45 minutes).

23. Have a QI process in place to provide ongoing feedback to adjacent SRHs on patients transferred for STEMI services. At a minimum, this QI process shall evaluate and provide SRH feedback of the following:
- SRH STEMI patient door-to-first ECG time (goal <10 minutes).
 - SRH STEMI patient door-to-transfer time (goal <30 minutes).
 - Operational issues related to STEMI patient transfer delays.
 - Proportion of STEMI patients receiving fibrinolysis prior to transport when the system cannot achieve times consistent with ACC/AHA guidelines for primary PCI.
 - Proportion of STEMI-eligible patients receiving any reperfusion (PCI or fibrinolysis) therapy.
24. Conduct regularly scheduled multidisciplinary team meetings to evaluate outcomes and quality improvement data. Operational issues should be reviewed, problems identified, and solutions implemented.
25. Provide CE opportunities, minimum of four (4) hours per year, for EMS personnel in areas of 12-lead EKG acquisition and interpretation, as well as assessment and management of STEMI patients.
26. Provide public education about STEMI warning signs and the importance of early utilization of the 9-1-1 system.
27. Comply with all data collection, QI and performance standards as defined in S-SV EMS SRC contracts.
- C. SRC diversion of STEMI patients shall only occur during times of an internal disaster or when the cardiac catheterization laboratory is otherwise unavailable.
1. Notification shall be made to the following entities at least 24 hours prior to any planned event, or as soon as possible for any unplanned event, resulting in the cardiac catheterization lab being unavailable:
 - S-SV EMS.
 - SRC emergency department – to include a status posting on EMResource indicating that the cardiac Cath lab is unavailable.
 - Appropriate adjacent SRC(s).
 - Appropriate prehospital provider agencies.
 2. All appropriate entities shall be notified as soon as possible when the cardiac catheterization lab is subsequently available.

3. An S-SV EMS ambulance patient diversion form describing such events shall be submitted to S-SV EMS by the end of the next business day.

PROCEDURE:

- A. The SRC applicant shall be designated after satisfactory review of written documentation and an initial site survey conducted by S-SV EMS representatives or designees and completion of a contract between the hospital and S-SV EMS.
- B. Designated SRCs shall have verification reviews by S-SV EMS representatives or designees conducted every three (3) years.
- C. Failure to comply with the criteria and performance standards outlined in this policy and/or SRC contracts may result in probation, suspension or rescission of SRC designation. Compliance will be solely determined by S-SV EMS.