PURPOSE
To reduce the morbidity and mortality related to STEMI by organizing a system of STEMI centers to serve our residents and visitors through preventative education, emergency care, hospitalization, rehabilitation, and research. This critical care system links prehospital and hospital care to deliver optimal treatment to the population of STEMI patients.

AUTHORITY
California Health and Safety Code - Division 2.5: Emergency Medical Services [1797.107, 1798.150]
California Code of Regulations, Title 22. Social Security, Division 9. Prehospital Emergency Medical Services, Chapter 7.1 ST- Elevation Myocardial Infarction Critical Care System

STEMI CENTER DEFINITIONS

STEMI Referring Hospital (SRH)
A licensed general acute care facility that meets the minimum hospital STEMI care requirements to stabilize and transfer patients to a PCI-capable facility.

STEMI Receiving Center (SRC)
A hospital with cardiology capabilities (Cardiac catheterization laboratory licensed to perform emergency Percutaneous Coronary Intervention [PCI] and/or cardiovascular surgery) and designated by the Riverside County EMS Agency to provide rapid intervention for STEMI patients.

DESIGNATION BY REMSA AS A STEMI CENTER

Initial REMSA Designation as a STEMI Center in the EMS System requires an application, satisfactory site survey and verification of the following:

1. Currently serving in the EMS system as a Prehospital Receiving Center (PRC) or a Base Hospital (BH).
2. Compliance with all standards and requirements listed in this policy.
3. Compliance with all requirements listed in Title 22, Division 9, Chapter 7.1- ST- Elevated Myocardial Infarction Critical Care System, for the requested level of designation.
4. Accreditation as a Chest Pain Center with Primary PCI from the American College of Cardiology (ACC) or Primary Heart Attack Center (PHAC) Certification level or higher from The Joint Commission (TJC).
   a. If certification is in process, the applying hospital shall provide REMSA with a copy of the certification within 30 days of receipt.
   b. Continued designation shall depend on re-certification as specified by the certifying organization, and a copy of the renewal certificate shall be provided to REMSA not less than 30 days prior to expiration of current certification.
5. Enrollment and participation in the STEMI data management system and commitment to provide additional data as required by REMSA and/or the STEMI System Committee.
6. Current written agreement with REMSA for designation as a STEMI Center to provide services in Riverside County.
7. STEMI Center designation may be granted following satisfactory review of a completed application, supporting written documentation, an initial site survey by REMSA personnel/designees.

Designation Renewal

1. The STEMI Center may be re-designated after satisfactory review of written documentation and a site survey by REMSA personnel/designees.
2. Re-designation shall occur every five (5) years. REMSA staff will attend and perform STEMI center audits during the entire American College of Cardiology site visit.
3. Failure to comply with the criteria outlined in this policy at any time will result in disciplinary action up to and including suspension or rescission of EMS STEMI Center designation.

**STEMI CENTER STANDARDS FOR ALL HOSPITALS DESIGNATED BY REMSA AS A STEMI RECEIVING CENTER**

**Staffing Requirements**

1. STEMI Centers shall staff the following positions:
   a. **STEMI Program Medical Director:**
      i. A qualified board-certified physician by the American Board of Medical Specialties (ABMS) as defined by the local EMS agency and designated by the hospital that is responsible for the STEMI program, performance improvement, and patient safety programs related to a STEMI critical care system.
   b. **STEMI Program Manager:**
      i. A registered nurse who is designated by the hospital and is responsible for monitoring, coordinating, and evaluating the STEMI program.
      1. In the event that an interim Program Manager is needed in the absence of a full-time Program Manager, a nurse from the hospital may be selected to fulfill the obligations and duties of the role for no more than one hundred-eighty (180) days. Should a full-time Program Manager not be assigned by the conclusion of the interim period, REMSA will perform an evaluation of the position and program to ensure compliance with state regulation(s), REMSA policy, and contract language.
   c. **Clinical STEMI Team:**
      i. Specially trained health care professionals that perform percutaneous coronary intervention. It may include, but is not limited to, an interventional cardiologist, mid-level practitioners, registered nurses, technicians, and other health care professionals.
   d. **Registrar:**
      i. One full-time equivalent registrar dedicated to the registry must be available to process the data capturing the ACC/NCDR, CARES, and REMSA data sets for each 500–750 patients in the registry. This staffing need increases if additional data elements are collected.

**Data Collection and Submission**

1. The STEMI Centers shall:
   a. Participate in the STEMI data management system
   b. Submit data to REMSA via the REMSA approved data collection method and on the schedule agreed upon by the STEMI System Committee.
   This data shall include but not be limited to:
      i. All data elements included in section 100270.126 of CCR Title 22 STEMI requirements.
      ii. ACC and National Cardiovascular Data Registry (NCDR) data elements.
      iii. CARES registry elements.
      iv. Any additional data elements as requested by REMSA and/or the REMSA STEMI system committee.

**Performance Standards**

1. Written EMS policies and procedures shall be reviewed at a minimum of every two (2) years but may be updated sooner based upon identified CQI needs.
2. STEMI Centers must operate a cardiac catheterization laboratory licensed by the Department of Health Services and approved for emergency PCI’s. The hospital shall 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.
   a. To ensure uninterrupted services, the following equipment is required:
      i. Maintain a minimum of two (2) catheterization (cath) lab suites capable of PCI.
   b. In the event that the required capabilities cannot be maintained and an interruption in service occurs, the REMSA Duty Officer must be called immediately.
      i. REMSA does not allow STEMI diversions. When a STEMI center is placed on “Diversion” in the ReddiNet, their STEMI program will be suspended until an evaluation occurs regarding the circumstances that caused the interruption in service. The STEMI center will be permitted to continue receiving suspected STEMI patients only after a completed evaluation and re-approval by REMSA.
3. Additional performance measures as determined by REMSA and/or the STEMI Critical Care System Committee.
4. The STEMI center shall establish adequate procedures for self-monitoring and quality control and assurance in compliance with standards, in this policy, on a continuous basis. Documentation of such efforts shall be made available to REMSA upon request.

**Education**

1. Provide STEMI related continuing education to EMS personnel and annually report these activities to REMSA. A minimum of 2 educational events annually is required.
2. Provide STEMI education to the public and annually report these activities to REMSA.

**STEMI System Participation**

1. STEMI Center representatives shall actively participate as members of the STEMI Critical Care System Committee.
2. STEMI Centers shall maintain accreditation as a Chest Pain Center with Primary PCI from the American College of Cardiology
3. Compliance with the California Evidence Code, Section 1157.7 to ensure confidentiality, and a disclosure-protected review of selected STEMI cases.
4. Active participation as a member of the STEMI system committee to include attendance and case review assignments.

**Hospital Services / Obligations**

The hospital shall meet the following requirements:

1. The hospital shall have established protocols for triage, diagnosis, and cath lab activation following field notification of an inbound suspected STEMI patient.
2. The hospital shall have a single call activation system to activate the Cardiac Catheterization Team directly.
3. The hospital shall have a process in place for the treatment and triage of simultaneously arriving STEMI patients.
4. Internal policies shall be developed for the following:
   a. Protocol to be used in unforeseen circumstances when PCI of a STEMI patient is not possible, or delay of the cath lab team to the patient exceeds 30 (thirty) minutes.
   b. Diversion of STEMI patients only during times of internal disaster designation (see REMSA Policy #6103 [Ambulance Diversion]). Immediate notification of the REMSA Duty Officer at (951) 712-3342 is required!
5. Hospital shall have the ability to receive ECGs wirelessly transmitted by prehospital personnel.
6. A Cardiovascular surgery service permit*
   *This requirement may be waived by the REMSA Medical Director when appropriate for patient or system needs. The REMSA Medical Director will evaluate conformance with existing ACC/AHA or other existing professional guidelines for standards.
7. A dedicated audio recorded phone line or radio system, capable of being answered twenty-four (24) hours per day, seven (7) days per week, used by paramedics to notify STEMI Receiving Center of incoming STEMI patients.
   a. Maintain such recordings for a minimum of one year, and use such recordings exclusively for auditing, continuing education and review approved by REMSA.
   b. Maintain a backup recording system in the event that the primary recording system fails.
8. Hospitals that must temporarily close their cardiac cath lab due to equipment failure must do the following:
   a. Immediately contact the EMS Duty Officer, the first responders, the transporting ambulance company(ies), the closest SRC, and the STEMI Base Hospital to notify them of the temporary closure and the expected downtime.
   b. Once the cath lab is open and functional, make the same contacts to notify the system that the cath lab is now open and functional.
   c. All STEMI patients that were diverted during the down time must be reported to REMSA. The accepting STEMI Receiving Center must do 100% CQI on these patients.

**Reporting Requirements**

1. SRC shall notify REMSA in writing of any failure to meet the EMS STEMI Receiving Center Standards within 10 (ten) business days.
2. Changes to key STEMI Receiving Center personnel (i.e., Program Medical Director and/or Program Manager) shall be reported to REMSA within 10 (ten) business days.