

Subject: Administration – Specialty Center Designation
ST-Elevation Myocardial Infarction (STEMI) Receiving Center
Designation Criteria

Associated Policies:

- I. Authority and Reference:(incorporated herein by references)
 - A. Division 2.5 of Health and Safety Code
 - B. California code of Regulations, Title 22
 - C. Coast EMS Policies and Procedures

- II. Purpose:

To establish requirements for designation and re-designation of a North Coast Emergency Medical Service (NCEMS) STEMI Receiving Center (SRC) for self-transported patients, or patients being transported via the 9-1-1 system according to the NCEMS policy, with STEMI or other cardiac conditions, who may benefit from rapid assessment, percutaneous intervention (PCI) or other cardiac procedures requiring utilization of a cardiologist and Cath Lab.

- III. Application and Designation Process:

To apply for designation as a NCEMS STEMI SRC, a hospital located within the NCEMS region shall:

 - A. Submit to NCEMS a letter of interest verifying the commitment by hospital administration, cardiology, Cath Lab and emergency department representatives to proceed with designation and pay associated fees including site visit. Associated fees will be determined by the NCEMS Joint Powers Governing Board.
 - B. Submit to NCEMS verification that all the designation criteria are met.

- IV. SRC Designation Criteria:
 - A. Current California licensure as an acute care facility providing Basic or
 - B. Comprehensive Emergency Medical Services.
 - C. Current national accreditation. Written agreement between NCEMS and SRC. Verification that Hospital meets STEMI Receiving Center Designation Criteria. The criteria include:
 1. Hospital Services
 - a. Special permit for cardiac catheterization laboratory.
 - b. Submission of prior door-to-balloon time data, PCI volume per operator, total PCI volumes including walk-ins and transports.
 - c. The SCAI/ACCF/AHA guidelines and H&S Code section 1256.01 require that each facility does greater than thirty-six (36) primary PCI procedures annually.
 - d. Intra-aortic balloon pump capability.
 - e. Cardiovascular surgical services or a written transfer plan and agreements for transfer to a facility with cardiovascular surgery capabilities.

Subject: Administration – Specialty Center Designation
ST-Elevation Myocardial Infarction (STEMI) Receiving Center
Designation Criteria

Associated Policies:

- f. Continuous availability of PCI resources 24/7.
 - g. Backup plan for when Cardiac Cath Lab (CCL) is not available with a policy for notification process to other area hospitals, prehospital agencies and NCEMS.
 - h. Policy for activation of interventionalist and CCL crew with response times to the CCL.
 - i. Communication systems for notification of incoming STEMI 24/7.
 - j. Participation in data collection and evaluation as required by NCEMS.
2. Staffing Requirements:
- a. SRC Medical Director: The SRC shall designate a medical director for the STEMI program that is licensed in the State of California and Board Certified in Interventional Cardiology, privileged by the hospital and active in performing PCI.
 - b. SRC STEMI Program Coordinator.
 - c. Cardiac CCL Manager and/or Director.
 - d. Intra-Aortic Balloon Pump Technician(s) or Nurse.
 - e. Clinical STEMI Team who shall be on-call and promptly available to the CCL within 30 minutes.
 - f. Cardiology Interventionalist who shall be on-call and promptly available to the CCL within 30 minutes.
3. Clinical Capabilities
- a. Utilization of ACC/AHA/SCAI guidelines for activity levels of facilities and practitioners for both primary PCI and total PCI events are optimal benchmarks.
 - b. Performance (timelines) and outcomes will be assessed initially in the survey process and will be monitored on an ongoing basis.
- D. SRC Internal Hospital Policies/Plans:
- 1. Base Hospital STEMI medical control and quality improvement plan.
 - 2. ED STEMI patient management plan.
 - 3. Cardiac interventionalist activation plan.
 - 4. CCL team activation plan.
 - 5. STEMI contingency plans for personnel and equipment.
 - 6. Coronary angiography policy.
 - 7. PCI and use of fibrinolytic policy.
 - 8. Interfacility transfer STEMI policies/procedures.
 - 9. Fibrinolytic therapy protocol to be used in unforeseen circumstances when PCI of STEMI is not available.

Subject: Administration – Specialty Center Designation
ST-Elevation Myocardial Infarction (STEMI) Receiving Center
Designation Criteria

Associated Policies:

10. Re-routing of STEMI patients ONLY during times of internal disaster. A written notification describing the event must be submitted to NCEMS within 24hours.
 11. Universal and immediate acceptance of STEMI patients from STEMI Referral Facilities (SRFs) and non-designated hospitals that do not have PCI capabilities.
 12. Patient tracking and treatment (acutely and at discharge) with ACC/AHA guideline-based Class I therapies.
 13. Internal hospital multi-disciplinary team meetings to evaluate outcomes and CQI data. Operational, policy and system issues should be reviewed, problems identified, and solutions implemented.
- E. Performance Improvement Program/CQI/Internal Plan:
1. SRC shall develop an ongoing CQI program which monitors all aspects of treatment and management of STEMI/cardiac patients and identify areas that need improvement. The program must, at a minimum, monitor the following parameters:
 - a. Death rate (within 30 days, related to procedure regardless of the mechanism).
 - b. Emergency CABG rate (result of procedure complication or failure).
 - c. Vascular Complications (access site, transfusion, or operative intervention required).
 - d. CVA rate (peri-procedure).
 - e. Sentinel event, system and organization issue review and resolve processes.
 - f. Tracking door to dilation times.
 - g. Other additions such as: use of a single standardized STEMI care pathway, arrival of interventionists and CCL team within 30 minutes, volume/experience characteristics, etc.
 2. Emergency cardiac surgery transport protocols should be tested a minimum of twice per year.
 3. Meetings to be held with NCEMS and the county-appropriate Cardiac Coordinating Committee on a quarterly basis initially, meeting frequency to be reviewed following the first year.
 4. Participants in the QIP Meetings, should include the following:
 - a. North Coast EMS Medical Director and/or Executive Director, EMS Coordinator and/or Cardiac Nurse Contractor.
 - b. Designated STEMI or QIP representative(s) from hospital.
 - c. Designated cardiologist from SRC.
 - d. Other members of the HCCC.

Subject: Administration – Specialty Center Designation
ST-Elevation Myocardial Infarction (STEMI) Receiving Center
Designation Criteria

Associated Policies:

- 5. Participate in Prehospital STEMI related activities.

- F. Data Collection, submission, and analysis:
 - 1. Participate in NCDR (national cardiovascular data registry).
 - 2. ED Door-to-ECG Time (goal = less than 10 minutes).
 - 3. Proportion of ED STEMI patients receiving PCI or fibrinolytic therapy.
 - 4. ED Door-to Cath lab time (for non-transfer patients) or Door-to-disposition time (for transferred patients: goal less than 90 minutes).
 - 5. ED Door-to-needle time (goal: less the 30 minutes).
 - 6. ED portion of ineligible patients.
 - 7. Hospital transfer time.
 - 8. Any additional mutually agreed upon hospital data.

- G. Additionally, must meet all requirements contained in 22 C.C.R. § 100270.124. STEMI Receiving Center Requirements

- V. Designation
 - A. SRC designation shall be awarded to a hospital following satisfactory review of written documentation and initial site visit and a MOU between the hospital and NCEMS.
 - B. SRC designation shall be for a period of 2 years initially, then every four years after that, contingent on satisfactory reviews.
 - C. Designation may be probated, suspended, or revoked for cause.

- VI. Basis for Probation, Suspension or Revocation of Designation
 - A. Inability to meet and maintain STEMI designation criteria.
 - B. Failure to provide required data.
 - C. Failure to participate in the STEMI CQI process.
 - D. Other criteria as defined in the NCEMS Cardiac STEMI Plan and NCEMS Policy # 6549.

Approved By EMS Director	Larry Karsteadt (Signature on File at EMS Agency)	Revision
EMS Medical Director	Matthew Karp, MD (Signature on File at EMS Agency)	12/12/2023