
CARDIOVASCULAR RECEIVING CENTER (# 5501)

AUTHORITY: Health and Safety Code, Division 2.5, Sections 1797.67, 1798, and 1798.170.

1. **APPLICATION:** This policy defines the requirements for designation as an Alameda County Cardiovascular Receiving Center (CRC) for patients transported via the 9-1-1 system with ST-elevation myocardial infarction (STEMI) who may benefit by rapid assessment and percutaneous coronary interventions (PCI).

2. CRITERIA:

2.1 **Hospital Services:** The hospital shall have the following services:

- Current designation as an Alameda County Emergency Medical Services receiving hospital
- Special permit for cardiac catheterization laboratory.
- Intra-aortic balloon pump capability.
- Special permit for cardiovascular surgery service. (The ALCO EMS Medical Director may waive this requirement when appropriate for patient or system needs. The Medical Director will evaluate conformance with existing American College of Cardiology/ American Heart Association or other existing professional guidelines for standards).
- Dedicated phone line for notification by paramedics of STEMI patient
- 24/7 capability
- Scheduled 12-lead EKG inservice training for out-of-hospital personnel.

2.2 **Personnel**

- **Medical Director** - The hospital shall designate a medical director for the cardiovascular program who shall be a physician certified by the American Board of Internal Medicine with sub-specialty certification in Cardiovascular Disease.
- **Nursing Director** - There shall be a CRC nursing director (may be critical care department director, etc.) and trained / certified nursing staff who meet Title 22 requirements.
- **Physician Consultants** - A daily roster of the following on-call physician consultants who must be promptly available:
 - ✓ Cardiologist with privileges in percutaneous coronary interventions (PCI) and volume sufficient to remain credentialed by the CRC medical staff
 - ✓ Cardiovascular surgeon, if cardiovascular surgery service.
- **Additional personnel** who must be promptly available:
 - ✓ Intra-aortic balloon pump nurse.
 - ✓ Cardiac catheterization laboratory team.

2.3 **Policies** - Internal policies shall be developed for the following:

- Defining patients who shall receive emergent angiography and who shall receive emergent fibrinolysis, based on physician decisions for individual patients.

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- Rapid administration of fibrinolytic therapy.
- To meet the goal of primary PCI door-to-dilation time within 90 minutes.

2.4 **Data Collection** - The following data shall be collected on an on-going basis and available for review by Alameda County Emergency Medical Services (ALCO EMS):

- Number of patients identified in the field with STEMI transported for emergent care.
- Number of above patients who receive a primary PCI.
- Number of above patients achieving TIMI grade III flow.
- For EMS-transported patients with acute myocardial infarction, door-to-infusion time for fibrinolysis; and, door-to-dilation time for primary PCI.
- Myocardial infarction admissions/year (all patients, not just EMS).
- Number of percutaneous coronary procedures per year on EMS transported STEMI patients.
- Cardiologist PCI volumes/year, for those treating EMS-transported patients.

2.5 **Quality Assurance/Improvement**

- Participation in the American College of Cardiology (ACC) National Cardiac Data Registry (NCDR).
- Participation by key personnel in the Alameda County EMS PCI Oversight/Coordinator Committee.
- An in-house quality improvement program for EMS transported patients which should include the following (is recommended for all cardiac patients):
 - ✓ Death rate (within 30 days, related to procedure regardless of the mechanism).
 - ✓ Emergency CABG rate (result of procedure failure or a procedure complication).
 - ✓ Vascular complications (PCI access site complication, hematoma large enough to require transfusion, or operative intervention required).
 - ✓ Cerebrovascular accident rate (peri-procedure).
 - ✓ Post-procedure nephrotoxicity (increase in serum creatinine of >0.5).

3. Designation:

- 3.1 Designation is contingent upon coordination and approval by community cardiologists and physicians (including health maintenance organizations.)
- 3.2 The cardiovascular receiving center shall be designated after satisfactory review of written documentation and an initial site survey by ALCO EMS.
- 3.2 The cardiovascular receiving center shall be redesignated after satisfactory ALCO EMS review every four years.