POLICY #421: TRAUMA SYSTEM EVALUATION AND QUALITY IMPROVEMENT

I. PURPOSE

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

II. POLICY

A. Prehospital Data Collection

1. Prehospital providers shall electronically transmit trauma patient care reports (PCRs) to the local Emergency Medical Services (EMS) Agency within 24 hours.
2. Prehospital PCRs shall meet the following current data element requirements:
    a. National EMS Information System (NEMSIS) data
    b. California EMS Information System (CEMSIS) data including trauma specified data
    c. National Trauma Data Bank (NTDB)
    d. Trauma Quality Improvement Program TQIP
    e. Title 22 Regulations
3. Prehospital providers shall include the following information in PCRs for all patients meeting the trauma patient criteria as outlined in EMS Agency Policy #153: Trauma Patient Triage and Destination:
    a. Trauma patient trauma triage step 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
4. Dispatch shall provide to the EMS Agency upon request, call recordings and CAD information for the purpose of quality improvement.

B. Trauma centers shall submit on-call logs of trauma team members to the EMS Agency on upon request

1. Trauma Team documentation shall contain documentation of 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 trauma registry software approved by the EMS Agency.

2. Non-trauma center hospitals not utilizing the trauma registry software shall provide the EMS Agency requested data for quality improvement programs for patients meeting trauma patient triage criteria according to EMS Agency Policy #153: Trauma Patient Triage and Destination.

3. Trauma centers shall enter data into the trauma registry system for all patients who meet the CEMSIS -Trauma and National Trauma Data Bank registry data inclusion criteria:

   a. At least one of the following injury diagnostic codes defined in the current International Classification of Diseases, Ninth and/or Tenth Revision, Clinical Modification (ICD-9/ICD-10) as defined in Attachment A:

      (1) Patient considered an admission based on the trauma registry inclusion criteria

      (2) Patient transfer via EMS transport (including air ambulance) from one hospital to another hospital

      (3) Death as a result of the injury

      (4) Transferred for trauma services

      (5) Met criteria for Trauma Team Activation at the Trauma Center

      (6) Burns with or 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 data elements required of the CEMSIS – Trauma.

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

6. Receiving hospitals shall submit requested data to the EMS Agency on a monthly basis or as requested.

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. SLO County trauma system participants shall 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 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 1966 (HIPAA) to ensure patient confidentiality.

D. Trauma Center Internal Performance Improvement and Patient Safety Program (PIPS)

1. Trauma centers shall have a 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 detailed audit for all trauma-related deaths, major complications and transfers (including Interfacility transfers)

   b. A multidisciplinary trauma peer review committee that includes representation from general surgery, emergency medicine, orthopedic surgery, anesthesia, neurosurgery, and other specialists involved in the care of trauma patients

   c. Participation in the trauma system data management system

   d. The development of trauma-specific Performance Improvement and Patient Safety Program (PIPS) including the core measures identified by the American College of Surgeons Committee on Trauma

   e. Participation in the Trauma Advisory Group (TAG) trauma case reviews when appropriate, and TAG ad-hoc committees as needed

   f. A written system for patients, parents of minor children who are patients, legal guardians of children who are patients and/or primary caretakers of children who are patients to provide, as defined in Title 22, Division 9, Chapter 7, Section 100265 (d), to provide input and feedback to hospital staff regarding the care provided to the child.

2. The trauma program medical director and the trauma program manager ensure the following functions:

   a. That sufficient mechanisms are in place to identify events for review by the Trauma PIPS program case reviews of all trauma cases

   b. Identify trauma cases that meet the TAG audit criteria for QI case review or trauma cases that may provide exceptional educational benefit

   c. Analyze trends

   d. Perform detailed review 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

E. Trauma System Quality Improvement (QI) Program

1. The EMS Agency and the TAG shall conduct ongoing performance evaluation through quality indicators developed by TAG of the trauma system.
2. Results of the trauma system evaluation shall be made available to system participants.
3. The EMS Agency shall include a trauma system status report as part of its annual EMS Plan update.
4. 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.
5. All trauma system participants shall participate in local, regional and state QI programs.

F. Trauma Advisory Group (TAG)

1. A primary objective of the TAG 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 TAG is advisory to the SLO 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. Receiving information about the trauma system and trauma care from EMS providers, hospitals, the local medical community and the public
    d. Reviewing trauma system data
    e. Reviewing public information, education, and injury prevention programs
    f. Monitoring the system for compliance with applicable policy and regulations
    g. Providing QI recommendations to the EMCC.
3. The TAG shall develop QI indicators from the following system components that may include:
    a. Dispatch
    b. Prehospital
        (1) PCR documentation
        (2) Scene times
        (3) Triage
    c. Trauma Center
        (1) Trauma alert and destination
        (2) Inter-facility transfers
        (3) Trauma team activation and response

(4) Pediatric trauma care

(5) Trauma related deaths

d. Trauma Related MCI's

e. Trauma Patient outcomes – all hospitals

f. Coordination with neighboring counties

4. TAG membership shall be approved by the EMCC, and may be comprised of representatives from ground and air transport providers, public providers, consumers, MedCom, law enforcement and all local hospitals.

5. TAG Case Reviews

a. Provide advisory information to the EMS Agency and the trauma centers on trauma care system issues and policies

b. Monitor process and outcome of trauma patient care ~~and~~ presenting opportunities for analysis of data and information of scientific value for studies and strategic planning of the trauma system

c. Provide educational forums for trauma care.

d. Trauma Case Review meetings and records are confidential and are protected under section 1157.7 of the Evidence Code, State of California.

e. 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

G. Trauma Case Reviews with Outside Advisory Groups

1. Procedure The EMS Agency shall participate with 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.

III. AUTHORITY

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