SAN LUIS OBISPO COUNTY EMERGENCY MEDICAL SERVICES AGENCY
PREHOSPITAL POLICY

SUBJECT: TRAUMA SYSTEM EVALUATION AND QUALITY IMPROVEMENT

I. PURPOSE

This policy establishes the process for ongoing evaluation and quality improvement of the San Luis Obispo County trauma system.

II. AUTHORITY

A. California Health and Safety Code, Division 2.5
B. California Code of Regulations, Title 22, Chapter 7, Section 100255

III. POLICY

A. Prehospital Data Collection

1. Prehospital transport providers shall electronically transmit trauma patient care reports (PCRs) to the EMS Agency within 24 hours.

2. Prehospital PCRs shall meet the following data element requirements:
   a) NEMSIS Data System
   b) CEMSIS Data System
   c) California State Trauma Registry Data Dictionary relating to prehospital data
   e) Title 22 regulations

3. Prehospital providers shall also include the following information in PCRs for all patients meeting the trauma patient criteria in Policy # 201.3 Trauma Patient Triage and Transport policy:
   a) Trauma patient criteria met: physiologic, anatomic, mechanism of injury, and/or special considerations
   b) Trauma center notification: time, hospital and contact
   c) Trauma center consultation: time, hospital, contact and orders
   d) Destination consultation: time, hospital, contact and destination orders
e) Reasons for transport to other than closest trauma center

B. Hospital Data Collection

1. Trauma centers shall submit on-call logs of trauma team members to the EMS Agency on a monthly basis.
2. Trauma centers shall submit documentation of trauma team member times for the following:
   a) Activation
   b) Response
   c) Consultation
   d) Consultation reply/response
   e) Referring hospital notification of intent to transfer
   f) De-activation

C. Trauma Registry System

1. Trauma centers shall utilize the trauma registry software approved by the EMS Agency.
2. Non-trauma center hospitals not utilizing the trauma registry software shall complete a Trauma Registry Data Form for all patients meeting trauma patient triage criteria according to Policy # 201.3 Trauma Patient Triage and Transport.
3. Trauma centers shall enter data into the trauma registry system for all patients who meet the following California and National Trauma Registry data inclusion criteria:
   At least one of the following injury diagnostic codes defined in the International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM):
   800–959.9
   AND
   Physically evaluated by trauma or burn surgeon in the ED or resuscitation area including non-admitted trauma patients
   OR
   Death in emergency department
   OR
Transfer for trauma services (note: may include inter-facility and intra-facility)

Exclusion:
Isolated burn without penetrating or blunt mechanism of injury

4. Trauma data shall be integrated into EMS Agency and State EMS Authority data management systems and include all applicable data elements required of the California State Trauma Registry Data Dictionary.

5. Trauma centers shall transmit trauma registry data on a monthly basis to the EMS Agency and submit reports as requested.

6. Receiving hospitals shall submit completed Trauma Registry Data Forms to the EMS Agency on a monthly basis.

7. Referring hospitals that have repatriated trauma patients from a trauma center shall provide the information required by the trauma registry system to the transferring trauma center for inclusion in the trauma registry system.

8. San Luis Obispo County trauma system participants should coordinate with other county’s trauma systems in data collection for trauma patients transported between counties.

9. The EMS Agency shall provide trauma registry reports of system-wide performance to all participants in the trauma registry system.

10. All participants of the trauma registry system shall adhere to the applicable provisions of Evidence Code Section 1157.7 and to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) to ensure patient confidentiality.

D. Trauma Center Internal Quality Improvement (QI) Program

1. Trauma centers shall have a quality improvement (QI) process to include 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. In addition, the process shall include the following:
   a) A multidisciplinary trauma peer review committee that includes all members of the trauma team
   b) Participation in the trauma registry system
   c) The development of trauma-specific quality improvement audit criteria
   d) Participation in the TSC, TSC trauma case reviews when appropriate, and TSC ad-hoc committees as needed
e) A written system available for patients and their significant others, as defined in Title 22, Division 9, Chapter 7, Section 100265 (d), to provide input and feedback to hospital staff regarding the care provided

f) Compliance with applicable provisions of Evidence Code Section 1157.7 to ensure confidentiality

2. The trauma program medical director and the trauma program manager/nurse coordinator shall perform the following functions:
   a) Perform case reviews of all trauma cases
   b) Identify trauma cases that meet the TSC audit criteria for QI case review or trauma cases that may provide exceptional educational benefit
   c) Analyze trends
   d) Perform detailed audits of all trauma deaths, major complications, transfers, unexpected outcomes (positive or negative), and unusual occurrences
   e) Generate and submit required trauma reports to the EMS Agency as requested
   f) Investigate all unusual occurrences, as identified internally or referred by the EMS Agency, and report results (including any resolution or identification of further actions required) directly back to the EMS Agency

D. Trauma System Quality Improvement (QI) Program

1. The EMS Agency and the TSC shall conduct an initial performance evaluation of the trauma system within one year of designation and subsequently every two years.

2. Results of the trauma system evaluation shall be made available to system participants.

3. The EMS Agency shall submit a trauma system status report as part of its annual EMS Plan update. The report shall address, at a minimum, the status of the trauma plan goals and objectives.

4. Trauma centers shall be evaluated every three years by a site review team coordinated by the EMS Agency to provide objective confirmation of trauma center compliance with contracts, policies and regulations.

5. The EMS Agency may schedule a review at any time to assure trauma center contract compliance. The reviews may include chart audit, trauma registry data review, and reviews of other records and documents.
6. All trauma system participants shall contribute to the Southwest Regional Trauma Coordinating Committee QI program.

F. Trauma System Committee (TSC)

1. The primary objective of the TSC is to provide the trauma system with a continuous multidisciplinary effort to measure, evaluate, and improve both the process of trauma care and the outcome.

2. The TSC is advisory to the San Luis Obispo County Emergency Medical Care Committee (EMCC) regarding the following trauma system components:
   a) Development and revisions of the Trauma System Plan and policies
   b) Evaluation of trauma center applications for designation
   c) Performance evaluations of the system at least every two years
   d) Receiving information about the trauma system and trauma care from EMS providers, hospitals, the local medical community and the public
   e) Reviewing trauma system data
   f) Reviewing public information, education, and injury prevention programs
   g) Monitoring the system for compliance with applicable policy and regulations
   h) Providing quality improvement recommendations to the EMCC

3. The TSC shall develop quality improvement (QI) indicators from the following system components:
   a) Prehospital
      (1) PCR documentation
      (2) Scene times
      (3) Triage
   b) Trauma alert and destination
   c) Interfacility transfers
   d) Trauma team activation and response
   e) Pediatric trauma care
   f) Trauma related deaths
   g) Patient outcomes
   h) Coordination with neighboring counties
4. TSC membership is determined by the EMCC, and may be comprised of representatives from ground and air transport providers, public providers, consumers, Med-Com, law enforcement and all local hospitals.

G. Trauma Case Reviews

1. The EMS Agency shall coordinate an outside, ad-hoc multidisciplinary medical advisory panel to conduct periodic mortality and morbidity case reviews.

2. Other cases may also be reviewed that are regarded as having exceptional educational or scientific benefit.

3. The medical advisory panel shall be comprised of qualified trauma specialists from outside the area with no known conflicts of interest.

4. The medical advisory panel shall meet with an ad-hoc TSC Trauma Case Review sub-committee.

5. The purpose of the TSC Trauma Case Review sub-committee includes:
   a) Serving in an advisory capacity to the EMS Agency and the TSC on trauma care system issues and policies
   b) Monitoring the process and outcome of trauma patient care and present opportunities for analysis of data and information of scientific value for studies and strategic planning of the trauma system
   c) Providing educational forums for trauma care when trends are identified

6. Confidentiality

   a) Trauma Case Review meetings are closed. Guests may attend only with prior approval of the Chairperson.
   b) Trauma Case Review meetings and records are confidential and are protected under section 1157.7 of the Evidence Code, State of California.
   c) Panel members and invited guests are required to sign a Confidentiality Agreement, which is maintained on file at the EMS Agency as a condition of attendance.
   d) Attendees shall not divulge or discuss information outside the meetings.
   e) All hard copy information distributed at Trauma Case Review meetings shall be disposed of in an appropriate confidential manner.