TITLE: **LEVEL II TRAUMA CENTER STANDARDS** EMS Policy No. **4712**

PURPOSE:

The purpose of this policy is to establish the minimum standards for level II trauma center designation in San Joaquin County.

AUTHORITY:

Health and Safety Code, Division 2.5, Sections 1797.67, 1797.220, 1798.162, 1797.163, 1797.164, 1798.165, 1798.168, 1798.170 and 1798.172; California Code of Regulations, Title 22, Division 9, Chapter 6.

DEFINITIONS: See EMS Policy No. 1100, POLICY DEFINITIONS.

POLICY:

Hospitals shall meet and maintain the following criteria to be designated as a Level II trauma center by SJCEMSA.

PROCEDURE:

I. In order to be eligible for designation as a level II trauma center in San Joaquin County a hospital shall have and continuously maintain the standards specified in this policy.

II. General Requirements:

A. Be licensed by the California Department of Public Health (CDPH) as a general acute care hospital.

B. Meet all of the standards and requirements of a level II trauma center as set forth in Health and Safety Code, Division 2.5, Chapter 6, Article 2.5; California Code of Regulations, Title 22, Division 9, Chapter 7; and SJCEMSA policies and procedures. SJCEMSA may establish standards that exceed the requirements specified in statute, regulation, or by the American College of Surgeons Committee on Trauma (ACS-COT). In any conflict between these standards the higher standard shall prevail. SJCEMSA shall have the sole authority and discretion to determine a hospital's compliance to standards.

C. Achieve accreditation from The Joint Commission or other accrediting organization acceptable to the Centers for Medicare and Medicaid

Approved: Signed by: 6C7EAFE95BC6438... Medical Director

DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

Services.

D. Be eligible for the reimbursement of patient care services by the Centers for Medicare and Medicaid.

E. Obtain within one (1) year of designation by the SJCEMSA and continuously maintain thereafter ACS-COT level II trauma center verification.

III. Required Services and Organization:

A. A trauma program medical director who is a board-certified surgeon, whose responsibilities include, but are not limited to, factors that affect all aspects of trauma care such as:
1. Recommending trauma team physician privileges.
2. Working with the nursing and administration to support the needs of trauma patients.
3. Developing trauma treatment protocols.
4. Determining the equipment and supplies necessary for trauma care.
5. Ensuring the development of policies and procedures to manage domestic violence, elder child abuse or neglect.
6. Authority and accountability for the trauma quality improvement peer review process.
7. Correcting deficiencies in trauma care and excluding from trauma call those trauma team members (physicians and non-physicians) that do not meet standards.
8. Coordinating pediatric trauma care with other hospital and professional services, including the establishment of trauma patient transfer criteria to a trauma center with a pediatric intensive care unit. Pediatric trauma transfer criteria shall be established with the assistance of pediatric trauma specialists and approved by SJCEMSA.
9. Coordinating with SJCEMSA, EMS Authority, and other trauma centers.
10. Assisting in the development of the budget for the trauma program and trauma service.
11. Identifying representatives from neurosurgery, orthopedic surgery, emergency medicine, pediatrics, anesthesiology, and other appropriate disciplines to assist in identifying physicians from their respective disciplines who are qualified to be members of the

Approved: DocuSigned by: 6C7EAFE95BC0438... Medical Director

DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

trauma program.

B. A full-time trauma program nurse manager who is a registered nurse with qualifications including evidence of educational preparation and clinical experience in the care of the adult and pediatric trauma patient and administrative ability. The trauma program nurse manager must have sufficient authority to perform the multidisciplinary nature of the job reporting directly to the director of nursing or higher within the organization. The trauma program nurse manager responsibilities shall include but are not limited to:
   1. Organizing services and systems necessary for the multidisciplinary approach to the care of the injured patient.
   2. Coordinating day-to-day clinical process and performance improvement as it pertains to nursing and ancillary personnel and services.
   3. Collaborating with the trauma program medical director in carrying out the educational, clinical, research, administrative, and outreach activities of the trauma program.
   4. Coordinating program monitoring, reporting, and oversight with the SJCEMSA.

C. An organized trauma service that can provide for the implementation of the requirements of a level II trauma center and provide effective coordination with the SJCEMSA.

D. A trauma registrar capable of performing high-quality data entry in the trauma registry. Within one (1) year of appointment each trauma registrar shall complete a trauma registrar course through the American Trauma Society of Registrars. Obtaining status as a Certified Specialist in Trauma Registries (CSRT) is encouraged.

E. A trauma performance improvement nurse who is a registered nurse responsible for trauma service quality improvement, under the supervision of the trauma program manager. There shall be one (1) full-time trauma performance improvement nurse for every 1,500 registry patient entries annually.

F. A multidisciplinary trauma team responsible for the initial resuscitation and management of the trauma patient.

G. Department(s), division(s), service(s), or section(s) that include at least the

Approved:
Signed by: 6C7EAFE95BC0438... Medical Director
DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

following surgical specialties, which are staffed by qualified surgical specialists:

1. General.
2. Neurologic.
3. Obstetric/gynecologic.
4. Ophthalmologic.
5. Oral or maxillofacial, or head and neck.
6. Orthopedic.
7. Plastic.
8. Urologic.

H. Department(s), division(s), service(s), or section(s) that include at least the following non-surgical specialties, which are staffed by qualified specialists:

1. Anesthesiology.
2. Internal medicine.
3. Pathology.
4. Psychiatry.
5. Radiology.

IV. Required Qualified Specialist Availability:

A. An emergency department, division, service, or section staffed with qualified specialists in emergency medicine who are in house.

B. Qualified surgical specialists:

1. General surgeon capable of evaluating and treating adult and pediatric trauma patients shall be on call and immediately available for trauma team activation and promptly available for consultation.
2. On-call and promptly available:
   a. Neurologic.
   b. Obstetric/gynecologic.
   c. Ophthalmologic.
   d. Oral or maxillofacial, or head and neck.
   e. Orthopedic.
   f. Plastic.
   g. Re-implantation/microsurgery capability. This surgical service may be provided through a written transfer agreement.
   h. Urologic.
3. Qualified surgical specialist requirements may be fulfilled by

Approved: Signed by: Katherine Spaeth, MD 6C7EAFE05BC6438... Medical Director

DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

supervised senior residents who are capable of assessing emergency situations in their respective specialties. When a senior resident is the responsible surgeon:

a. The senior resident shall be able to provide the overall control and surgical leadership necessary for the care of the patient, including initiating surgical care.
b. A staff trauma surgeon shall be on call and promptly available.
c. A staff trauma surgeon shall be advised of all trauma patient admissions, participate in major therapeutic decisions, and be present in the emergency department for major resuscitations and in the operating room for all trauma operative procedures.

4. Available for consultation or available for consultation and transfer through written agreement(s) for adult and pediatric trauma patients requiring the following services:
   a. Burns.
   b. Cardiothoracic.
   c. Pediatric.
   d. Re-implantation/microsurgery.
   e. Spinal cord injury.

C. Qualified non-surgical specialists:
   1. Emergency medicine in house at all times.
      a. This requirement may be fulfilled by supervised senior residents in emergency medicine, as defined, who are assigned to the emergency department and are serving in the same capacity. In such cases, the senior resident shall be capable of assessing emergency situations in trauma patients and of providing for initial resuscitation. Current Advanced Trauma Life Support (ATLS) certification is required for all emergency medicine physicians who provide emergency trauma care and are qualified specialists in a specialty other than emergency medicine.
   2. Anesthesiology shall be on call and promptly available with a mechanism established to ensure that the anesthesiologist is in the operating room when the patient arrives.
      a. This requirement may be initially fulfilled by senior residents or certified registered nurse anesthetists who are capable of assessing emergent situations in trauma patients and of providing any indicated treatment and are supervised by the

Approved: Signed by: 6C7EAFE05BC6438... Medical Director

DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

staff anesthesiologist. In such cases, the staff anesthesiologist on call shall be advised about the patient, and be promptly available at all times, and be present for all operations.

3. Radiology, on call and promptly available.
4. Available for consultation:
   a. Cardiology.
   b. Gastroenterology.
   c. Hematology.
   d. Infectious diseases.
   e. Internal medicine.
   f. Nephrology.
   g. Neurology.
   h. Pathology.
   i. Pulmonary medicine.

V. Required Additional Service Capability and Availability:

A. Radiological service. The radiological service shall have an in-house radiological technologist capable of performing plain film and computed tomography (CT) imaging. The radiological service shall have the following services on call and promptly available:
   1. Angiography.
   2. Ultrasound.

B. Clinical laboratory service. The clinical laboratory service shall have:
   1. A comprehensive blood bank or access to community central blood bank.
   2. Clinical laboratory services staffed with clinical laboratory scientist and phlebotomist in house.

C. Surgical service. A surgical service shall have an operating suite that is available or being used for trauma patients and that has:
   1. Operating staff who are on call and promptly available unless operating on trauma patients and back up personnel who are on call and promptly available.
   2. Appropriate surgical equipment and supplies as determined by the trauma program medical director and approved by the SJCEMSA.

D. Basic or comprehensive emergency service which has special permits

Approved: Signed by: 6C7EAFE95BC6438... Medical Director
DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

issued pursuant to California Code of Regulations (CCR), Title 22, Division 5, Chapter 1, Article 5. The emergency service shall:

1. Designate an emergency physician to be a member of the trauma team.
2. Provide emergency medical services to adult and pediatric patients.
3. Have on hand appropriate adult and pediatric equipment and supplies as approved by the director of emergency medicine in collaboration with the trauma program medical director.

E. Required supplemental services:

1. Intensive care service (ICU):
   a. The ICU shall have on hand appropriate equipment and supplies as approved by the physician responsible for the intensive care service and the trauma program medical director.
   b. The ICU shall have a qualified specialist promptly available to care for trauma patients in the ICU. The qualified specialist may be a resident with two (2) years of training who is supervised by the staff intensivist or attending trauma surgeon who shall participate in all critical decisions.
   c. The qualified ICU specialist shall be a member of the trauma team.

2. Acute hemodialysis capability.

3. Burn center. These services may be provided through a written transfer agreement with a burn center.

4. Occupational therapy service. Occupational therapy services to include personnel trained in occupational therapy and equipped for the acute care of the critically injured patient.

5. Physical therapy (PT). PT services to include personnel trained in PT and equipped for the acute care of the critically injured patient.

6. Rehabilitation center. Rehabilitation services to include personnel trained in rehabilitation care and equipped for the acute care of the critically injured patient. These services may be provided through a written transfer agreement with a qualified hospital.

Approved:
DocuSigned by:
6C7EAFE95BC0438...
Medical Director

DocuSigned by:
06A07EEDBDA14D4...
EMS Administrator

7. Respiratory care services. Respiratory care services to include personnel trained in respiratory therapy and equipped for the acute care of the critically injured patient.

8. Speech therapy. Speech therapy services to include personnel trained in speech therapy and equipped for the acute care of the critically injured patient.

9. Social services.

F. Non licensed or permitted services:

1. Pediatric service. A pediatric intensive care unit (PICU) approved by CDPH California Children Services; or a written transfer agreement with a hospital with an approved PICU. Hospitals without a PICU shall establish and utilize written criteria for consultation and transfer of pediatric patients needing intensive care in collaboration with the trauma program director and subject to the review and approval of the SJCEMSA medical director.

2. A multidisciplinary team to manage child abuse and neglect.

3. Acute spinal cord injury management capability. This service may be provided through a written transfer agreement with a rehabilitation center.

VI. Required Trauma Quality Improvement:

A. A trauma service quality improvement program 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 program shall include:

1. A detailed audit of all trauma related deaths, major complications, patient transfers and all in-house ICU pediatric admissions.
2. A multidisciplinary trauma peer review committee that includes all members of the trauma team.
3. Participation in the SJCEMSA trauma audit committee.
4. A written policy establishing a system for patients, parents/legal guardians of minor children who are patients and immediate family

Approved: DocuSigned by: 6C7EAFE05BC6438... Medical Director

DocuSigned by: 06A07EEDBDA14D4... EMS Administrator

members to provide input and feedback to hospital staff regarding the care provided to the patient.

5. Adhere to the applicable provisions of Evidence Code Section 1157.7 to ensure confidentiality.

B. The trauma center shall additionally maintain compliance with all SJCEMSA quality improvement requirements for receiving and base hospitals.

C. The trauma center shall measure response time compliance for physicians and specialists from the time the request is made to respond until arrival at trauma resuscitation area, operating room, or other specified location.

D. Maintain a trauma registry data management system in accordance with the requirements of EMS Policy No. 6720 Trauma Data Management.

VII. Other Requirements:

A. Heliport with state permit and lighting for nighttime operations.

B. Written transfer agreement with the level I trauma center in Sacramento County, referring hospitals, and specialty hospitals.

C. Protocol to identify potential organ donors as described in Division 7, Chapter 3.5 of the Health and Safety Code.

D. Continuing education. Continuing education in trauma care shall be provided for:
1. Staff physicians.
2. Staff nurses.
3. Staff allied health personnel.
4. EMS personnel.
5. Community physicians.

E. Outreach program to include:
1. Capability to provide both telephone and on-site consultations with physicians in the community.
2. Trauma prevention for the general public.

Approved: DocuSigned by: 6C7EAFE95BC6438... Medical Director

DocuSigned by: 06A07EEDBDA14D4... EMS Administrator