

CENTRAL CALIFORNIA
EMERGENCY MEDICAL SERVICES
A Division of the Fresno County Department of Public Health

Manual	Emergency Medical Services Administrative Policies and Procedures	Policy Number 323
Subject	STEMI Critical Care System Monitoring/Data Management	Page 1 of 6
References	California Code of Regulations Title 22. Social Security Division 9. Prehospital Emergency Medical Services Chapter 7.1. STEMI Critical Care System	Effective 09/20/23

I. POLICY

The care administered to patients of the local ST Elevation Myocardial Infarction (STEMI) critical care system will be reviewed for appropriateness of cardiac care and patient outcome. This review will be provided by the Regional STEMI Critical Care System Committee and Regional Medical Control Committee.

II. PROCEDURE

A. STEMI DATA COLLECTION

1. The EMS Agency shall implement a standardized data collection and reporting process for the STEMI critical care system.
2. The hospital STEMI patient care elements will be collected by the EMS Agency at a minimum quarterly and upon request. The data shall include but not limited to:
 - a. The California Code of Regulations, Title 22, Division 9, Chapter 7, Article 5, Section 100170.126 and listed in Appendix B of this policy.
 - b. CARES Registry elements
 - c. Any additional data elements as requested by the EMS Agency
 - d. Data elements listed in Appendix B of this policy.

Approved By	Revision
EMS Director Daniel J. Lynch (Signature on File at EMS Agency)	09/20/2023
EMS Medical Director Jim Andrews, M.D. (Signature on File at EMS Agency)	

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B. INTERNAL HOSPITAL REVIEW

All STEMI hospitals shall have an internal quality improvement process to include structure, process, and outcome evaluation to focus on tracking efforts to identify root causes of problems, intervene to reduce or eliminate these causes and to take steps in correcting problems and process issues.

C. REGIONAL CARDIAC CARE SYSTEM COMMITTEE

1. Membership

The Regional Cardiac Care System Committee is an advisory committee to the EMS Agency on issues related to cardiac care and will meet at least quarterly. The membership shall be broad-based and shall represent the participants in the Cardiac Care System and the local medical community. The Cardiac Care System Committee membership shall minimally include:

MEMBERSHIP OF THE REGIONAL CARDIAC CARE SYSTEM COMMITTEE

STEMI Hospitals	Non-STEMI Hospitals
STEMI Medical Director	Emergency Department Physician
Emergency Department Physician	PLN
STEMI Program Manager	
PLN	
EMS Agency	
EMS Medical Director	
EMS Director	
EMS Specialty Services Coordinator	

Each of the agencies listed above shall notify the EMS Agency, in writing, of the name of the person designated to represent the agency and exercise Committee voting privileges. There will be one vote per hospital in the event a vote is necessary. Committee voting members are expected to attend at least 50% of the scheduled meetings.

2. Chairperson/Vice Chairperson

The Committee shall elect a Chairman who shall serve a term of two years with new elections every other January. The committee may elect to choose a co-chairperson. The EMS Medical Director will serve as Vice Chairman in the event of absence of the chairperson (and co-chairperson). Meeting Minutes will be recorded on topics not related to specific confidential patient care issues. The EMS Agency will provide staff support for the committee.

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3. Committee Responsibilities

The Regional Cardiac Care System Committee is responsible for reviewing all aspects of the Cardiac Care System and developing recommendations on system operation for the EMS Agency. This will include:

- a. Monitor and trend issues in the STEMI System;
- b. Provide STEMI system quality improvement recommendations to the EMS Agency;
- c. Discuss current trends and ongoing review of the medical care in the STEMI system;
- d. Provide standardized ongoing review of the medical care in the STEMI system;
- e. Collaborate to share best practices for optimal STEMI care.
- f. Patient care review for best practices and system evaluation.

The Committee's agenda shall include a review and approval of minutes, discussion topics, case presentations and specific educational case reviews. Agenda items may occur on a regular schedule (e.g. case presentations) or at the request of the Committee members. Items not included in the Committee's written agenda may be added at the beginning of the meeting at the discretion of the Chairman.

The STEMI hospitals will review system performance. Non-STEMI facilities may present problems transfers or STEMI related issues as needed. Criteria for STEMI system review are included in Attachment A. Specific educational system reviews may be presented to illustrate new techniques, patient problems, or system operational issues. The Committee may provide feedback on system operation or quality improvement issues directly to the EMS Agency, health care facility or provider, and other EMS advisory groups.

D. EMS AGENCY

The EMS Agency is responsible for monitoring the operation of the STEMI Critical Care System. The EMS Agency may request an onsite review of any designated STEMI hospital with repetitive problems to ensure the issues are being resolved. Additional agency involvement (e.g. State Department of Health Care Services) may be requested as appropriate.

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ATTACHMENT A
STEMI CRITICAL CARE SYSTEM REVIEW CRITERIA

- I. Review of the STEMI Critical Care System performance shall occur quarterly at the Regional Cardiac Care System Committee. The criteria for review shall include:
- STEMI-related deaths
 - Major complications
 - Delay in activation of Cath Team
 - Delay in arrival of Cardiologist
 - Delay to Cath Lab
 - Problem Transfers
 - Any case demonstrating system operational problems
 - Interesting or educational cases

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ATTACHMENT B DATA MANAGEMENT

- I. All hospitals that receive STEMI patients via EMS shall participate in the EMS Agency's data collection process.
- II. The following data elements shall be collected and submitted to the EMS Agency at a minimum quarterly and upon request:

STEMI Patient Data Elements:

Prehospital Information

- A. EMS PCR Number
- B. Dispatch Date / Time
- C. Field ECG Performed, Date/Time, Result
- D. Did patient suffer an out-of-hospital cardiac arrest?

Patient Information

- A. Name; Last, First
- B. Date of Birth, Age
- C. Gender
- D. Race

Hospital Information

- A. Facility
- B. Hospital Arrival Date/Time
- C. 1st Hospital ECG Date/Time
- D. Cath Lab Activated, Date/Time
- E. Did patient go to CATH Lab
- F. CATH Lab Arrival Date/Time
- G. PCI Performed, Date/Time
- H. Fibrinolytic Infusion, Date/Time
- I. Hospital Discharge Date
- J. Patient Outcome
- K. Primary and Secondary Discharge Diagnosis

Transfer Information

- A. Was patient a transfer?
- B. Patient Arrival Date/Time from Referring Hospital
- C. Patient Departure Date/Time from Referring Hospital

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I. STEMI System Data Elements

- A. Number of STEMI's treated.
- B. Number of STEMI patients transferred.
- C. Number and percent of emergency department STEMI patients arriving by private transport (non-EMS).
- D. The false positive rate of EMS diagnosis of STEMI, defined as the percentage of STEMI alerts by EMS which did not show STEMI on ECG ready by the emergency physician.