# CENTRAL CALIFORNIA

# **EMERGENCY MEDICAL SERVICES**

A Division of the Fresno County Department of Public Health

| Manual:     | Manual:  Emergency Medical Services Administrative Policies and Procedures                                                                             |                     |
|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Subject:    | Continuous Quality Improvement                                                                                                                         |                     |
| References: | Division 2.5 of the California Health and Safety Code<br>Title 22, Division 9 of the California Code of Regulations<br>Section 1157.7 of Evidence Code | Effective: 08/07/00 |

#### I. POLICY

This policy describes the roles and responsibilities of all Central California EMS System participants in the provision of Continuous Quality Improvement (CQI). All EMS provider agencies shall meet the requirements of this policy.

#### II. PURPOSE

"Continuous Quality Improvement" or "CQI" means methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process.

## III. PROCEDURE

The EMS Agency is responsible for the oversight and supervision of the entire CQI process and communicating with all involved participants.

#### A. EMS Agency CQI Medical Director/Coordinator responsibilities include:

- 1. Implement, monitor and evaluate the CQI System, including CQI requirements as described in Appendix B.
- 2. Provide oversight of the CQI Committee.
- 3. Provide regular CQI reports to Medical Control Committee, Base Hospital Committee, EMSOC, CQI Committee and EMS Staff meetings.
- 4. Review individual QI Reports and take necessary action.
- 5. Provide an access point for Internal/External Customers as identified in Section III.F.
- 6. Create an Investigative Review Panel (IRP), as needed, to provide a grievance process for EMS personnel in accordance with State guidelines and requirements (Refer to Section III.G.).

| Approved By:<br>EMS Division Manager | Daniel J. Lynch (Signature on File at EMS Agency) | Revision: |
|--------------------------------------|---------------------------------------------------|-----------|
|                                      | DRAFT                                             |           |
| EMS Medical Director                 | (Signature on File at EMS Agency)                 |           |

- 7. Monitor quality indicators via database analysis as identified in Appendix A.
- 8. Review and participate in research generated by the CQI process.
- 9. Forward CQI Committee recommendations to EMS Training Division.
- 10. Manage EMS database to assure quality and completeness of databases.

#### B. CQI Committee responsibilities include:

NOTE: All proceedings are confidential and protected under Section 1157.7 of Evidence Code: "The prohibition relating to discovery or testimony provided in Section 1157 shall be applicable to proceedings and records of any committee established by a local governmental agency to monitor, evaluate, and report on the necessity, quality, and level of specialty health services including, but not limited to trauma care services, provided by a general acute care hospital which has been designated or organized by that governmental agency as qualified to render specialty health care services."

- 1. Review/Monitor Data from EMS System (III.C).
- 2. Select quality indicators, items for review and monitoring, create action plans, and monitor performance (i.e., time, patient satisfaction, workforce satisfaction, protocol compliance, outcome data). (See Appendix A.)
- 3. After review by EMS Agency, serve as a forum to discuss issues/concerns brought to the attention of the EMS Agency by internal and external customers (III. F.).
- 4. Propose, review, and participate in EMS research.
- 5. Promote CQI training throughout the EMS System.
- Policy/Protocol Review Selected policies reviewed with prenotification sent out to allow participant feedback. Initial review by CQI Coordinator/Medical Director and proposed revisions discussed at CQI Committee.
- 7. Provide recommendations to Training Division, including:
  - a. Orientation

Paramedic eight-hour introduction to Central California EMS policies, procedures and local scope of practice.

- b. Primary Training
  - 1) Local EMS Paramedic Training Course
  - 2) Local EMT Courses (Fire Department/Schools/Provider Agencies)
  - 3) AED (AED Provider Agencies)
  - 4) Emergency Medical Dispatcher Training
  - 5) Mobile Intensive Care Nursing Training
  - 6) Base Hospital Physician Course

- c. Continuing Education
  - 1) Case Review/Tape Review
  - 2) Provider Agency C.E.
  - 3) EMS C.E. Topics Based on CQI identified deficiencies.
- 8. CQI Committee Members
  - a. CQI Medical Director
  - b. CQI Coordinator
  - c. Base Hospital Physician (chosen by Medical Control Committee)
  - d. PLN (chosen by Base Hospital Committee)
  - e. PLO (Three preferably one from each County)
  - f. EMS Dispatcher
  - g. Fire First Responder (chosen by Fire Chiefs Association)
- 9. CQI Committee Ex-Officio Members
  - a. EMS Medical Director
  - b. EMS Division Manager
- 10. CQI Committee Guests

CQI Medical Director or CQI Coordinator may approve the attendance of guests.

# C. Data/System Review

Various databases currently exist which contain data relevant to Continuous Quality Improvement (CQI) in EMS (see list below). These databases must be searched to:

- 1. Prospectively identify areas of potential improvement.
- 2. Answer questions about the EMS System.
- 3. Monitor changes once improvement plans are implemented.
- 4. Provide accurate information enabling data driven decisions.
- 5. Monitor individual performance within the EMS System.
- 6. Support research that will improve our system and potentially broaden EMS knowledge through publication.
- 7. The involved databases include:
  - a. Dispatch Database
  - b. First Responder Database
  - c. EMT-D Database
  - d. PCR Databases
  - e. Hospital Databases
  - f. QI Database
  - g. Trauma Registry
  - h. County Coroner's Reports

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# D. Individual Quality Improvement Reports

Individual quality improvement reports are generated by anyone in the EMS System and are reviewed at the Base Hospital Physician/Prehospital Liaison Nurse level as well as by the EMS Agency.

E. EMS Research

Any parties interested in EMS research may participate. Leadership is expected from EMS Medical Directors and Senior EMS Specialists with EMS Division Manager and Medical Control Committee approval.

# F. Internal/External Customers

Various entities interact with the EMS System. In order to allow input from these sources, the CQI process may be accessed via the EMS Agency who will determine if the issue raised will be put on the CQI Committee Agenda.

#### 1. Internal Customers

Paramedics/EMT-IIs/EMT-Is/First Responders

MICNs/Flight Nurses

Dispatch Personnel

**EMS Students** 

**Ambulance Providers** 

**EMS Committees** 

Hospitals

State/Regional EMS Personnel

**UCSF** Residency Personnel

Base Hospital Physicians

# 2. <u>External Customers</u>

**Patients** 

Patients' Families

Community/Public

Third Party Payors (Insurance Companies, HMOs)

Government Agencies (Public Health Department, Police, etc.)

**Nursing Homes** 

Private Physicians

# G. Investigative Review Panel

- 1. Created on an as needed basis as outlined in Title 22, Division 9.
- 2. Purpose An impartial advisory body, the members of which are knowledgeable in the provision of prehospital emergency medical care and local EMS System policies and procedures, which may be convened to review allegations against the holder of an EMS prehospital emergency medical care certificate, assist in establishing facts of the matter, and provide its findings to the EMS Medical Director.

# APPENDIX A

# **Quality Indicators**

The CQI committee will determine quality indicators to be tracked based on the needs and goals of the system. The following quality indicators are monitored on a routine and continuous basis and reported to the appropriate EMS committees:

|    | Initial System Review Items:                                             |    | Other Review Items:                              |
|----|--------------------------------------------------------------------------|----|--------------------------------------------------|
| 1. | Trauma Scene Times (<10 minutes)                                         | 1. | RMCT Ratios (at each Base Hospital)              |
| 2. | Medical Scene Times (<20 minutes)                                        | 2. | Codes (compliance with times in protocol)        |
| 3. | Cardiac Arrest Survival Rates                                            | 3. | Nature of Incident Frequency on QA Reports       |
| 4. | Trauma Survival Rates                                                    | 4. | Pediatric Survival Rates                         |
| 5. | Percentage of Unrecognized Esophageal Intubation                         | 5. | Prehospital Violence                             |
|    |                                                                          | 6. | 90% Successful IV after Three Attempts           |
|    |                                                                          | 7. | 95% Successful ET Placement after Three Attempts |
|    | Data to Determine Performance Excellence:                                |    |                                                  |
|    |                                                                          |    |                                                  |
| 1. | Are EMS services timely?                                                 |    |                                                  |
| 2. | Do providers adhere to prescribed protocols?                             |    |                                                  |
| 3. | What is the level of patient/stakeholder satisfaction?                   |    |                                                  |
| 4. | How does performance compare with similar systems?                       |    |                                                  |
| 5. | Are data and information used in planning and operation?                 |    |                                                  |
| 6. | Do all workforce members understand and use available data?              |    |                                                  |
| 7. | Have CQI efforts been successful at improving performance?               |    |                                                  |
| 8. | Are changes in one critical performance indicator affecting other areas? |    |                                                  |
| 9. | Are QI resolutions communicated to all involved parties?                 |    |                                                  |

#### APPENDIX B

## **CQI Skills Retainment Requirements**

#### **EMT-PARAMEDIC**

## A. Patient Contact Requirement

The Central California EMS Agency maintains a standard of care that provides a high quality, consistent, and dependable skill level and knowledge base for its Emergency Medical Services personnel. To assure that EMT-Paramedics maintain adequate patient assessment and other ALS skills, the EMS Agency acknowledges the importance of minimum patient contacts to assure the proficiency of skills, problem recognition, and knowledge.

Each EMT-Paramedic accredited in the Central California EMS System shall document an average of at least 20 patient contacts per month (240 per year) while working on an approved Central California County ALS unit. A written statement from the employer shall be submitted to the Central California EMS Agency by March 20th of each year.

A patient contact is defined as a patient who is completely assessed by an on-duty EMT-Paramedic during the course of an EMS response and a prehospital care report is completed as a result of the patient assessment. The EMS Agency shall audit records to verify compliance on a random basis.

In the event that an EMT-Paramedic does not achieve the 240 patient contacts (or prorated amount authorized by the Central California EMS Agency) in the twelve-month period, the individual shall complete one of the following:

- Five (5) ALS field evaluations within a sixty (60) day period beginning March 21st. An EMS Training Officer approved by the Central California EMS Agency must continuously supervise this field evaluation. An ALS response includes a patient contact involving the use of one or more ALS skills excluding cardiac monitoring and basic CPR.
- Successfully complete 4 hours of simulation-based physician evaluation for neonatal, pediatric, adult medical
  and trauma assessment and skills. Skills lab or other scenario-based evaluation must be approved by the EMS
  agency.

The EMS Agency, in the event of an unsatisfactory evaluation, may prescribe additional education or evaluation.

#### B. Paramedic Field Evaluation Requirement

Document satisfactory field evaluations performed by an approved Central California EMS Training Officer. EMT-Paramedics that have been certified/accredited less than two (2) years within the Central California EMS Region must be evaluated by a designated EMS Training Officer, each six (6) months (Deadline-September 20th and March 20th). EMT-Paramedics that have been certified/accredited greater than two (2) years within the Central California EMS Region will not be required to do a field evaluation.

A field evaluation will consist of an EMS Training Officer observing an EMT-Paramedic conducting three (3) patient assessments. The EMS Training Officer will evaluate the EMT-II or EMT-Paramedic based upon criteria utilized for field internships as developed by the Central California EMS Agency. An evaluation is documented utilizing a field evaluation form (as utilized for field internships) and shall be submitted to the Central California EMS Agency within fifteen days of the completion of the field evaluation.

The agency's liaison officer and the EMS Agency will review unsatisfactory evaluations with the EMT-Paramedic. Possible actions by the Central California EMS Agency in the case of an unsatisfactory evaluation include reevaluation, additional training, or initiation of the formal investigation.

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# C. ACLS Requirement

Within two (2) years of initial accreditation, the EMT-Paramedic shall demonstrate proof of current certification and continued certification as an Advanced Cardiac Life Support (ACLS) provider according to the standards of the American Heart Association. Fulfillment of this requirement may be utilized for completing a portion of the on-going continuing education requirements.

# D. BTLS/PHTLS Requirement

Within two (2) years of initial accreditation, the EMT-Paramedic shall demonstrate proof of satisfactory completion of a Basic Trauma Life Support (BTLS) course according to the standards of the American College of Emergency Physicians, or Prehospital Trauma Life Support (PHTLS). Fulfillment of this requirement may be utilized for completing a portion of the on-going continuing education requirements. Refresher training in these courses may be assigned to individuals by the EMS Medical Director for remedial education as a condition of accreditation.