

POLICY #400: STEMI RECEIVING CENTER DESIGNATION

I. PURPOSE

- A. To define requirements for designation as a STEMI Receiving Center in the County of San Luis Obispo (SLO).

II. SCOPE

- A. This policy applies to all hospitals in the County of SLO seeking designation as a STEMI Receiving Center.

III. DEFINITIONS/GLOSSARY

- Percutaneous Coronary Intervention (PCI): A broad group of percutaneous techniques utilized for the diagnosis and treatment of patients with STEMI.
- STEMI: An acute myocardial infarction that generates a specific type of ST-segment elevation on a 12-lead ECG.
- “STEMI Alert”: A report from prehospital personnel that notifies a STEMI Receiving Center as early as possible that a patient has a specific computer-interpreted prehospital 12-lead ECG indicating a STEMI, allowing the SRC to initiate the internal procedures to provide appropriate and rapid treatment interventions.
- STEMI Receiving Center (SRC): A facility licensed for cardiac catheterization laboratory and approved to operate as an SRC by the County of SLO Emergency Medical Services Agency (EMS Agency).
- STEMI Referral Hospital (SRH): An acute care hospital in the County of SLO that is not designated as a STEMI Receiving Center.

IV. POLICY

- A. To be designated as a SRC in the County of SLO, a hospital must meet the following requirements:
 1. Possess current California licensure as an acute care facility providing Basic Emergency Medical Services.
 2. Hold current status as a Base Hospital in the County of SLO.
 3. Have the ability to enter into a written agreement with the County of SLO identifying SRC and County roles and responsibilities.
 4. Agree to accept all EMS patients meeting STEMI patient triage criteria and all “STEMI Alert” patients transferred from other County of SLO hospitals (except when on diversion due to a declared hospital in-house internal disaster), and provide a plan for the triage and treatment of simultaneously presenting STEMI patients regardless of ICU/CCU or ED saturation status.

5. Meet SRC designation requirements as defined in the County of SLO EMS Agency SRC Designation Criteria Application and Evaluation matrix (Attachment A) which includes:
 - a. Hospital Services including:
 - (1) Special permit for cardiac catheterization laboratory pursuant to the provisions of Title 22, Division 5, of the California Code of Regulations.
 - (2) Intra-aortic balloon pump capability with necessary staff available 24 hours a day 7 days a week 365 days a year.
 - (3) California permit for cardiovascular surgery or a written plan for emergency transport to a facility with cardiovascular surgery available with timely (within 1 hour) transfer steps and agreements.
 - (4) Continuous availability of PCI resources 24 hours a day 7 days a week 365 days a year.
 - (5) Dedicated priority "Specialty Care" phone line available 24 hours a day 7 days a week 365 days a year to be used for pre-hospital communication regarding "STEMI Alert" patients and for notifications of "STEMI Alert" transfers from other hospitals.
 - b. Hospital Personnel including:
 - (1) SRC Medical Director who must be board-certified in Internal Medicine with a sub-specialty in cardiovascular disease.
 - (2) SRC Program Manager who must be an RN.
 - (3) Cardiac Catheterization Lab Manager/Coordinator who must be an RN if not directly reporting to the SRC Program Manager.
 - (4) A daily roster of interventional cardiologists who must:
 - (a) Be available and present in the SRC within 30 minutes of the activation of the SRC's internal STEMI/PCI system.
 - (b) Have privileges in PCI.
 - (5) A daily roster of cardiovascular surgeons who must be available and present in the SRC within 30 minutes of documented request, or SRCs without cardiovascular surgery capability must have written transfer guidelines and a plan for emergency transfer within 1 hour if medically necessary.
 - (6) Other personnel who must be promptly available and present in the SRC within 30 minutes of the activation of the SRC's internal STEMI/PCI system including:
 - (a) Appropriate cardiac catheterization nursing and support personnel.
 - (b) RN or CV Perfusionist trained in intra-aortic balloon pump management.
 - c. Clinical Requirements including:

- (1) ACC/AHA guidelines for activity levels of facilities and practitioners for both primary PCI and total PCI events are adopted herein and may require period updating:
 - (a) Interventionalist must perform a minimum of 11 primary PCI procedures and 75 PCI procedures per year.
 - (b) SRC must perform a minimum of 36 primary PCI procedures and 200 total PCI procedures annually.
 - (2) Performance (timeliness) and outcome measures will be assessed initially in the survey process, and will be monitored closely on an ongoing basis by the SRC and the EMS Agency through a Performance Improvement Program for EMS Patients (Item 5.e below).
- d. Policies and Procedures including:
- (1) Cardiac interventionalist activation
 - (2) Cardiac catheterization lab team activation
 - (3) STEMI contingency plans for personnel and equipment
 - (4) Coronary angiography
 - (5) PCI and use of fibrinolytics
 - (6) Inter-facility transfer policies/protocols for STEMI
 - (7) Transfer agreements for cardiac surgery, as appropriate
 - (8) STEMI patient triage
- e. Performance Improvement Program for EMS Patients including:
- (1) An SRC must provide two representatives to participate in the EMS Agency STEMI Quality Improvement (QI) Committee:
 - (a) A QI representative
 - (b) A cardiologist
 - (2) An SRC will hold routine multidisciplinary meetings that must include representatives from SRHs, County of SLO prehospital providers and the EMS Agency.
 - (3) An SRC must implement a written internal SRC QI plan/program with an internal review process that includes:
 - (a) Door-to Balloon times
 - (b) Death rate (within 30 days, related to procedure regardless of mechanism)
 - (c) Compliance
 - (d) Emergency CABG rate (result of procedure failure or complication)
 - (e) Vascular complications (access site, transfusion, coronary perforation or operative intervention required)
 - (f) Cerebrovascular accident rate (peri-procedure)
 - (g) Post-procedure nephrotoxicity (increase in serum

creatinine of >0.5)

(h) Sentinel event, system and organization issue review and resolution processes

(4) A SRC must participate in prehospital STEMI-related educational activities as may be required by the EMS Agency

f. Data Collection, Submission and Analysis including:

(1) A SRC must participate in the National Cardiac Data Registry (NCDR).

(2) A SRC must participate in EMS Agency data collection as defined in Attachment B: Data Requirements for STEMI Receiving Centers.

B. A hospital may lose its designation as an SRC for one or more of the following reasons:

1. Inability to meet and maintain SRC Designation Criteria
2. Failure to provide required data
3. Failure to participate in STEMI System QI activities
4. Other criteria as defined and reviewed by the EMS Agency STEMI QI Committee

V. PROCEDURE

- A. To apply for designation as a SRC in the County of SLO, a Base Hospital must pay the initial application fee and submit an application for designation to the EMS Agency.
- B. SRC designation may be awarded to a hospital following a satisfactory review of written documentation, an initial site survey by EMS Agency staff and a cardiologist from out of the area, and designation approval by the EMS Agency.
- C. The SRC designation period will coincide with the period covered in a written agreement between the SRC and the County of San Luis Obispo.

VI. AUTHORITY

- Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2
- California Code of Regulations, Title 22, Section 100175

VII. ATTACHMENTS

- A. Application and Evaluation Matrix
- B. Data Requirements for STEMI Receiving Center