



POLICY NO:	FAC - 9
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## STEMI SYSTEM RECEIVING CENTER STANDARDS AND DESIGNATION

**Purpose:** To define the criteria for designation as a STEMI Receiving Center in San Mateo County.

**Authority:** Health and Safety Code, Division 2.5, Sections 1789, 1797.220 and 1798. 101, 1798.105, 1798.2. California Code of Regulations, Title 22, Sections 100147 and 100169 and 100175.

**Definitions:**

ST Segment Elevation Myocardial Infarction (STEMI): A type of myocardial infarction, acute in nature, generating an ST segment elevation on the 12-lead EKG.

STEMI Receiving Center (SRC): A licensed general acute care hospital with a special permit for a cardiac catheterization laboratory from the California Department of Public Health (CDPH) and designated as a SRC by San Mateo County EMS Agency (SMC-EMSA)

STEMI Referral Hospital (SRH): A licensed general acute care hospital in San Mateo County (SMC) that is not designated as a SRC.

Percutaneous Coronary Intervention (PCI): A broad group of techniques used for the diagnosis and treatment of patients with STEMI.

STEMI Team: A group of hospital staff including physicians, nurses, and other hospital personnel from the emergency department and cardiology involved in the care of STEMI patients.

**Policy:** A STEMI Receiving Center (SRC), approved and designated by San Mateo County EMS Agency (SMC-EMSA) shall meet the following requirements:

1. Hospital License Requirements for a SRC
  - a. Licensed general acute care hospital recognized by SMC-EMSA as a receiving facility.
  - b. Holds a special permit for a Cardiac Catheterization Laboratory from the California State Department of Health Services (DHS)
  - c. Holds a special permit issued by DHS for Cardiovascular Surgery Service or has established current transfer agreements with a hospital or hospitals holding such a special permit.
  - d. Enters into a written agreement with SMC for designation.

APPROVED:

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2. Hospital Capabilities

- a. Cardiac Catheterization Laboratory available 24 hours per day / 7 days per week.
- b. An Intra-Aortic Balloon Pump shall be available on site 24 hours per day / 7 days per week with a person capable of operating this equipment.
- c. Ability to receive electronic 12-lead EKG transmission from the EMS system

3. Personnel

- a. SRC Medical Director:
  - i. The SRC shall designate a medical director for the STEMI program who shall be a physician certified by the American Board of Internal Medicine (ABIM) with current ABIM sub-specialty certification in Cardiovascular Disease and Interventional Cardiology who will ensure compliance with these SRC standards and perform ongoing Quality Improvement (QI) as part of the hospital QI Program.
  - ii. The SRC Medical Director must be a credentialed member of the medical staff with PCI privileges.
- b. SRC Program Manager:
  - i. The SRC shall designate a program manager for the STEMI program who shall have experience in Emergency Medicine or Cardiovascular Care, who shall assist the SRC Medical Director to ensure compliance with these SRC standards and the QI program.
- c. Cardiovascular Lab Coordinator:
  - i. The SRC shall have a Cardiovascular Lab Coordinator who shall assist the SRC Medical Director and the SRC Program Manager to ensure compliance with these SRC Standards and the QI Program.
- d. Physician Consultants:
  - i. The SRC shall maintain a daily roster of on-call Interventional Cardiologists with privileges for PCI and credentialed by the hospital in accordance with the American College of Cardiology/American Heart Association national standards. This requirement may be waived by SMC-EMSA for physicians with SRC primary privileges if all of the following are met:
    1. Board certified by the ABIM with subspecialty certification in cardiovascular disease;
    2. Demonstrated lifetime minimum of 500 PCI procedures and 11 primary or 75 PCI Annually.
  - ii. These physicians must respond immediately upon notification and be available within 30 minutes of when a STEMI patient presents to the hospital.
  - iii. The SRC will submit a list of Cardiologists with active PCI privileges to the EMS Agency annually.

4. Clinical Process Performance Standard

- a. The overall goal of the STEMI Care System in San Mateo County is to minimize the interval between first medical contact to coronary artery reperfusion.
- b. SRCs will adopt evidence-based strategies to reduce time to reperfusion.
- c. An on-going internal quality improvement process, including data measurements and feedback from STEMI patients and SRHs.

5. Policies

Internal policies and procedures shall be developed for the following:

- a. STEMI Alert: Through a “one call” process, the interventional cardiologist and cardiac catheterization lab team will be immediately contacted upon notification by prehospital personnel that they are transporting a patient on whom a 12-lead ECG that has been interpreted as an “Acute MI Suspected” or “Meets ST Elevation MI Criteria.”
- b. Interventional cardiologist and cardiac catheterization laboratory staff will be required to respond immediately upon notification and have a response time standard of 20-30 minutes.
- c. Emergency medicine physicians will have the authority to activate the cardiac catheterization laboratory staff.
- d. Allow the automatic acceptance of any STEMI patient from a San Mateo County Hospital upon notification by the transferring physician.
- e. That an interventional cardiologist assumes care of the patient from the time the patient arrives at the SRC.
- f. To accept all patients meeting STEMI patient triage criteria or upon transfer notification from a STEMI Referral Hospital, except when on an internal disaster, and provide a plan for triage and treatment of simultaneously presenting STEMI patients, regardless of ICU/CCU or ED status.
- g. Criteria for patients to receive emergent angiography or emergent fibrinolysis based on physician decisions for individual patients.
- h. Any SRC that has been activated from the field is to ensure that the transporting paramedic can be placed in radio contact with the Base Station physician prior to ED arrival if requested.

6. Data Collection

- a. Data listed in data dictionary posted on SMC-EMSA website shall be collected on an ongoing basis and provided to the SMC-EMSA ([www.smchealth.org/ems/policyprocedures/facilities](http://www.smchealth.org/ems/policyprocedures/facilities)).
- b. Data will be entered into an EMS-approved instrument and submitted monthly, by no later than the 15th of the following month.
- c. In consultation with the STEMI CQI Committee, EMS will update the data dictionary and/or identify another process to expedite data submission and reduce duplication.

7. Quality Improvement

- a. The Quality Improvement program will include a process to review all cases of STEMI patients taken to the catheterization laboratory at the end of the procedure and provide immediate feedback to the staff in the emergency department and the catheterization laboratory – prior to the end of that shift. Additionally, formal feedback utilizing the standardized format designated by the SMC-EMSA will be provided to any prehospital agency or SRH that participated in the care of a “STEMI Activation” patient, within 72 hours.

- b. An SRC QI program shall be established, maintained, and conducted to review performance and outcome data for STEMI patients.
- c. The SRC will actively participate in the SMC-EMSA STEMI QI Program. This will require regular meeting attendance by the SRC Medical Director or designee, who will be a staff interventional cardiologist, and the SRC Program Manager.

**Procedure:**

8. Designation

- a. An SRC may be designated following satisfactory review of written documentation and a site survey, when deemed necessary, by the SMC-EMSA.
  - i. Application: Eligible hospitals shall submit a written letter of intent and request for SRC approval to the SMC-EMSA, as well as complete a formal application documenting the compliance of the hospital with SMC-EMSA SRC Standards.
  - ii. Approval: SRC approval or denial shall be made in writing by the SMC-EMSA to the requesting hospital within a reasonable time (30 days) after receipt of the request for approval, application completion and submission of all required documentation.

9. Redesignation

- a. SMC-EMSA may suspend or revoke the approval of a SRC at any time for failure to comply with any applicable policies, procedures, or regulations.
- b. An SRC may be re-designated following a satisfactory SMC-EMSA review in accordance to current standards and the term of the written agreement.
- c. SRCs shall receive notification of evaluation from SMC-EMSA.
- d. SRCs shall respond in writing regarding program compliance.
- e. On-site SRC visits for evaluative purposes may occur.
- f. SRCs shall notify the SMC-EMSA by telephone, followed by a letter or email within 48 hours, of changes in program compliance or performance.

10. Discontinuation

- a. The SRC shall submit a written 90 calendar day notice to SMC-EMSA prior to the discontinuation of SRC services.