

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

Public Comment Response  
April 1, 2015 to May 20, 2015

## **OCEMS POLICIES- PUBLIC COMMENT RESPONSES**

**APRIL 1, 2015 TO MAY 20, 2015**

### **OCEMS Policy #620.00- Adult Trauma Center Criteria**

<b>Date</b>	<b>Contact</b>	<b>Organization</b>	<b>Comment</b>	<b>OCEMS Response</b>
4/7/2015	Desiree Thomas (TPM)	Long Beach Memorial/Miller Children's Hospital	<b><u>Page #7, L:1:B</u></b>  An EMS designated PedsTC does not need a full time peds TPM. A ACS verified PedsTC does need a full time peds TPM.	<b>Acknowledged- OCEMS Comment:</b>  Policies have been updated to current American College of Surgeons Committee on Trauma 2014 standards. An OCEMS designated Pediatric Trauma Center requires a full time pediatric trauma program manager. <b>The following statement added by motion of RTOC on 7/14/15 "The dedicated pediatric trauma program manager may have duties beyond that of pediatric trauma program manager as described in the Resources for Optimal Care of the Injured Patient."</b>
5/19/2015	Michael Lekawa MD (Pediatric TMD)	UC Irvine Medical Center	The timing of this document review does not provide adequate time for us to evaluate such sweeping changes. Both UC Irvine and Mission are currently preparing for their ACS site survey which is consuming most of our non clinical resources. I would ask that this be tabled for a period of 3 months to allow us time to review and comment in detail.	<b>Acknowledged- OCEMS Comment:</b> <i>OCEMS Policy #0.80 "Policy and Procedure Review Process (New and Revised Policies)" defines the process for system providers to review new and / or revised draft policies. Policies 620.00, 620.01, 620.07, 620.11, 620.13, 620.14 and 635.10 have been posted for a 50 day public comment period from April 1, 2015 to May 20, 2015 to allow providers time to review and comment on the policy revisions. Policies have been updated to current American College of Surgeons Committee on Trauma 2014 standards. Policies will be placed</i>

			<p>Also, the timing is poor in that we now have a new ACS document to use as a resource (Orange Book). The changes illustrated in this document appear to be from the green book and might be outdated at this time.</p> <p>Specific problems that I have found begin with the use of the word "Adult" in the title and throughout the document. There is no basis for this change at this time and it implies that an adult center cannot care for children.</p> <p>We do not have an ACS verified pediatric trauma center at this time, and we do not have a track record which implies that there would be adequate depth to care for multiple</p>	<p>effective July 1, 2015 but can be reviewed by the Trauma Operations Committee, Facilities Advisory Committee and Emergency Medical Care Committee.</p> <p><b>Acknowledged- OCEMS Comment:</b> The following resources were used for revisions to policies 620.00, 620.01, 620.07, 620.11, 620.13, 620.14 and 635.10:</p> <ul style="list-style-type: none"> <li>• The 2014 Resources for Optimal Care of the Injured Patient published by the American College of Surgeons Committee on Trauma (Also referred to as the Orange Book)</li> <li>• California Health and Safety Code Division 2.5</li> <li>• California Title 22 Chapter 7 Trauma Care Systems</li> <li>• Current OCEMS system standards for facility designations</li> </ul> <p><b>Acknowledged- OCEMS Comment:</b> "Adult" Removed from policy 620.00.</p> <p><b>Thank you, comment acknowledged.</b></p>
--	--	--	---	---

			<p>pediatric trauma patients outside of the current trauma centers. This can be reconsidered after the flow of pediatric patients equilibrates over the next few years.</p> <p>Regarding initial designation, we need to state the reasons why a PRC would not have their application considered (IIIA4). Disrupting the ability of the current trauma centers to economically survive or disrupting the need to have a trauma educational program for the county would be examples of what to considered. Also, who would be the decider for this.</p> <p>The specific standards for when a backup Neurosurgeon call schedule is needed should be delineated. There are too many</p>	<p><b>Acknowledged- OCEMS Comment:</b>  <b>Current Policy Section II.A.4:</b>  <i>"OCEMS will evaluate the request and determine the need for an additional Trauma Center."</i></p> <p><b>Added the following language to policy</b>  <i>"OCEMS evaluation may include:</i></p> <ul style="list-style-type: none"> <li><i>a. Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).</i></li> <li><i>b. Base hospital designation (number of calls, impact on patients, prehospital personnel, and other base hospitals)</i></li> <li><i>c. Trauma care (number of trauma patients, impact on other hospitals, trauma centers, and trauma patients)</i></li> <li><i>d. Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability)</i></li> <li><i>e. Patient volume (number of patients annually, both 9-1-1 transported and walk-ins)"</i></li> </ul> <p><b>Acknowledged- Policy revised to:</b>  <i>"Hospitals with a trauma service shall have a</i></p>
--	--	--	---	--

			<p>"prescriptive" requirements which are repetitive to the "Optimal Care of the Injured Patient".</p> <p><b>Recommendation withdrawn by submitter on 7/14/15</b></p> <p>TMD requirements, page 3, A3C is an example. The educational program should not be required to be conducted by the trauma program (listed under each specialty except anesthesiology). Should be reworded....please contact Stephanie Lush for assistance.</p> <p>Overall, these are too sweeping of a change to make without a specific gathering of the trauma medical directors and program directors to review them with OCEMSA. Alternatively, the chair of the Trauma Operations Committee must be involved at inception, which has not occurred here. (I am that person) That document should then be put out for review.</p>	<p><i>published back up call schedule for neurotrauma for times when the neurosurgeon is encumbered upon the arrival of a neurotrauma case."</i></p> <p><b>Acknowledged- OCEMS Comment:</b> Policy 620.00 Section V A. 3. C. TMD requirement is consistent with The 2014 Resources for Optimal Care of the Injured Patient published by the American College of Surgeons Committee on Trauma.</p> <p><b>Acknowledged- OCEMS Comment:</b> The following resources were used for revisions to policies 620.00, 620.01, 620.07, 620.11, 620.13, 620.14 and 635.10:</p> <ul style="list-style-type: none"> <li>• The 2014 Resources for Optimal Care of the Injured Patient published by the American College of Surgeons Committee on Trauma (Also referred to as the Orange Book)</li> <li>• California Health and Safety Code Division 2.5</li> <li>• California Title 22 Chapter 7 Trauma Care Systems</li> <li>• Current OCEMS system standards for facility designations</li> </ul>
5/20/15	Karen Grimley, CNO	UCI Irvine Health	<p>Given the comprehensive nature of the OCEMS Trauma infrastructure, it seems that the delineation of Adult and Pediatric Trauma centers will tax our community's health care resources. The policy should remain</p>	<p><b>Thank you, comment acknowledged.</b></p> <p><b>Acknowledged- OCEMS Comment:</b> "Adult" Removed from policy 620.00.</p>

			Paramedic Trauma Receiving Center Criteria until such time as a county wide trauma meeting can be convened to discuss the implications of such a change on Orange County and existing trauma receiving centers.	
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	Page #'s – are there 80+ pages in this document? Top right says 1 of 8* (covered by insignia) but policy goes to page 13 and if you count excluded items, it goes to pg 17 out of 8*...?) just curious if there are other pages	<b>Acknowledged- OCEMS Comment:</b> The policy was posted with track changes causing the formatting to be offset. Once policy formatting is applied, the policy will be 13 pages.
			Page 1 - III – Designation – do we need to mention a “needs assessment” to be completed prior to another trauma center being added, (or reference to the LEMSA or State plan would be adhered to). Otherwise it would just go off of the hospitals application to be a TC. I know this was an issue in LA a while back when a bunch of trauma centers opened up and then had to close due to low volumes and financial impact.	<b>Acknowledged- OCEMS Comment:</b> <b>Current Policy Section II.A.4:</b> <i>“OCEMS will evaluate the request and determine the need for an additional Trauma Center.”</i> <b>Added the following language to policy</b> <i>“OCEMS evaluation may include:</i> <ul style="list-style-type: none"> <li>a. <i>Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).</i></li> <li>b. <i>Base hospital designation (number of calls, impact on patients, prehospital personnel, and other base hospitals)</i></li> <li>c. <i>Trauma care (number of trauma patients, impact on other hospitals, trauma centers, and trauma patients)</i></li> <li>d. <i>Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability)</i></li> </ul>

				e. <i>Patient volume (number of patients annually, both 9-1-1 transported and walk-ins)”</i>
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	Page 2 – #4 – OCEMS will provide its designation decision to the Facilities Advisory Subcommittee and the EMCC for endorsement. Who is on these committees? How are individuals selected for the committee?	<b>Acknowledged- OCEMS Comment:</b> Information on advisory committees to OCEMS can be found on the OCEMS website at <a href="http://www.healthdisasteroc.org/ems">www.healthdisasteroc.org/ems</a>
			Page 5 G – ATC Surgical Physician Specialty – “staffed by qualified specialist with documented training and experience in trauma surgery” – does this mean all specialists, even some of the obscure ones must have trauma experience? (i.e. microvascular, ophtho, etc?)	<b>Acknowledged- OCEMS Comment:</b> <b>Policy revised to:</b> <i>“Trauma Center Surgical Physician Specialty shall include at least the following surgical specialties to properly serve trauma patients:”</i>
			Page 5 H – Non-surgical Physician Specialties will also have documented training and experience in trauma surgery — same question as above – all specialties? (psychiatry also?)	<b>Acknowledged- OCEMS Comment:</b> <b>Policy revised to:</b> <i>“Trauma Center Non-Surgical Physician Specialty shall include at least the following specialties to properly serve trauma patients:”</i>
			Page 8 – A1 a – OR available –Page 8 – A1b – the OR mustbe available and ... Ensure an operating room must be adequately staffed and available within 15 minutes. If the first OR is occupied, an adequately staffed additional room must be available. How is this tracked or ensured?	<b>Acknowledged- OCEMS Comment:</b> Trauma centers should integrate monitoring of critical or high risk situations into their PIPS processes.

			Pg 10 -B Universal screening for alcohol must be performed on all injured patients and must be documented .... For clarity, does this mean every patient, including, for instance those d/c'd from ED?	<b>Acknowledged- OCEMS Comment:</b> <b>Policy revised to:</b> <i>"Universal screening for alcohol use must be performed and documented for all injured patients meeting ACS registry inclusion criteria with a hospital stay of &gt; 24 hours"</i>
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	Pg 11 – H – All facilities shall provide follow up information including the information on an OC trauma registry form with a simple disability score. – we had about 70 patients last year; every patient needs follow up info provided?	<b>Acknowledged- OCEMS Comment:</b> Page 11- Section IX. H Deleted
			<p>Pg 12 – C1,2 &amp; 3- Annual performance eval....</p> <ul style="list-style-type: none"> <li>o PT outcomes vs triage criteria and ISS – what exactly is needed? "outcomes"... "Lived/Died?" FIM Scores? ... ? Will we be reporting quarterly?</li> </ul> <p>Adequacy of prehospital care... as measured by.... Defined as?</p> <p>Rates of under and over triage need to be monitored and reviewed - reporting quarterly?</p> <ul style="list-style-type: none"> <li>o</li> </ul>	<p><b>Acknowledged- OCEMS Comment:</b> Page 12 Section XI.C. modified to: <i>"Annual performance evaluation based on criteria determined by the trauma operations committee."</i></p> <p>The following have been deleted from Page 12 Section XI.C. :</p> <p><i>"C.1. Measurement of patient outcomes versus triage criteria and injury severity</i> <i>C.2. Adequacy of prehospital care</i> <i>C.3. Rates of under triage and over triage monitored and reviewed quarterly"</i></p>

### **OCEMS Policy #620.01- Pediatric Trauma Center Criteria**

Date	Contact	Organization	Comment	OCEMS Response
5/20/2015	Michael Lekawa MD (Pediatric TMD)	UCI Medical Center	on page one, 14 or younger would be consistent with the other policies.	<b>Acknowledged- OCEMS Comment:</b> All pediatric age references in Policies 620.00, 620.01, 620.07, 620.11, 620.13, and 620.14 will read



			<p>For medical personnel, vA2d should simply read, "A Physician", deleting At a minimum... which implies it is less optimal. The trauma experience of a trauma surgeon may likely be far more than that of a pediatric surgeon.</p> <p>Lastly, on page 10 B1, that line requiring CCS approval should be deleted.</p>	<p>"younger than 15 years old" which is consistent with language in The 2014 Resources for Optimal Care of the Injured Patient published by the American College of Surgeons Committee on Trauma.  <b>Pediatric age defined as "younger than 15 years old" at the request of the RTOC on 7/14/15.</b></p> <p><b>Acknowledged- OCEMS Comment:</b>  Deleted "at a Minimum"</p> <p><b>Acknowledged- OCEMS Comment:</b>  Policies were updated to reflect current California Code of Regulations Title 22 Chapter 7 § 100261. Level I and Level II Pediatric Trauma Centers standards.  <b>Policy 620.01 Section VI.B.1. "The PedTC shall have a CCS Approved PICU" removed by motion of the RTOC on 7/14/15.</b></p>
5/20/15	Karen Grimley, CNO	UCI Irvine Health	UC Irvine Medical Center is the only ACS verified Level 2 Trauma center in the County. To impose CCS criteria would require establishing a dedicated pediatric intensive care unit when ACS Level 2 pediatric trauma criteria were met under the auspices of a virtual pediatric ICU with dedicated pediatric staff. IN addition we provide comprehensive	<p><b>Acknowledged- OCEMS Comment:</b>  Policies were updated to reflect current California Code of Regulations Title 22 Chapter 7 § 100261. Level I and Level II Pediatric Trauma Centers standards.  <b>Policy 620.01 Section VI.B.1. "The PedTC shall have a CCS Approved PICU" removed by motion of the RTOC on 7/14/15.</b></p>

			pediatric specialtiy 24/7 coverage with trauma and pediatric intensivists on the premise. To that end, section VI. Hospital Services B. Pediatric Intensive Care Unit (PICU) for trauma patients. DELETE i. The PedTC shall have a CCS approved PICU (CCR)	
--	--	--	--	--

### **OCEMS Policy #620.07- Trauma System Design**

<b>Date</b>	<b>Contact</b>	<b>Organization</b>	<b>Comment</b>	<b>OCEMS Response</b>
5/20/2015	Michael Lekawa MD (Pediatric TMD)	UCI Medical Center	We should consider specific plans to regulate trauma centers other than the ability to meet ACS standards. Economic or educational impact should be considered.	<b>Acknowledged- OCEMS Comment:</b> <b>Current Policy 620.00 and 620.01:</b> <i>"OCEMS will evaluate the request and determine the need for an additional Trauma Center."</i> <b>Added the following language to policy</b> <i>"OCEMS evaluation may include:</i> <ul style="list-style-type: none"> <li><i>a. Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).</i></li> <li><i>b. Base hospital designation (number of calls, impact on patients, prehospital personnel, and other base hospitals)</i></li> <li><i>c. Trauma care (number of trauma patients, impact on other hospitals, trauma centers,</i></li> </ul>

				<p><i>and trauma patients)</i></p> <p>d. <i>Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability)</i></p> <p>e. <i>Patient volume (number of patients annually, both 9-1-1 transported and walk-ins)”</i></p>
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	This looked good – would just ask to include “Trauma Registry Inclusion Criteria” so all trauma centers can standardize data collected	<p><b>Acknowledged- OCEMS Comment:</b></p> <p><b>Added to Page 5 Section V:</b></p> <p><i>(d) “Trauma registry criteria based on inclusion criteria determined by the trauma operations committee.”</i></p>

### **OCEMS Policy #620.11- Trauma System Marketing and Advertising**

Date	Contact	Organization	Comment	OCEMS Response
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	Nothing to comment on	<b>Acknowledged</b>

### **OCEMS Policy #620.13- Trauma System Public Information and Education**

Date	Contact	Organization	Comment	OCEMS Response
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	1) Regarding the below – more a question than a comment...would be curious to know what other centers are doing and what we should be doing given that I am just starting up in this position	<p><b>Acknowledged- OCEMS Comment:</b></p> <p>Trauma centers should develop an organized approach to prioritize injury prevention efforts based on local trauma registry and epidemiologic data.</p> <p>Revised by motion of the RTOC on 7/14/15.</p> <p>Trauma centers should develop an organized</p>

			<p>IV A – Each trauma center shall provide the following public education to the citizens and service providers with its service area</p> <p>Injury prevention in the home and industry, and on the highways and athletic fields. ... We are not currently doing this are we? - Standard First Aid</p> <p>Problems confronting the public, the medical profession and hospitals regarding optimal care of the injured.</p>	<p>approach to prioritize injury prevention efforts based on ACS guidelines, community needs local trauma registry and epidemiologic data.</p>
--	--	--	--	--

### **OCEMS Policy #620.14- Integration of Pediatric Care in the Trauma System**

<b>Date</b>	<b>Contact</b>	<b>Organization</b>	<b>Comment</b>	<b>OCEMS Response</b>
5/20/2015	Michael Lekawa MD (Pediatric TMD)	UCI Medical Center	<p>The addition of "approved by California Children's Services" and "CCS approved" is not acceptable at this time. I have aggressively pursued the development of CCS guidelines for pediatric trauma ICUs but they simply are not staffed or prepared for such a designation system. It took them over 10 years to create guidelines for CCS approved PICU's. These are designed for general PICUs and are not appropriate for a pediatric trauma ICU. CCS is understaffed and simply unable to manage a comprehensive system for pediatric trauma care in a timely manner. The CCS leadership visited our Peds trauma ICU and noted that it was an optimal</p>	<p><b>Acknowledged- OCEMS Comment:</b></p> <p>Policies were updated to reflect current California Code of Regulations Title 22 Chapter 7 § 100261. Level I and Level II Pediatric Trauma Centers standards.</p> <p>Policy 620.14. "The PedTC shall have a CCS Approved PICU" removed by motion of the RTOC on 7/14/15.</p>

			alternative method to deliver trauma care to children. Essentially, this unnecessary and non beneficial requirement would destroy the proven and current pediatric trauma system. . Using CCS PICU guidelines to determine how a trauma system should function is likened to the tail wagging the dog. The integration of CHOC into the trauma system must be developed in a way to assure optimal care, depth of care, ability to not divert etc. There are many likely benefits to having children managed in a comprehensive trauma center. These can be discussed at trauma operations.	
5/20/15	Karen Grimley, CNO	UCI Irvine Health	Delete IV. Criteria C. changes in policy. Keep old language to read as, Trauma centers shall have pediatric intensive care units or shall have transfer agreements with a hospitals which have pediatric intensive care units.	<b>Acknowledged- OCEMS Comment:</b> Policies were updated to reflect current California Code of Regulations Title 22 Chapter 7 § 100261. Level I and Level II Pediatric Trauma Centers standards. <b>Policy 620.14. "The PedTC shall have a CCS Approved PICU" removed by motion of the RTOC on 7/14/15</b>
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	Can we make the pediatric age definition (in phrasing) uniform across documents? – This document says " persons fourteen (14) years of age or less" Pediatric Trauma Center Criteria (#620.01) says "younger than 15" Survey policy (635.10)states it as "age < 15" Triage Criteria says - ... special consideration for < 13	<b>OCEMS Response:</b> All pediatric age references in Policies 620.00, 620.01, 620.07, 620.11, 620.13, and 620.14 will read "younger than 15 years old" which is consistent with language in The 2014 Resources for Optimal Care of the Injured Patient published by the American College of Surgeons Committee on Trauma.

--	--	--	--	--

### **OCEMS Policy #635.10- Paramedic Trauma Receiving Center Survey**

<b>Date</b>	<b>Contact</b>	<b>Organization</b>	<b>Comment</b>	<b>OCEMS Response</b>
5/20/2015	Michael Lekawa MD (Pediatric TMD)	UCI Medical Center	Adult should not be added to trauma center facility application.	<b>Acknowledged- OCEMS Comment:</b> <i>"Adult" Removed from policy 635.10.</i>
5/20/2015	Almaas Shaikh, TMD	Mission Hospital	Pg 4 – D - ACS reports sometimes take longer than 30days as stated– can take up to 12 weeks, should this be amended?	<b>Acknowledged- OCEMS Comment:</b> Added: <i>"ACS summary reports may take longer than 30 working days depending on the number and type of deficiencies identified"</i>

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.00  
Trauma Center Criteria  
Final Version



## TRAUMA CENTER (TC) CRITERIA

---

### I. AUTHORITY:

*Health and Safety (HS) Code, Division 2.5, Article 2.5, Sections 1798.160-1798.169; California Code of Regulations, Title 22, Division 9, Chapter 7. & Title 21 Sections 3525-3560; American College of Surgeons Resources for Optimal Care of the Injured Patient 2014.*

### II. APPLICATION:

This policy defines the requirements for designation as an Orange County Level I or Level II Trauma Center.

A Trauma Receiving Center (TC) will provide specialized trauma care for emergency and critically ill trauma patients presenting via the 9-1-1 system or by emergency interfacility transfer from an Orange County Emergency Medical Services (OCEMS) Emergency Receiving Center (ERC). Patients eligible for 9-1-1 field triage or transfer to a TC include trauma patients identified by the base hospital physician or transferring physician as critically ill and who would benefit from trauma specialty services.

The Level I TC shall admit at least 1200 trauma patients yearly or have 240 admissions with an injury severity score of more than 15.

### III. DESIGNATION:

#### A. Initial Designation Criteria

1. Hospitals applying for initial designation as a Trauma Center must submit a request to Orange County Emergency Medical Services (OCEMS) and evidence of compliance to all criteria in this policy.
2. Hospital shall be designated as an Orange County Emergency Receiving Center (ERC).
3. Hospital will have a designated trauma resuscitation area.
4. OCEMS will evaluate the request and determine the need for an additional Trauma Center. OCEMS evaluation may include:
  - a. Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).
  - b. Base hospital designation if applicable (number of calls, impact on patients, prehospital personnel, and other base hospitals).
  - c. Trauma care (number of trauma patients, impact on other hospitals, trauma centers, and trauma patients).
  - d. Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability).
  - e. Patient volume (number of patients annually, both 9-1-1 transported and walk-ins).
5. If OCEMS determines there is a need for an additional TC, OCEMS will request the interested hospital to provide:
  - a. A completed pre-review questionnaire.
  - b. Policies and agreements as described in Section IX of this policy.





## TRAUMA CENTER (TC) CRITERIA

---

6. OCEMS will review the submitted material, perform a site visit, and meet with the hospital representatives. In addition, the following information will be collected by OCEMS and considered in the designation process:
  - a. Emergency Department diversion statistics during the past three years.
7. Following review, OCEMS will provide the designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for designation of up to one year as a Trauma Center.
8. An OCEMS designated Trauma Center will apply for the American College of Surgeons (ACS) initial verification review process within the first year of designation and shall complete the ACS verification review process prior to the end of the second year of designation as a TC.
9. An OCEMS designated Trauma Center will have a written agreement as described in Section IX of this policy and pay the established Health Care Agency fee.

### B. Continuing Designation

1. OCEMS will review each designated Trauma Center for compliance to criteria as described in this policy every three years or more often if deemed necessary by the OCEMS Medical Director.
2. Each TC will be required to submit specific written materials to demonstrate evidence of compliance to criteria established by this policy and pay the established fee.
3. Each TC shall complete the American College of Surgeons (ACS) re-verification process to maintain verification as a Level I or Level II TC.
4. OCEMS will provide its designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for continued designation of up to three years.

### C. Change in Ownership / Change in Executive Management

1. In the event of a change in ownership of the hospital, continued TC designation will require adherence to this policy with review and approval of continued designation by the OCEMS Medical Director. OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in hospital ownership. Change in hospital ownership may require re-designation by OCEMS.
2. OCEMS shall be notified, in writing, at least 10 days prior to the effective date of any changes in key TC personnel as identified in Section V, A & L.

### D. Denial / Suspension / Revocation of Designation

1. OCEMS may deny, suspend, or revoke the approval of a TC for failure to comply with any applicable OCEMS policies and procedures and/or state regulations.
2. The process for TC suspension or revocation shall adhere to OCEMS Policy and Procedure # 640.00 and 645.00 (Base Hospital / Facilities / Training Programs / EMT-P Service Providers: Review Process for Suspension/Revocation of Approval/Designation).
3. The Orange County TC designation may be withdrawn by OCEMS upon 120 day written notice to the trauma center, or the trauma center may withdraw as a trauma center upon 120 days written notice to OCEMS. The Orange County Trauma Center designation is not transferable.



## TRAUMA CENTER (TC) CRITERIA

---

### E. Cancellation of Designation / Reduction or Elimination of Services

1. Trauma Center designation may be canceled by the TC upon 120 days written notice to OCEMS.
2. Hospitals considering a reduction or elimination of emergency services must notify the California Department of Public Health and the Orange County Health Care Agency/ OCEMS a minimum of 120 days prior to the planned reduction or elimination of services.

### IV. HOSPITAL LICENSING AND ACCREDITATION:

- A. Hospital shall possess a current California Department of Public Health permit for basic or comprehensive emergency services.
- B. Hospital shall maintain accreditation by an accreditation organization approved by the Centers for Medicare and Medicaid Services (CMS).
- C. Hospital shall notify OCEMS verbally and in writing any time the hospital is not in compliance with any applicable federal and/or state laws, and/or OCEMS policies, indicating reason(s), date(s), and time(s) for non-compliance and corrective actions that are being taken. OCEMS shall determine whether the hospital may continue to receive 9-1-1 patients during the period that corrective actions are underway.

### V. MEDICAL PERSONNEL:

- A. Trauma Medical Director (TMD)
  1. The trauma medical director shall be a physician:
    - a. Certified in general surgery by the American Board of Surgery (ABS); or,
    - b. A general surgeon eligible for certification by the American Board of Surgery (ABS); or,
    - c. A general surgeon who is an American College of Surgeons Fellow with a special interest in trauma care.
  2. The Trauma Medical Director shall:
    - a. Participate in trauma call.
    - b. Maintain current Advanced Trauma Life Support® (ATLS®).
    - c. Maintain trauma-related extramural continuing medical education (16 hours annually, or 48 hours in 3 years). This requirement must be met by the acquisition of 16 hours of CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the performance improvement and patient safety program.
    - d. The TMD must chair and attend a minimum of 50% of the multidisciplinary trauma peer review committee meetings.
    - e. Maintain membership and active participation in regional or national trauma organizations.
  3. The Trauma Medical Director shall be responsible for:
    - a. Establishing the policies and procedures, staffing, educational activities, quality assurance, and audit programs of the trauma service in conjunction with the medical staff.
    - b. Correcting deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria.
    - c. Performing an annual assessment of the trauma panel providers in the form of Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) when indicated by findings of the Performance Improvement and Patient Safety (PIPS) process.
    - d. Ensuring compliance with the requirements of this policy and cannot direct more than one trauma center.
    - e. Determining each general surgeon's ability to participate on the trauma panel based on an annual review.



## TRAUMA CENTER (TC) CRITERIA

---

### B. General Surgery

1. General Surgeons shall be physicians:
  - a. Certified in general surgery by the American Board of Surgery (ABS), American Osteopathic Board of Surgery (AOBS) or the equivalent as determined by the OCEMS Medical Director.
2. General Surgeons shall:
  - a. Have privileges in general surgery.
  - b. Be dedicated to a single trauma center while on duty.
  - c. Be available 24 hours per day to respond immediately (within 15 minutes) from time of patient arrival with an 80 percent attendance threshold for the highest-level activations.
  - d. As the attending surgeon, be present in the operating room for all operations.
3. General Surgeons shall be responsible for:
  - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
  - b. Successful completion of the Advanced Trauma Life Support® (ATLS®) course at least once.
  - c. Maintaining a commitment to continuing medical education by participating in a minimum 16 hours of CME per year on average or by demonstrating participation in internal educational processes conducted by the trauma program.
4. General Surgery call schedule
  - a. Hospitals with a trauma service shall have a published back up call schedule for trauma surgery.

### C. Neurosurgery

1. Neurotrauma care should be organized and led by:
  - a. Director of neurosurgery or neurosurgical liaison.
2. Neurosurgeons shall be physicians:
  - a. Certified in neurological surgery by the American Board of Neurological Surgery (ABNS), American Osteopathic Board of Surgery (AOBS) or the equivalent as determined by the OCEMS Medical Director.
3. Neurosurgeons shall:
  - a. Be available 24 hours per day for all traumatic brain injury (TBI) and spinal cord injury patients and must be present and respond promptly (within 30 minutes) based on institutional-specific criteria. Qualified neurosurgeons should be regularly involved in the care of patients with head and spinal cord injuries.
  - b. Be credentialed by the hospital with general neurosurgical privileges.
  - c. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
4. Neurosurgery director or neurosurgery liaison shall be responsible for:
  - a. Attendance at a minimum of 50 percent the multidisciplinary trauma peer review committee meetings.
  - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
5. Neurotrauma Call Schedule
  - a. Hospitals with a trauma service shall have a published back up call schedule for neurotrauma for times when the neurosurgeon is encumbered.

### D. Orthopaedic Surgery

1. Orthopaedic trauma care should be organized and led by
  - a. Director of orthopedic surgery or orthopaedic trauma liaison.



## TRAUMA CENTER (TC) CRITERIA

---

2. Orthopaedic surgeons shall be physicians:
    - a. Certified in orthopaedic surgery by the American Board of Orthopaedic Surgery (ABOS), American Osteopathic Board of Surgery (AOBS) or the equivalent as determined by the OCEMS Medical Director.
    - b. In a Level I trauma center the orthopaedic care must be overseen by an individual who has completed a fellowship in orthopaedic traumatology approved by the Orthopaedic Trauma Association (OTA).
  3. Orthopedic surgeons shall:
    - a. Be available 24 hours a day and in the trauma resuscitation area within 30 minutes after consultation has been requested by the surgical trauma team leader for multiple injured patients.
    - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  4. Orthopaedic surgeon director or liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  5. Orthopaedic Surgery Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for orthopaedic surgery.
- E. Anesthesiology
1. Anesthetic care should be organized and led by
    - a. Director of anesthesia or anesthesiologist liaison.
  2. Anesthesiologist shall be physicians:
    - a. Certified in anesthesiology by the American Board of Anesthesiology (ABA), American Osteopathic Association (AOA) or the equivalent as determined by the OCEMS Medical Director.
    - b. All anesthesiologists taking call must have successfully completed an anesthesia residency program.
  3. Anesthesiologist shall:
    - a. Be available in-house 24 hours a day to assist and continue trauma resuscitation.
    - b. Be promptly available (within 30 minutes) for emergency operations.
    - c. When anesthesiology senior residents or CRNAs are used to fulfill availability requirements, the attending anesthesiologist on call must be advised, available within 30 minutes at all times, and present for all operations.
  4. Anesthesiologist director or liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Ensuring the trauma service is staffed with a panel of anesthesiologists who agree to rotate coverage for the trauma service. The depth of the back-up for anesthesia coverage shall be commensurate with the expected volume of the trauma service.
    - c. Commitment to and accrual of education in trauma-related anesthesia and educate other anesthesiologists and the entire trauma team.
  5. Anesthesia Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for Anesthesia.
- F. Trauma Center Physician Specialty
1. The trauma service shall have priority for such personnel and facilities and they shall not be preempted for non-emergency purposes.
-

**TRAUMA CENTER (TC) CRITERIA**

2. For all patients being transferred for specialty care, such as burn care, microvascular surgery, cardiopulmonary bypass capability, complex ophthalmologic surgery, or high-complexity pelvic fractures, transfer agreements with a similar or higher-qualified verified trauma center should be in place. If this approach is used, a clear plan for expeditious critical care transport, follow-up, and performance monitoring is required.

**G. Trauma Center Surgical Physician Specialty**

1. Trauma Center surgical physician specialty shall include at least the following surgical specialties to properly serve trauma patients:

<b>Surgical Specialty</b>	<b>Availability</b>	<b>Level I Trauma Center</b>	<b>Level II Trauma Center</b>
General Surgery	Immediately	Essential	Essential
Cardiothoracic	Promptly	Essential	Essential
Vascular Surgery	Promptly	Essential	Essential
Neurologic	Promptly	Essential	Essential
Obstetric/Gynecologic	Promptly	Essential	Essential
Ophthalmologic	Promptly	Essential	Essential
Orthopedic	Promptly	Essential	Essential
Oral/Maxillofacial or Head and Neck	Promptly	Essential	Essential
Plastic	Promptly	Essential	Essential
Urologic	Promptly	Essential	Essential
Pediatric	Promptly	Essential	Desirable
Reimplantation/Microvascular	Promptly	Essential	Essential
Hand Surgery	Promptly	Essential	Essential

**H. Trauma Center Non-Surgical Physician Specialty**

1. Trauma Center non-surgical physician specialty shall include at least the following specialties to properly serve trauma patients:

<b>Specialty</b>	<b>Availability</b>	<b>Level I Trauma Center</b>	<b>Level II Trauma Center</b>
Emergency Medicine	Immediately	Essential	Essential
Anesthesiology	Promptly	Essential	Essential
Cardiology	Promptly	Essential	Essential
Gastroenterology	Promptly	Essential	Essential
Hematology	Promptly	Essential	Essential
Infectious Disease	Promptly	Essential	Essential
Internal Medicine	Promptly	Essential	Essential
Nephrology	Promptly	Essential	Essential
Neurology	Promptly	Essential	Essential
Pathology	Promptly	Essential	Essential
Pediatrics	Promptly	Essential	Essential
Psychiatry	Promptly	Essential	Essential
Pulmonary	Promptly	Essential	Essential
Radiology	Promptly	Essential	Essential

2. Medical specialists on staff must include their respective support teams (for example, respiratory therapy, a dialysis team, and nutrition support).

**I. Radiologist**

1. Radiologist shall be physicians:
  - a. Certified in radiology by the American Board of Radiology (ABR), American Osteopathic Association (AOA) or the equivalent as determined by the OCEMS Medical Director.





## TRAUMA CENTER (TC) CRITERIA

---

2. Radiologist shall be:
    - a. Qualified radiologists must be available within 30 minutes in person or by teleradiology for the interpretation of radiographs.
    - b. Qualified radiologists must be available within 30 minutes in person to perform complex imaging studies or interventional procedures or by tele-radiology for the interpretation of radiographs.
  3. A radiologist must be appointed as liaison to the trauma program
    - a. The radiologist liaison must attend at least 50 percent of peer review meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services.
    - b. Radiologists must be involved in protocol development and trend analysis that relate to diagnostic imaging.
- J. Emergency Department Physician Staffing
1. Emergency Department Physicians who participate as a member of the trauma team shall be have training and experience in emergency medicine, as evidenced by:
    - a. Board Certification by the American Board of Emergency Medicine (ABEM), American Osteopathic Board of Emergency Medicine (AOBEM) or the equivalent as determined by the OCEMS Medical Director; or
    - b. Successful completion of an ABEM, ACGEM or AOA accredited Emergency Medicine Residency within the past three years.
    - c. A resident in postgraduate year 4 or 5 or an attending emergency physician who is part of the trauma team may be approved to begin resuscitation while awaiting the arrival of the attending surgeon but cannot independently fulfill the responsibilities of, or substitute for, the attending surgeon.
    - d. In institutions in which there are emergency medicine residency training programs, supervision must be provided by an in-house attending emergency physician 24 hours per day.
  2. Emergency Department Physician:
    - a. May initially evaluate the limited-tier trauma patient, but the center must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission.
    - b. Shall be present in the emergency department at all times and shall be regularly involved in the care of injured patients.
    - c. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  3. Emergency physician director or liaison shall be responsible for:
    - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
- K. Physician Assistants (PAs) and Nurse Practitioners (NPs) Staffing
1. The TMD is responsible for establishing the roles and responsibilities for PAs and NPs participating in the trauma program.
  2. PA and NP scope of practice must be clearly delineated and must be consistent with state regulations.
  3. Credentialing procedures for PAs and NPs must meet the requirements of the local, state and federal jurisdiction.
  4. The trauma program must demonstrate appropriate orientation and skill maintenance for advanced practitioners.
  5. PAs and NPs shall
    - a. Maintain current ACLS® and PALS® or APLS®.
    - b. Maintain verification as an Advanced Trauma Life Support® provider if the PA or NP participates in the initial evaluation of trauma patients.



## TRAUMA CENTER (TC) CRITERIA

---

### L. Trauma Program Manager (TPM)

1. The TPM shall:
  - a. Be a registered nurse with at least three years' experience in trauma nursing within the previous five years.
  - b. Be full time and dedicated to the trauma program. (Trauma Centers also designated as a Pediatric Trauma Centers must have a separate full time dedicated TPM for the pediatric trauma program. The dedicated pediatric trauma program manager may have duties beyond that of pediatric trauma program manager as described in the Resources for Optimal Care of the Injured Patient).
  - c. Demonstrate evidence of educational preparation and clinical experience in the care of injured patients with a minimum of 16 hours (internal or external) of trauma-related continuing education per year and clinical experience in the care of injured patients.
2. TPM shall be responsible for:
  - a. Organization of services and systems necessary for a multidisciplinary approach to providing care to injured patients.
  - b. Process and performance improvement activities of nursing and ancillary staff.
  - c. Identify events, develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking.
  - d. Supervision of trauma registry staff, injury prevention coordinator, and trauma nurse clinicians.

### M. Trauma Nursing Staff

1. The trauma team is responsible for the care of the patient from admission to discharge.
2. Trauma team personnel must participate in in-service educational opportunities including regional trauma training programs.
3. Certification:
  - a. All Trauma Nursing Staff shall maintain current Basic Life Support® (BLS) provider certification.
  - b. All Trauma Nursing staff shall maintain current Advanced Cardiac Life Support® (ACLS) provider certification.
  - c. All Trauma Nursing staff shall maintain current Pediatric Advanced Life Support® (PALS) certification or other approved pediatric resuscitation competency.
4. Education
  - a. The trauma program must demonstrate appropriate orientation and skill maintenance for trauma nursing staff.

## VI. HOSPITAL SERVICES:

Trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of verification.

### A. Surgical Service

1. The Surgical Service shall:
  - a. Have one operating suite that is available or being utilized for major trauma patients with in house operating room staffing immediately available 24 hours a day unless operating on major trauma patients and back up personnel who are on-call and promptly available when needed.
  - b. Ensure an operating room must be adequately staffed and available within 15 minutes. If the first operating room is occupied, an adequately staffed additional room must be available.
  - c. Ensure a PACU with qualified nurses available 24 hours per day to provide care for the patient if needed during the recovery phase.
    - i. If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses and compliance with this requirement must be documented by the PIPS program.



## TRAUMA CENTER (TC) CRITERIA

---

- d. The PACU must have the necessary equipment to monitor and resuscitate patients, consistent with the process of care designated by the institution.
- B. Intensive Care Unit (ICU) for trauma patients
- 1. Designated Medical Director
    - a. The ICU medical director shall be a surgeon with board certification in surgical critical care for Level I TCs.
    - b. The ICU medical director or co-medical director shall be a surgeon with board certification in surgical critical care for Level II TCs.
    - c. The designated medical director or co-director shall be actively involved in, and responsible for, setting policies and administrative decisions related to trauma ICU patients.
    - d. The designated medical director or co-director shall serve as a liaison or identify a physician liaison to the trauma service.
    - e. The ICU liaison must attend at least 50 percent of the multidisciplinary peer review meetings.
    - f. The ICU liaison to the trauma program shall accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external trauma-related continuing medical education (CME) which can be by acquisition of 16 hours of trauma CME per year, on average, or through an internal educational process conducted by the trauma program.
  - 2. ICU Physicians
    - a. Shall be available in-house within 15 minutes to provide care for the ICU patients 24 hours per day.
    - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
    - c. If a trauma attending provides coverage, a backup ICU attending must be identified and readily available.
    - d. The trauma surgeon must retain responsibility for the patient and coordinate all therapeutic decisions.
  - 3. ICU Nursing Staff
    - a. Nurse patient ratios shall remain 1:2 on each shift.
    - b. The ICU charge nurse will be assigned for each shift and shall not be registry.
  - 4. ICU Equipment shall include:
    - a. Cardiac output monitoring devices
    - b. Electronic blood pressure monitoring devices
    - c. Intracranial pressure monitoring devices
    - d. Pulmonary function measuring devices
    - e. Rapid transfusion devices
    - f. Thermal control devices
    - g. Immediate access to clinical laboratory services
    - h. Patient weighing devices
- C. Ancillary Services
- In addition to requirements delineated in Title 22, hospitals shall maintain these trauma and emergency service capabilities 24 hours/day, 7 days/week for:
- 1. Respiratory Services
    - a. In-house availability of respiratory therapist with qualifications and necessary equipment to care for trauma patients.
  - 2. Radiological Services
    - a. In-house radiological services 24 hours per day, including radiology technologist and CT technologist, with availability of general radiological procedures, plain X-Rays and computed tomography.





## TRAUMA CENTER (TC) CRITERIA

---

- b. Magnetic resonance imaging (MRI) capability must be available 24 hours per day, including MRI technologist who must be available within 60 minutes in person to perform MRI studies.
  - c. Interventional radiologic procedures and sonography must be available 24 hours per day.
- 3. Acute Hemodialysis
  - a. Acute hemodialysis must be available in Level I and II Trauma Centers.
- 4. Burn Care
  - a. May be provided through a written transfer agreement with a burn center.
- 5. Speech Therapy Service
  - a. Must be available during the acute phase of care, including intensive care.
- 6. Physical Therapy Service
  - a. Must be available during the acute phase of care, including intensive care.
- 7. Occupational Therapy Service
  - a. Must be available during the acute phase of care, including intensive care.
- 8. Rehabilitation Center Service
  - a. Equipped for acute care of the critically injured patient with in-house personnel trained in rehabilitation care.
  - b. May be provided through a written transfer agreement with a freestanding rehabilitation hospital.
- 9. Social Services
  - a. Must be available during the acute phase of care, including intensive care.
- 10. Acute Spinal Cord Injury Management Capability
  - a. May be provided through a written transfer agreement with a rehabilitation center.
- 11. Clinical Laboratory Services immediately available 24 hours a day to perform:
  - a. Standard blood analysis
  - b. Blood gas and pH determination
  - c. Urine and other body fluids osmolality
  - d. Blood typing and cross matching
  - e. Coagulation studies
  - f. Drug and alcohol screening
  - g. Other body fluids including micros sampling when appropriate
  - h. Microbiology studies
  - i. Comprehensive Blood Bank
    - i. With adequate in-house supply of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, and appropriate coagulation factors to meet the needs of injured patients.
    - ii. Must have a massive transfusion protocol developed collaboratively between the trauma service and the blood bank.
    - iii. Access to a community central blood bank.
- 12. Nutritional Support
  - a. Nutrition support services must be available.

## VII. EQUIPMENT

The hospital shall ensure the following trauma and emergency equipment is available 24 hours/day, 7 days/week:

- 1. Cardiothoracic surgery capabilities available 24 hours per day and should have cardiopulmonary bypass equipment.
- 2. Operating microscope – required for Level I Trauma Center / desirable for Level II Trauma Center.
- 3. Rapid fluid infusers.
- 4. Thermal control equipment for patients, resuscitation fluids and blood.
- 5. Intraoperative radiologic capabilities.
- 6. Endoscopes, including at least bronchoscopes, esophagoscopes and gastroscopes.



## TRAUMA CENTER (TC) CRITERIA

---

7. Craniotomy trays and necessary equipment to perform a craniotomy.
8. Equipment for fracture fixation.
9. Autotransfusion capability.

### VIII. SYSTEM COORDINATION AND COMMUNICATION

- A. Outreach programs
  - a. Telephonic and on-site consultations with physicians in the community and outlying area.
- B. Prevention Programs
  - a. All designated trauma centers must engage in public and professional education.
  - b. TCs must provide some means of referral and access to trauma center resources.
  - c. Trauma centers must have an organized and effective approach to injury prevention and must prioritize those efforts based on the American College of Surgeons guidelines, community needs, local trauma registry and epidemiologic data.
  - d. The trauma center must have someone in a leadership position that has injury prevention as part of his or her job description.
    - i. In Level I Trauma Centers, this individual must be a prevention coordinator (separate from the trauma program manager) with a job description and salary support.
  - e. Universal screening for alcohol use must be performed and documented for all injured patients meeting ACS registry inclusion criteria with a hospital stay of > 24 hours.
    - i. All patients who have screened positive must receive an intervention by appropriately trained staff, and this intervention must be documented.
  - f. Trauma centers must implement at least two programs that address one of the major causes of injury in the community.
  - g. A trauma center's prevention program must include and track partnerships with other community organizations.
- C. Trauma Research Program
  - a. Level 1 Trauma Centers shall have an identifiable trauma research program.
  - b. Trauma research program – desirable for Level 2 Trauma Centers.
- D. Continuing Medical Education
  1. The Trauma Center shall provide formal programs for CME in trauma care provided by hospital for:
    - a. Staff physicians
    - b. Staff allied health personnel
    - c. Prehospital emergency and medical care personnel to include at least EMTs and paramedics
    - d. Community physicians and health care personnel
    - e. Affiliated trauma receiving centers
- E. Post Graduate Medical Training
  - a. Approved and accredited post graduate medical training program for residents at multiple levels of training in general surgery, internal medicine and anesthesiology (required for Level I Trauma Centers / desired for Level II Trauma Centers).
- F. Disaster Planning
  - a. Trauma centers must participate in regional disaster management plans and exercises.
  - b. Trauma centers must meet the disaster-related requirements of the Joint Commission.
  - c. A surgeon from the trauma panel must be a member of the hospital's disaster committee.
  - d. Hospital drills that test the individual hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can substitute for drills.
  - e. All trauma centers must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent.
- G. Heliport
  - a. Maintain a heliport and state heliport permit from the California Department of Transportation.



## TRAUMA CENTER (TC) CRITERIA

---

### H. Organ Procurement

- a. Trauma Center must have an established relationship with a recognized organ procurement organization.
- b. Trauma Center shall have a written policy must be in place for triggering notification of the regional organ procurement organization.
- c. Trauma Center must review its sold organ donation rate annually.
- d. Trauma Center shall have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.

### I. Trauma Center Diversion

- a. The trauma director must be involved in the development of the trauma center's bypass (diversion) protocol.
- b. Trauma center shall have a process to limit the total trauma centers annual diversion hours to a maximum of five (5) percent.

## IX. HOSPITAL POLICIES AND AGREEMENTS

- A. The hospital will have a written agreement with OCEMS indicating the concurrence of the institutional governing body, hospital administration and medical staff to meet the requirements for trauma program participation as specified in this policy.
- B. The hospital shall implement clearly defined criteria for graded activation with defined trauma team activation levels.
- C. The Trauma Center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.
- D. The Trauma Center will have written transfer agreements with all nearby Emergency Receiving Centers (ERC) and/or Comprehensive Children's Emergency Receiving Centers (CCERC) and affiliated trauma care hospitals to accept in transfer those trauma patients recognized by both transferring and receiving physicians as needing higher level trauma care.
- E. Designated trauma patients shall not be transferred from a trauma receiving center until the patient is unlikely to require trauma center care, within reasonable medical probability, as determined by the trauma surgeon.
- F. All patients will be transferred physician-to-physician. The accepting physician shall be of the appropriate specialty to manage the patient's injuries.
- G. Patients requiring additional acute care shall be transferred to a facility able to provide evaluation and care if there should be an unexpected change in their condition. These facilities shall substantially meet the requirements of emergency receiving centers (OCEMS Policy #600.00), including appropriate physician consultants to include neurosurgery, urology, psychiatry, ophthalmology, and oral surgery if needed.

## X. DATA COLLECTION

- A. Participation in the trauma system OCEMS data management system and performance evaluation.
- B. Trauma data shall be made available to OCEMS for medical review (All patient information shall be confidential).
- C. Trauma Registry
  1. Trauma registry data must be collected and in compliance with the National Trauma Data Standard (NTDS) and submitted to the National Trauma Data Bank® (NTDB®) every year in a timely fashion so that they can be aggregated and analyzed at the national level.
  2. Trauma registries should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge.
  3. Trauma centers shall use a risk-adjusted benchmarking system to measure performance and outcomes.
  4. The trauma center shall develop and implement strategies for monitoring data validity.



## TRAUMA CENTER (TC) CRITERIA

---

5. Data shall be analyzed by the trauma center and findings shall be used to identify injury prevention priorities that are appropriate for local implementation.

D. Trauma Registrar

1. The trauma registrar shall attend or have previously attended two courses within 12 months of being hired: (1) the American Trauma Society's Trauma Registrar Course or equivalent provided by a state trauma program; and (2) the Association of the Advancement of Automotive Medicine's Injury Scaling Course.
2. One full-time equivalent employee dedicated to the registry must be available to process the data capturing the NTDS data set for each 500–750 admitted patients annually.

## XI. QUALITY ASSURANCE/IMPROVEMENT:

- A. Integrated Performance Improvement and Patient Safety (PIPS) program to ensure optimal care and continuous improvement in care for adult and pediatric patients. PIPS review should include but shall not be limited to:
1. Detailed audit of all trauma related death, major complications and transfers.
  2. Rate of change in interpretation of radiologic studies.
  3. Review of all admissions to non-surgical services if trauma program admits more than 10% of trauma patients to non-surgical services.
  4. Review of anesthesia service availability, operating room availability, operating room and post anesthesia care unit response times, and response times for computed tomography technologist, magnetic resonance imaging technologist, and/or interventional radiology team when responding from outside of the trauma center.
- B. Multidisciplinary trauma peer review committee must meet at least monthly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as to propose improvements to the care of the injured and shall:
1. Include representation with at least 50 percent attendance of all trauma team members, including but not limited to representation from general surgery, and liaisons to the trauma program from emergency medicine, orthopaedics, and anesthesiology, critical care, neurosurgery and radiology.
  2. Provide for the implementation of the requirements by state law and OCEMS policies and procedures and provide for coordination with OCEMS.
  3. Include processes of event identification and levels of review that result in the development of corrective action plans, and methods of monitoring, reevaluation, and benchmarking must be present.
  4. Include problem resolution, outcome improvements, and assurance of safety ("loop closure") that are identifiable through methods of monitoring, reevaluation, benchmarking, and documentation.
- C. Annual performance evaluation based on criteria determined by the trauma operations committee.
- D. Pediatric Patients
- a. Trauma Centers that admit over 100 pediatric trauma patients shall:
    - i. Ensure trauma surgeons are credentialed for pediatric trauma care by the hospital's credentialing body.
    - ii. Provide a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PIPS program.



## TRAUMA CENTER (TC) CRITERIA

---

- b. Trauma Centers that admit less than 100 pediatric trauma patients shall review the care of their injured children through their PIPS program and review each case for timeliness and appropriateness of care. Additionally, the Trauma Center should:
  - i. Ensure trauma surgeons are credentialed for pediatric trauma care by the hospital's credentialing body.
  - ii. Provide a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PIPS program.
- c. Trauma Centers providing in-house pediatric trauma care shall have:
  - i. A pediatric intensive care unit approved by California Children Services (CCS); or
  - ii. A written transfer agreement with a CCS approved PICU. Hospitals without CCS PICU shall establish and utilize written criteria for consultation and transfer of pediatric patients needing intensive care and provide a multidisciplinary team to manage child abuse and neglect.

### Approved:

---

Sam Stratton, MD, MPH  
OCEMS Medical Director

---

Tammi McConnell, MSN, RN  
OCEMS Administrator

Original Date: 1980  
Reviewed Date(s): 11/25/2008; 4/1/2015  
Revised Date(s): 11/25/2008; 4/1/2015; 6/26/2015  
Effective Date: XX/XX/2015

EMCC Meeting

October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.00

Trauma Center Criteria

Redlined Version



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**



**4-I. AUTHORITY:**

*Health and Safety (HS) Code, Division 2.5, Article 2.5, Sections 1798.162 and 1798.163; California Code of Regulations, Title 22, Division 9, Chapter 7. & Title 21 Sections 3525-3560; American College of Surgeons Resources for Optimal Care of the Injured Patient 2014.*

**2-II. APPLICATION:**

This policy defines the requirements for designation as an Orange County ~~Adult~~ Level I or Level II Trauma Center.

An ~~Adult~~ Trauma Receiving Center (~~ATC~~) will provide specialized trauma care for emergency and critically ill trauma patients presenting via the 9-1-1 system or by emergency interfacility transfer from an Orange County Emergency Medical Services (OCEMS) Emergency Receiving Center (ERC). Patients eligible for 9-1-1 field triage or transfer to an ~~ATC~~ include ~~adult~~ trauma patients identified by the base hospital physician or transferring physician as critically ill and who would benefit from trauma specialty services.

The Level I ~~ATC~~ shall admit at least 1200 trauma patients yearly or have 240 admissions with and injury Severity score of more than 15

**3-III. DESIGNATION:**

**A. Initial Designation Criteria**

~~a-1.~~ Hospitals applying for initial designation as an ~~Adult~~ Trauma Center must submit a request to Orange County Emergency Medical Services (OCEMS) and evidence of compliance to all criteria in this policy.

~~a-2.~~ Hospital shall be designated as an Orange County Emergency Receiving Center (ERC).

~~b-3.~~ Hospital will have a designate trauma resuscitation area.

4. OCEMS will evaluate the request and determine the need for an additional ~~Adult~~ Trauma Center. OCEMS evaluation may include:

a) Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).

b) Base hospital designation (number of calls, impact on patients, prehospital personnel, and other base hospitals)

c) Trauma care (number of trauma patients, impact on other hospitals, trauma centers, and trauma patients)

d) Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability)

e) Patient volume (number of patients annually, both 9-1-1 transported and walk-ins)"

~~e-5.~~ If such need is identified, If OCEMS determines there is a need for an additional TC, OCEMS will request the interested hospital to provide:

i-a. A completed pre-review questionnaire.

ii-b. Policies and agreements as described in Section IX of this policy.

~~d-6.~~ OCEMS will review the submitted material, perform a site visit, and meet with the hospital representatives. In addition, the following information will be collected by OCEMS and considered in the designation process:

a. Emergency Department diversion statistics during the past three years.





**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

~~e-7.~~ Following review, OCEMS will provide the designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for designation of up to one year as an ~~Adult~~ Trauma Center.

~~f-8.~~ An OCEMS designated ~~Adult~~ Trauma Center will apply for the American College of Surgeons (ACS) initial verification review process within the first year of designation and shall complete the ACS verification review process prior to the end of the second year of designation as an ~~ATC~~.

~~g-9.~~ An OCEMS designated ~~Adult~~ Trauma Center will have a written agreement as described in Section IX of this policy and pay the established Health Care Agency fee.

**B. Continuing Designation**

1. OCEMS will review each designated ~~Adult~~ Trauma Center for compliance to criteria as described in this policy every three years or more often if deemed necessary by the OCEMS Medical Director.
2. Each ~~ATC~~ will be required to submit specific written materials to demonstrate evidence of compliance to criteria established by this policy and pay the established fee.
3. Each ~~ATC~~ shall complete the American College of Surgeons (ACS) re-verification process as a Level I or Level II ~~ATC~~.
4. OCEMS will provide its designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for continued designation of up to three years.

**a-C. Change in Ownership / Change in Executive Management**

~~a-1.~~ In the event of a change in ownership of the hospital, continued ~~ATC~~ designation will require adherence to this policy with review and approval of continued designation by the OCEMS Medical Director. OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in hospital ownership. Change in hospital ownership may require re-designation by OCEMS.

~~b-2.~~ OCEMS shall be notified, in writing, at least 10 days prior to the effective date of any changes in key ~~ATC~~ personnel as identified in Section V, ~~(A)~~ & ~~(LK)~~.

**b-D. Denial / Suspension / Revocation of Designation**

1. OCEMS may deny, suspend, or revoke the approval of an ~~ATC~~ for failure to comply with any acceptable OCEMS policies and procedures and/or state regulations.
2. The process for ~~ATC~~ suspension or revocation shall adhere to OCEMS Policy and Procedure # 640.00 and 645.00 (Base Hospital / Facilities / Training Programs / EMT-P Service Providers: Review Process for Suspension/Revocation of Approval/Designation).
3. The Orange County ~~ATC~~ designation may be withdrawn by OCEMS upon 120 day written notice to the trauma center, or the trauma center may withdraw as a trauma center upon 120 days written notice to OCEMS. The Orange County trauma center designation is not transferable.

**c-E. Cancellation of Designation / Reduction or Elimination of Services**

1. ~~Adult~~ Trauma Center designation may be canceled by the ~~ATC~~ upon 120 days written notice to OCEMS.
2. Hospitals considering a reduction or elimination of emergency services must notify the California Department of Public Health and the Orange County Health Care Agency/ EMS a minimum of 120 days prior to the planned reduction or elimination of services.

**4-IV. HOSPITAL LICENSING AND ACCREDITATION:**





**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**



~~a.A.~~ Hospital shall possess a current California Department of Public Health permit for basic or comprehensive emergency services.

~~b.B.~~ Hospital shall maintain accreditation by an accreditation organization approved by the Centers for Medicare and Medicaid Services (CMS).

~~c.C.~~ Hospital shall notify OCEMS verbally and in writing any time the hospital is not in compliance with any applicable federal and/or state laws, and/or OCEMS policies, indicating reason(s), date(s), and time(s) for non-compliance and corrective actions that are being taken. OCEMS shall determine whether the hospital may continue to receive 9-1-1 patients during the period that corrective actions are underway.

**5.V. MEDICAL PERSONNEL:**

~~a.A.~~ Trauma Medical Director (TMD)

~~A.1.~~ The trauma medical director shall be a physician:

- a. Certified in general surgery by the American Board of Surgery (ABS); or,
- b. A general surgeon eligible for certification by the American Board of Surgery (ABS); or,
- c. A general surgeon who is an American College of Surgeons Fellow with a special interest in trauma care.

~~B.2.~~ The Trauma Medical Director shall:

- a. Participate in trauma call.
- b. Maintain current Advanced Trauma Life Support® (ATLS®).
- c. Maintain trauma-related extramural continuing medical education (16 hours annually, or 48 hours in 3 years). This requirement must be met by the acquisition of 16 hours of CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the performance improvement and patient safety program.
- d. The TMD must chair and attend a minimum of 50% of the multidisciplinary trauma peer review committee meetings.
- e. Maintain membership and active participation in regional or national trauma organizations.

~~C.3.~~ The trauma medical director shall be responsible for:

- a. Establishing the policies and procedures, staffing, educational activities, quality assurance, and audit programs of the trauma service in conjunction with the medical staff.
- b. Correcting deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria.
- c. Performing an annual assessment of the trauma panel providers in the form of Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) when indicated by findings of the PIPS process.
- d. Ensuring compliance with the requirements of this policy and cannot direct more than one trauma center.

~~a.e.~~ Determining each general surgeon's ability to participate on the trauma panel based on an annual review.

~~b.B.~~ General Surgery

1. General Surgeons shall be physicians:

- a. Certified in general surgery by the American Board of Surgery (ABS), American Osteopathic Board of Surgery (AOBS) or the equivalent as determined by the OCEMS Medical Director.

2. General Surgeons shall:

- a. Have privileges in general surgery.
- b. Be dedicated to a single trauma center while on duty.
- c. Be available 24 hours per day to respond immediately (within 15 minutes) from time of patient arrival with an 80 percent attendance threshold for the highest-level activations.
- d. As the attending surgeon, be present in the operating room for all operations.

3. General Surgeons shall be responsible for:

- a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

- b. Successful completion of the Advanced Trauma Life Support® (ATLS®) course at least once.
- c. Maintaining a commitment to continuing medical education by participating in a minimum 16 hours of CME per year on average or by demonstrating participation in internal educational processes conducted by the trauma program.
4. General Surgery Call Schedule
  - a. Hospitals with a trauma service shall have a published back up call schedule for trauma surgery.

**e.C. Neurosurgery**

- a.1.** Neurotrauma care should be organized and led by
  - a. Director of neurosurgery or neurosurgical liaison.

**b.2.** Neurosurgeons shall be physicians:

- a. Certified in neurological surgery by the American Board of Neurological Surgery (ABNS), American Osteopathic Board of Surgery (AOBS) or the equivalent as determined by the OCEMS Medical Director.

**c.3.** Neurosurgeons shall:

- a. Be available 24 hours per day for all TBI and spinal cord injury patients and must be present and respond promptly (within 30 minutes) based on institutional-specific criteria. Qualified neurosurgeons should be regularly involved in the care of patients with head and spinal cord injuries.
- b. Be credentialed by the hospital with general neurosurgical privileges.
- c. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.

**d.4.** Neurosurgery director or neurosurgery liaison shall be responsible for:

- a. Attendance at a minimum of 50 percent the multidisciplinary trauma peer review committee meetings.
- b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.

**e.5.** Neurotrauma Call Schedule

- a. Hospitals with a trauma service shall have a published back up call schedule for neurotrauma for times when the neurosurgeon is encumbered.
- ~~b. The trauma service shall have contingency plans for times in which a neurosurgeon is encumbered upon the arrival of a neurotrauma case.~~

**d.D.** Orthopaedic Surgery

1. Orthopaedic trauma care should be organized and led by
  - a. Director of orthopedic surgery or orthopaedic trauma liaison.
2. Orthopaedic surgeons shall be physicians:
  - a. Certified in orthopaedic surgery by the American Board of Orthopaedic Surgery (ABOS), American Osteopathic Board of Surgery (AOBS) or the equivalent as determined by the OCEMS Medical Director.
  - b. In a Level I trauma center the orthopaedic care must be overseen by an individual who has completed a fellowship in orthopaedic traumatology approved by the Orthopaedic Trauma Association (OTA).
3. Orthopedic surgeons shall:
  - a. Be available 24 hours a day and in the trauma resuscitation area within 30 minutes after consultation has been requested by the surgical trauma team leader for multiply injured patients.
  - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

4. Orthopaedic surgeon director or liaison shall be responsible for:
  - ~~2-a.~~ Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
  - ~~3-b.~~ Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
5. Orthopaedic Surgery Call Schedule
  - a. Hospitals with a trauma service shall have a published back up call schedule for Orthopaedic surgery.

**e.E. Anesthesiology**

1. Anesthetic care should be organized and led by
  - a. Director of anesthesia or anesthesiologist liaison.
2. Anesthesiologist shall be physicians:
  - a. Certified in anesthesiology by the American Board of Anesthesiology (ABA), American Osteopathic ~~Board of Surgery Association~~ (AO~~ABS~~) or the equivalent as determined by the OCEMS Medical Director.
  - b. All anesthesiologists taking call must have successfully completed an anesthesia residency program.
3. Anesthesiologist shall:
  - ~~A-a.~~ Be available in-house 24 hours a day to assist and continue trauma resuscitation.
  - ~~B-b.~~ Be promptly available (within 30 minutes) for emergency operations.
  - ~~C-c.~~ When anesthesiology senior residents or CRNAs are used to fulfill availability requirements, the attending anesthesiologist on call must be advised, available within 30 minutes at all times, and present for all operations.
4. Anesthesiologist director or liaison shall be responsible for:
  - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
  - b. Ensuring the trauma service is staffed with a panel of anesthesiologists who agree to rotate coverage for the trauma service. The depth of the back-up for anesthesia coverage shall be commensurate with the expected volume of the trauma service.
  - c. Commitment to and accrual of education in trauma-related anesthesia and educate other anesthesiologists and the entire trauma team.
5. Anesthesia Call Schedule
  - a. Hospitals with a trauma service shall have a published back up call schedule for Anesthesia.

**f.F. Surgical-Trauma Center Physician Specialty**

- ~~i.1.~~ The trauma service shall have priority for such personnel and facilities and they shall not be preempted for non-emergency purposes.
- ~~ii.2.~~ For all patients being transferred for specialty care, such as burn care, microvascular surgery, cardiopulmonary bypass capability, complex ophthalmologic surgery, or high-complexity pelvic fractures, agreements with a similar or higher-qualified verified trauma center should be in place. If this approach is used, a clear plan for expeditious critical care transport, follow-up, and performance monitoring is required.

**G. ATC Surgical Physician Specialty -**

- ~~g-1.~~ **1. Trauma Center surgical physician specialty S**shall include at least the following **surgical specialties to properly serve trauma patients: which are staffed by qualified specialist with documented training and experience in trauma surgery:**

Surgical Specialty	Availability	Level I Trauma Center	Level II Trauma Center
General Surgery	Immediately	Essential	Essential
Cardiothoracic	Promptly	Essential	Essential
Vascular Surgery	Promptly	Essential	Essential

**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

Neurologic	Promptly	Essential	Essential
Obstetric/Gynecologic	Promptly	Essential	Essential
Ophthalmologic	Promptly	Essential	Essential
Orthopedic	Promptly	Essential	Essential
Oral/Maxillofacial or Head and Neck	Promptly	Essential	Essential
Plastic	Promptly	Essential	Essential
Urologic	Promptly	Essential	Essential
Pediatric	Promptly	Essential	Desirable
Reimplantation/Microvascular	Promptly	Essential	Essential
Hand Surgery	Promptly	Essential	Essential

**H. Trauma Center Non-Surgical Physician Specialty-**

~~h.~~ **1. Trauma Center non-surgical physician specialty s** shall include at least the following specialties **to properly serve trauma patients: which are staffed by qualified specialist with documented training and experience in trauma surgery:**

Specialty	Availability	Level I Trauma Center	Level II Trauma Center
Emergency Medicine	Immediately	Essential	Essential
Anesthesiology	Promptly	Essential	Essential
Cardiology	Promptly	Essential	Essential
Gastroenterology	Promptly	Essential	Essential
Hematology	Promptly	Essential	Essential
Infectious Disease	Promptly	Essential	Essential
Internal Medicine	Promptly	Essential	Essential
Nephrology	Promptly	Essential	Essential
Neurology	Promptly	Essential	Essential
Pathology	Promptly	Essential	Essential
Pediatrics	Promptly	Essential	Essential
Psychiatry	Promptly	Essential	Essential
Pulmonary	Promptly	Essential	Essential
Radiology	Promptly	Essential	Essential

~~a.~~ **1.** Medical specialists on staff must include their respective support teams (for example, respiratory therapy, a dialysis team, and nutrition support).

**i.I. Radiologist**

1. Radiologist shall be physicians:
  - a. Certified in radiology by the American Board of Radiology (ABR), American Osteopathic Association Board of Surgery (AOABS) or the equivalent as determined by the OCEMS Medical Director.
2. Radiologist Shall
  - a. Qualified radiologists must be available within 30 minutes in person or by teleradiology for the interpretation of radiographs.
  - b. Qualified radiologists must be available within 30 minutes in person to perform complex imaging studies or interventional procedures or by tele-radiology for the interpretation of radiographs.
3. A radiologist must be appointed as liaison to the trauma program.
  - a. The radiologist liaison must attend at least 50 percent of peer review meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services.
  - b. Radiologists must be involved in protocol development and trend analysis that relate to diagnostic imaging.

**j.J. Emergency Department Physician Staffing**



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

- a)1. Emergency Department Physicians who participate as a member of the trauma team shall be have training and experience in emergency medicine, as evidenced by:
  - a. Board Certification by the American Board of Emergency Medicine (ABEM), American Osteopathic Board of Emergency Medicine (AOBEM) or the equivalent as determined by the OCEMS Medical Director; or
  - b. Successful completion of an ABEM, ACGEM or AOA accredited Emergency Medicine Residency within the past three years.
  - c. A resident in postgraduate year 4 or 5 or an attending emergency physician who is part of the trauma team may be approved to begin resuscitation while awaiting the arrival of the attending surgeon but cannot independently fulfill the responsibilities of, or substitute for, the attending surgeon.
  - d. In institutions in which there are emergency medicine residency training programs, supervision must be provided by an in-house attending emergency physician 24 hours per day.
- b)2. Emergency Department Physician:
  - a. May initially evaluate the limited-tier trauma patient, but the center must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission.
  - b. Shall be present in the emergency department at all times and shall be regularly involved in the care of injured patients.
  - c. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
- c)3. Emergency physician director or liaison shall be responsible for:
  - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
- k-K. Physician Assistants (PA's) and Nurse Practitioners (NP's) Staffing
  1. The TMD is responsible for establishing the roles and responsibilities for PA's and NPs participating in the trauma program.
  2. PA's and NP's scope of practice must be clearly delineated and must be consistent with state regulations.
  3. Credentialing procedures for PA's and NP's must meet the requirements of the local, state and federal jurisdiction.
  4. The trauma program must demonstrate appropriate orientation and skill maintenance for advanced practitioners.
  5. PA's and NP's shall
    - a. Maintain current ACLS and PALS or APLS.
    - b. Maintain verification as an Advanced Trauma Life Support® provider if the PA or NP participates in the initial evaluation of trauma patients.
- l-L. Trauma Program Manager (TPM)
  1. The TPM Shall:
    - a. Be a registered nurse with at least three years' experience in trauma nursing within the previous five years.
    - b. Be full time and dedicated to the trauma program. (ATC's also designated as a PedTC must have a separate full time dedicated TPM for the pediatric trauma program. The dedicated pediatric trauma program manager may have duties beyond that of pediatric trauma program manager as described in the Resources for Optimal Care of the Injured Patient.).
    - c. Demonstrate evidence of educational preparation and clinical experience in the care of injured patients with a minimum of 16 hours (internal or external) of trauma-related continuing education per year and clinical experience in the care of injured patients.
  2. TPM shall be responsible for:
    - a. Organization of services and systems necessary for a multidisciplinary approach to providing care to injured patients.
    - b. Process and performance improvement activities of nursing and ancillary staff





**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

- c. Identify events; develop corrective action plans, and ensuring methods of monitoring, reevaluation, and benchmarking.
- d. Supervision of trauma registry staff, injury prevention coordinator, and trauma nurse clinicians.

**m-M. Trauma Nursing Staff**

1. The trauma team is responsible for the care of the patient from admission to discharge.
2. Trauma team personnel must participate in in-service educational opportunities including regional trauma training programs.
3. Certification:
  - a. All Trauma Nursing Staff shall maintain current Basic Life Support (BLS) provider certification.
  - b. All Trauma Nursing staff shall maintain current Advanced Cardiac Life Support (ACLS) provider certification.
  - c. All Trauma Nursing staff shall maintain current Pediatric Advanced Life Support (PALS) certification or other approved pediatric resuscitation competency.
4. Education
  - a. The trauma program must demonstrate appropriate orientation and skill maintenance for trauma nursing staff.

**6-VI. HOSPITAL SERVICES:**

Trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of verification.

**a-A. Surgical Service**

1. The Surgical Service Shall:
  - a. One operating suite that is available or being utilized for major trauma patients with in house operating room staffing immediately available 24 hours a day unless operating on major trauma patients and back up personnel who are on-call and promptly available when needed.
  - b. Ensure an operating room must be adequately staffed and available within 15 minutes. If the first operating room is occupied, an adequately staffed additional room must be available.
  - c. Ensure a PACU with qualified nurses is available 24 hours per day to provide care for the patient if needed during the recovery phase.
    - i. If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses and compliance with this requirement must be documented by the PIPS program.

**a-d.** The PACU must have the necessary equipment to monitor and resuscitate patients, consistent with the process of care designated by the institution.

**b-B. Intensive Care Unit (ICU) for trauma patients**

1. Designated Medical Director
  - a. The ICU medical director shall be a surgeon with board certification in surgical critical care for level one **ATCs**.
  - b. The ICU medical director or co-medical director shall be a surgeon with board certification in surgical critical care for level two **ATCs**.
  - c. The designated medical director or co director shall be actively involved in, and responsible for, setting policies and administrative decisions related to trauma ICU patients.
  - d. The designated medical director or co director shall serve as a liaison or identify a physician liaison to the trauma service.
  - e. The ICU liaison must attend at least 50 percent of the multidisciplinary peer review meetings.
  - f. The ICU liaison to the trauma program shall accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external trauma-related continuing medical education (CME) which can be by acquisition of 16 hours of trauma CME per year, on average, or through an internal educational process conducted by the trauma program.



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

2. ICU Physicians
  - a. Shall be available in-house within 15 minutes to provide care for the ICU patients 24 hours per day.
  - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  - c. If a trauma attending provides coverage, a backup ICU attending must be identified and readily available.
  - d. The trauma surgeon must retain responsibility for the patient and coordinate all therapeutic decisions.
3. ICU Nursing Staff
  - a. Nurse patient ratios shall remain 1:2 on each shift.
  - b. The ICU charge nurse will be assigned for each shift, shall not be registry.
4. ICU Equipment
  - a. Cardiac output monitoring
  - b. Electronic blood pressure monitoring
  - c. Intracranial pressure monitoring devices
  - d. Pulmonary function measuring devices
  - e. Rapid transfusion
  - f. Thermal control devices
  - g. Immediate access to clinical laboratory services
  - h. Patient weighing devices

**e.C. Ancillary Services**

In addition to requirements delineated in Title 22, hospitals shall maintain these trauma and emergency service capabilities 24 hours/day, 7 days/week for:

**a.1. Respiratory Services**

- a. In house availability of respiratory therapist with qualifications and necessary equipment to care for trauma patients.

**b.2. Radiological Services**

- a. In house radiological services 24 hours per day, including radiology technologist CT technologist, with availability of general radiological procedures, plain X-Rays and Computed tomography.
- b. Magnetic resonance imaging (MRI) capability must be available 24 hours per day, including MRI technologist who must be available within 60 minutes in person to perform MRI studies.
- c. Interventional radiologic procedures and sonography must be available 24 hours per day.

**e.3. Acute Hemodialysis**

- a. Acute hemodialysis must be available in Level I and II trauma centers.

**d.4. Burn Care**

- a. May be provided through a written transfer agreement with a burn center.

**e.5. Speech Therapy Service.**

- a. Must be available during the acute phase of care, including intensive care.

**f.6. Physical Therapy Service**

- a. Must be available during the acute phase of care, including intensive care.

**g.7. Occupational Therapy Service**

- a. Must be available during the acute phase of care, including intensive care.

**h.8. Rehabilitation Center Service**

- a. Equipped for acute care of the critically injured patient with in house personnel trained in rehabilitation care.
- b. May be provided through a written transfer agreement with a freestanding rehabilitation hospital.

**i.9. Social Services**

- a. Must be available during the acute phase of care, including intensive care.

**j.10. Acute Spinal Cord Injury Management Capability**

- a. May be provided through a written transfer agreement with a rehabilitation center.

**k.11. Clinical Laboratory Services immediately available 24 hours a day to perform:**



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**



- a. Standard blood analysis
- b. Blood gas and pH determination
- c. Urine and other body fluids osmolality
- d. Blood typing and cross matching
- e. Coagulation studies
- f. Drug and alcohol screening
- g. Other body fluids including micros sampling when appropriate.
- h. Microbiology studies
- i. Comprehensive Blood Bank
  - i. With adequate in-house supply of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, and appropriate coagulation factors to meet the needs of injured patients.
  - ii. Must have a massive transfusion protocol developed collaboratively between the trauma service and the blood bank.
  - iii. Access to a community central blood bank
- ~~12.~~ Nutritional Support
  - a. Nutrition support services must be available.

**7.VII. EQUIPMENT**

The hospital shall ensure the following trauma and emergency equipment is available 24 hours/day, 7 days/week:

1. Cardiothoracic surgery capabilities available 24 hours per day and should have cardiopulmonary bypass equipment.
2. Operating microscope – required for Level I ATC / desirable for Level II ATC.
3. Rapid fluid infusers.
4. Thermal control equipment- for patients, resuscitation fluids and blood.
5. Intraoperative radiologic capabilities.
6. Endoscopes, including at least bronchoscopes, esophagoscopes and gastroscopes
7. Craniotomy trays and necessary equipment to perform a craniotomy.
8. Equipment for fracture fixation.
9. Autotransfusion Capability.

**8.VIII. SYSTEM COORDINATION AND COMMUNICATION**

- A. Outreach programs
  - a. Telephonic and on-site consultations with physicians in the community and outlying area.
- B. Prevention Programs
  - a. All designated trauma centers must engage in public and professional education.
  - b. ATCs must provide some means of referral and access to trauma center resources. Trauma centers must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.
  - c. The trauma center must have someone in a leadership position that has injury prevention as part of his or her job description.
    - i. In Level I centers, this individual must be a prevention coordinator (separate from the trauma program manager) with a job description and salary support.
  - d. Universal screening for alcohol use must be performed and documented for all injured patients meeting ACS registry inclusion criteria with a hospital stay of > 24 hours, and must be documented.
    - i. All patients who have screened positive must receive an intervention by appropriately trained staff, and this intervention must be documented.
  - e. Trauma centers must implement at least two programs that address one of the major causes of injury in the community.
  - f. A trauma center's prevention program must include and track partnerships with other community organizations.
- C. Trauma Research Program
  - a. Level 1 ATC shall have an identifiable trauma research program.
  - b. Trauma research program – desirable for Level 2 ATCs
- D. Continuing Medical Education
  1. The ATC shall provide formal programs in CME in trauma care provided by hospital for:





**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

- a. Staff physicians
- b. Staff allied health personnel
- c. Prehospital emergency and medical care personnel to include at least EMTs and paramedics
- d. Community physicians and health care personnel
- e. Affiliated trauma receiving centers
- E. Post Graduate Medical Training
  - a. Approved and accredited post graduate medical training program for residents at multiple levels of training in general surgery, internal medicine and anesthesiology (required for Level I ATC / desired for Level II ATC).
- F. Disaster Planning
  - a. ~~Adult~~ trauma centers must participate in regional disaster management plans and exercises.
  - b. Trauma centers must meet the disaster-related requirements of the Joint Commission.
  - c. A surgeon from the trauma panel must be a member of the hospital's disaster committee.
  - d. Hospital drills that test the individual hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can substitute for drills.
  - e. All trauma centers must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent.
- G. Heliport
  - a. Maintain a heliport and state heliport permit from the California Department of Transportation.
- H. Organ Procurement
  - a. Trauma center must have an established relationship with a recognized organ procurement organization.
  - b. Trauma Center shall have a written policy must be in place for triggering notification of the regional organ procurement organization.
  - c. Trauma center must review its solid organ donation rate annually.
  - d. Trauma center have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.
- I. Trauma Center Diversion
  - a. The trauma director must be involved in the development of the trauma center's bypass (diversion) protocol.
  - b. Trauma center shall have a process to limit the total trauma centers annual diversion hours to a maximum of five (5) percent.

**9.IX. HOSPITAL POLICIES AND AGREEMENTS**

- A. The hospital will have a written agreement with OCEMS indicating the concurrence of the institutional governing body, hospital administration and medical staff to meet the requirements for trauma program participation as specified in this policy.
- B. The hospital shall implement clearly defined criteria for graded activation with defined trauma team activation levels.
- C. The trauma center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.
- D. The ATC will have written transfer agreements with all nearby Emergency Receiving Centers (ERC) and/or Comprehensive Children's Emergency Receiving Centers (CCERC) and affiliated trauma care hospitals to accept in transfer those trauma patients recognized by both transferring and receiving physicians as needing higher level trauma care.
- E. Designated trauma patients shall not be transferred from a trauma receiving center until the patient is unlikely to require trauma center care, within reasonable medical probability, as determined by the trauma surgeon.
- F. All patients will be transferred physician-to-physician. The accepting physician shall be of the appropriate specialty to manage the patient's injuries.
- G. Patients requiring additional acute care shall be transferred to a facility able to provide evaluation and care if there should be an unexpected change in their condition. These facilities shall substantially meet the requirements of emergency receiving centers (OCEMS Policy 600.00), including



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**



appropriate physician consultants to include neurosurgery, urology, psychiatry, ophthalmology, and oral surgery if needed.

~~All facilities subsequently receiving the designated trauma patient shall provide needed appropriate follow-up information including the information on an Orange County trauma registry form with a simple disability score. The facility shall agree to cooperate with any OCEMS inquiries regarding patient care. (Policy 620.00).~~

**10.X. DATA COLLECTION**

- A. Participation in the trauma system OCEMS data management system and performance evaluation.
- B. Trauma data shall be made available to OCEMS for medical review (All patient information shall be confidential).
- C. Trauma Registry
  1. Trauma registry data must be collected and in compliance with the National Trauma Data Standard (NTDS) and submitted to the National Trauma Data Bank® (NTDB®) every year in a timely fashion so that they can be aggregated and analyzed at the national level.
  2. Trauma registries should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge.
  3. Trauma centers shall use a risk adjusted benchmarking system to measure performance and outcomes.
  4. The trauma center shall develop and implement strategies for monitoring data validity.
  5. Data shall be analyzed by the trauma center and findings shall be used to identify injury prevention priorities that are appropriate for local implementation.
- D. Trauma Registrar
  1. The trauma registrar shall attend or have previously attended two courses within 12 months of being hired: (1) the American Trauma Society's Trauma Registrar Course or equivalent provided by a state trauma program; and (2) the Association of the Advancement of Automotive Medicine's Injury Scaling Course.
  2. One full-time equivalent employee dedicated to the registry must be available to process the data capturing the NTDS data set for each 500–750 admitted patients annually.

**11.XI. QUALITY ASSURANCE/IMPROVEMENT:**

- ~~i.A.~~ Integrated Performance Improvement and patient safety (PIPS) program to ensure optimal care and continuous improvement in care for adult and pediatric patients. PIP review should include but shall not be limited to:
  1. Detailed audit of all trauma related death, major complications and transfers.
  - ~~Medical nursing audit, utilization review, tissue review.~~
  2. Rate of change in interpretation of radiologic studies.
  3. Review of all admissions to non-surgical services if trauma program admits more than 10% of trauma patients to non-surgical services.
  4. Review of anesthesia service availability, operating room availability, operating room and post anesthesia care unit response times, and response times for computed tomography technologist, magnetic resonance imaging technologist, interventional radiology team when responding from outside of the trauma center.
- ~~ii.B.~~ Multidisciplinary trauma peer review committee must meet at least monthly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as propose improvements to the care of the injured and shall:
  - ~~a.1.~~ Include representation with at least 50 percent attendance of all trauma team members, including but not limited to representation from general surgery, and liaisons to the trauma program from emergency medicine, orthopaedics, and anesthesiology, critical care, neurosurgery and radiology.
  - ~~b.2.~~ Provide for the implementation of the requirements by state law and OCEMS policies and procedures and provide for coordination with OCEMS.
  - ~~c.3.~~ Include processes of event identification and levels of review that result in the development of corrective action plans, and methods of monitoring, reevaluation, and benchmarking must be present.



**PARAMEDIC-TRAUMA RECEIVING-CENTER (TC) CRITERIA**

# 620.00

Page 13 of 8

Orig. Date: 1980

Revised: 11/25/08



~~d.4.~~ Include problem resolution, outcome improvements, and assurance of safety ("loop closure") that are identifiable through methods of monitoring, reevaluation, benchmarking, and documentation.

~~iii.C.~~ Annual performance evaluation based on criteria determined by the trauma operations committee.

~~a. Measurement of patient outcomes versus triage criteria and injury severity.~~

~~b. Adequacy of prehospital care.~~

~~c. Rates of under triage and over triage monitored and reviewed quarterly.~~

~~iv.D.~~ Pediatric Patients

a. ATCs that admit over 100 pediatric trauma patients shall:

i. Ensure trauma surgeons are credentialed for pediatric trauma care by the hospital's credentialing body.

ii. Provide a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PIPS program.

b. ATCs that admit less than 100 pediatric trauma patients shall review the care of their injured children through their PIPS program and review each case for timeliness and appropriateness of care. Additionally, ATC should:

i. Ensure trauma surgeons are credentialed for pediatric trauma care by the hospital's credentialing body.

ii. Provide a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PIPS program.

c. ATCs providing in house pediatric trauma care shall have

i. A pediatric intensive care unit approved by California Children Services (CCS); or

ii. A written transfer agreement with a CCS approved PICU. Hospital s without CCS PICU shall establish and utilize written criteria for consultation and transfer of pediatric patients needing intensive care and provide a multidisciplinary team to manage child abuse and neglect.



**PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA**



12. AUTHORITY:

~~Health and Safety (HS) Code, Division 2.5, Article 2.5, Sections 1798.162 and 1798.163; California Code of Regulations, Title 22, Division 9, Chapter 7.~~

13. APPLICATION:

~~The policy defines the criteria a hospital must meet to qualify for designation as an Orange County trauma center.~~

14. CRITERIA:

~~Hospital Organization and Management~~

~~A general surgeon with experience in trauma care is to be designated as the chief of trauma service. He will be responsible for establishing the policies and procedures, staffing, educational activities, quality assurance, and audit programs of the trauma service in conjunction with the medical staff. The hospital and its medical staff shall be committed to the provision of surgery and anesthesiology coverages as herein described and shall designate the physician participating in the program. The trauma service shall have priority for such personnel and facilities and they shall not be preempted for non-emergency purposes. The trauma team, under the direction of the trauma surgeon or his designee, is responsible for the care of the patient from admission to discharge. Trauma team personnel must participate in in-service educational opportunities including regional trauma training programs.~~

~~A. Trauma Service:~~

~~1. A board certified general surgeon adequately trained and experienced in trauma surgery shall be immediately available 24 hours per day to assist and continue trauma resuscitation in the emergency department and for the definitive surgical intervention. The hospital with a trauma service must have a panel of surgeons who agree to rotate coverage for the trauma services. The depth of the back-up coverage shall be commensurate with the expected volume of the service. Surgeons shall participate in hospital education programs on trauma, audits on trauma deaths, and other quality assurance programs developed by the chief of the trauma service. All trauma surgeons shall maintain a commitment to continuing medical education by participating in a minimum 16 hours per year of C.M.A., Category I credit in trauma.~~

~~2. A board certified anesthesiologist shall be immediately available 24 hours per day to assist and continue trauma resuscitation. The hospital with a trauma service must have a panel of anesthesiologists who agree to rotate coverage for the trauma service. The depth of the back-up for anesthesia coverage shall be commensurate with the expected volume of the trauma service. The anesthesia service shall designate one physician to coordinate with the chief of the trauma service. In Level I facilities, at least one anesthesiologist should put forth a specific effort and a commitment to education in trauma-related anesthesia and educate other anesthesiologists and the entire trauma team. In all trauma centers, participation in the trauma performance improvement program process by anesthesia is essential.~~

*Italicized Text Identifies Quotations From An Authority Outside The Orange County EMS.*



## PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA



<b>FACILITY RESOURCES AND EQUIPMENT TITLE 22, 100259</b>	<b>Trauma Center Level I</b>	<b>Trauma Center Level II</b>
<del>B. — SURGICAL SPECIALTIES (DEPARTMENTS, DIVISIONS, SERVICES OR SECTIONS): shall include at least the following surgical specialties which are staffed by qualified specialists<sup>1</sup> with documented training and experience in trauma surgery.</del>	<del>E = Essential D = Desirable</del>	
<del>1. — Immediately available</del>		
<del>General Surgery</del>	<del>E</del>	<del>E<sup>2</sup></del>
<del>2. — Promptly available</del>		
<del>Cardiothoracic Surgery</del>	<del>E</del>	<del>E</del>
<del>Neurologic Surgery</del>	<del>E</del>	<del>E</del>
<del>Obstetric/Gynecologic Surgery</del>	<del>E</del>	<del>E</del>
<del>Ophthalmologic Surgery</del>	<del>E</del>	<del>E</del>
<del>Orthopedic Surgery</del>	<del>E</del>	<del>E</del>
<del>Oral or Maxillofacial or head and neck Surgery</del>	<del>E</del>	<del>E</del>
<del>Plastic Surgery</del>	<del>E</del>	<del>E</del>
<del>Urologic Surgery</del>	<del>E</del>	<del>E</del>
<del>Pediatric Surgery</del>	<del>E</del>	<del>D</del>
<del>Replantation/Microsurgery Capability</del>	<del>E</del>	<del>E</del>
<del>Requirements may be fulfilled by senior residents in an approved or affiliated residency program of the trauma center who are capable of assessing emergency situations in their respective specialties. In such cases, the senior resident(s) shall:</del>		
<del>a. — Be capable of undertaking immediate surgical care;</del>		
<del>b. — Be able to provide the overall control and surgical leadership necessary for the care of the patient; and</del>		
<del>c. — Have staff specialists on-call, who shall be advised about the patient and make themselves promptly available, when needed; and</del>		
<del>d. — Have attending physicians in-house and immediately available for all major operative trauma cases as per California Code of Regulations, Title 22, Article 3, Section 100259.</del>		

<sup>1</sup>This requirement is waived for no longer than five (5) years following completion of the pertinent specialty training.<sup>2</sup>This in-house requirement may be fulfilled when the surgeon is immediately available and in the Emergency Department when the patient is delivered.



## PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA



FACILITY RESOURCES AND EQUIPMENT TITLE 22, 100259	Trauma Center Level I	Trauma Center Level II
<del>C. NON-SURGICAL SPECIALTIES</del> <del>1. In-house and immediately available:</del> <del>Emergency Medicine</del>	<del>E</del>	<del>E</del>
<del>The emergency service shall:</del> <del>Designate a qualified specialist physician with training and experience in major trauma care to be a member of the trauma team. Senior level residents in emergency medicine who are assigned to the emergency medicine service, who are capable of assessing emergency situations in trauma patients and providing for initial resuscitation may fulfill this requirement. In such cases, the staff emergency medicine specialist shall be advised of the patient and make themselves promptly available when needed. The emergency department medical director shall designate one ED staff physician to coordinate with the chief of the trauma service</del>		
<del>2. Promptly available</del> <del>Anesthesiology</del>	<del>E</del>	<del>E</del>
<del>Level I: Must be immediately available.</del> <del>This requirement may be fulfilled by senior residents who are capable of assessing emergency situations in trauma patients and providing any indicated treatment. In such cases, the staff anesthesiologist on-call shall be advised about the patient, be promptly available, and be present for all operations.</del>		
<del>Nursing Staff</del> <del>a. Nurse aides must be EMT-A certified.</del> <del>b. A designated trauma program manager shall supervise the nursing staff.</del> <del>c. All ED registered nurses must have successfully completed an ACLS provider certification course.</del>	<del>E</del>	<del>E</del>
<del>3. On-Call and promptly available from inside or outside hospital:</del> <del>Cardiology</del>	<del>E</del>	<del>E</del>
<del>Gastroenterology</del>	<del>E</del>	<del>E</del>
<del>Hematology</del>	<del>E</del>	<del>E</del>
<del>Infectious Diseases</del>	<del>E</del>	<del>E</del>
<del>Internal Medicine</del>	<del>E</del>	<del>E</del>
<del>Nephrology</del>	<del>E</del>	<del>E</del>
<del>Neurology</del>	<del>E</del>	<del>E</del>



## PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA



FACILITY RESOURCES AND EQUIPMENT TITLE 22, 100259	Trauma Center Level I	Trauma Center Level II
<i>Pathology</i>	E	E
<i>Pediatrics</i>	E	E
<i>Psychiatry</i>	E	E
<i>Pulmonary</i>	E	E
<i>Radiology</i>	E	E
<i>a. In addition to licensure requirements, the trauma center shall have the following service capabilities:</i>		
<i>1. Surgical Service</i>		
<i>At least one operating suite that is available or being utilized for major trauma patients with in-house O.R. staffing immediately available 24 hours a day unless operating on major trauma patients and back-up personnel who are on-call and promptly available when needed.</i>		
<i>Cardiopulmonary bypass pump-oxygenator.</i>	E	E
<i>Operating microscope.</i>	E	D
<i>Thermal control equipment: for patient for blood</i>	E	E
<i>X-ray capability.</i>	E	E
<i>Endoscopes, including at least bronchoscopes, esophagoscopes, and gastroscopes.</i>	E	E
<i>Craniotomy trays.</i>	E	E
<i>Autotransfusion capability.</i>	E	E
<i>2. Intensive Care Unit (ICU) for trauma patients; ICU shall have:</i>		
<i>Designated medical director.</i>	E	E
<i>Nurse-patient ratio of 1:2 on each shift.</i>	E	E
<i>Unit charge nurse, one each shift, shall not be registry.</i>	E	E
<i>Physician on duty in ICU or promptly available at all times.</i>	E	E
<i>Cardiac output monitoring.</i>	E	E
<i>Electronic blood pressure monitoring.</i>	E	E
<i>Intracranial pressure monitoring devices.</i>	E	E





## PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA



<b>FACILITY RESOURCES AND EQUIPMENT TITLE 22-100259</b>	<b>Trauma Center Level I</b>	<b>Trauma Center Level II</b>
<del>Pulmonary function measuring devices.</del>	<del>E</del>	<del>E</del>
<del>Thermal control devices.</del>	<del>E</del>	<del>E</del>
<del>Immediate access to clinical laboratory services.</del>	<del>E</del>	<del>E</del>
<del>Patient weighing devices.</del>	<del>E</del>	<del>E</del>
<del>3. Radiological service (licensed) Radiological technician in-house and immediately available for general radiological procedures and computerized tomography.</del>	<del>E<sup>3</sup></del>	<del>E</del>
<del>Angiography and ultrasound promptly available.</del>	<del>E</del>	<del>E</del>
<del>4. Acute hemodialysis capability.</del>	<del>E</del>	<del>E<sup>4</sup></del>
<del>5. Burn care (licensed); may be provided through a written transfer agreement with a Burn Center.</del>	<del>E</del>	<del>E</del>
<del>6. Speech therapy service (licensed).</del>	<del>E</del>	<del>E</del>
<del>7. Physical therapy service (licensed).</del>	<del>E</del>	<del>E</del>
<del>8. Occupational therapy service (licensed).</del>	<del>E</del>	<del>E</del>
<del>9. Pediatric care (licensed) may be provided through a written transfer agreement with a hospital having a pediatric intensive care unit approved by CALIFORNIA CHILDREN'S SERVICE.</del>	<del>E</del>	<del>E</del>
<del>10. Rehabilitation Center Service (licensed): Rehabilitation services to include personnel trained in rehabilitation care and equipped for acute care of the critically injured patient. These services may be provided through a written transfer agreement with a rehabilitation center.</del>	<del>E</del>	<del>E</del>
<del>11. Social Services.</del>	<del>E</del>	<del>E</del>
<del>12. Acute spinal cord injury management capability. This service may be provided through a written transfer agreement with a Rehabilitation Center.</del>	<del>E</del>	<del>E</del>
<del>13. Clinical Laboratory Services: immediately available 24 hours a day to perform:</del>	<del>E</del>	<del>E</del>
<del>Blood, gas and PH determination</del>	<del>E</del>	<del>E</del>

<sup>3</sup>Level I must have in-house technician.<sup>4</sup>This service may be provided through a written transfer agreement.





## PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA



<b>FACILITY RESOURCES AND EQUIPMENT TITLE 22, 100259</b>	<b>Trauma Center Level I</b>	<b>Trauma Center Level II</b>
<del>_____ Urine, and other body fluids osmolality</del>	<del>E</del>	<del>E</del>
<del>_____ Blood typing and cross-matching</del>	<del>E</del>	<del>E</del>
<del>_____ Coagulation studies.</del>	<del>E</del>	<del>E</del>
<del>_____ Clinical Laboratory technologist in-house and promptly available at all times.</del>	<del>E</del>	<del>E</del>
<del>_____ Drug and alcohol screening.</del>	<del>E</del>	<del>E</del>
<del>_____ Comprehensive blood bank or access to a community central blood bank.</del>	<del>E</del>	<del>E</del>
<del>_____ 14. Transfer agreements with all nearby paramedic receiving centers and "affiliated trauma care hospitals" to accept in transfer those trauma patients recognized by both transferring and receiving physicians as needing higher level trauma care.</del>	<del>E</del>	<del>E</del>
<del>_____ 15. Programs for Quality Assurance including: Participation in the trauma system OCEMS data management system and performance evaluation. Trauma data shall be made available to OCEMS for medical review (all patient information shall be confidential).</del>	<del>E</del>	<del>E</del>
<del>_____ Detailed audit of all trauma-related death, major complications, and transfers.</del>	<del>E</del>	<del>E</del>
<del>_____ 16. Medical nursing audit, utilization review, tissue review.</del>	<del>E</del>	<del>E</del>
<del>_____ 17. Trauma conferences that include all members of the trauma team --- at least monthly, to critique trauma cases<sup>5</sup>.</del>	<del>E</del>	<del>E</del>
<del>_____ 18. Annual Performance Evaluation (Title 22-100259):</del>		
<del>_____ a. Measurement of patient outcome versus triage criteria and injury severity.</del>	<del>E</del>	<del>E</del>
<del>_____ b. Adequacy of prehospital care.</del>	<del>E</del>	<del>E</del>
<del>_____ 19. Outreach programs: to include telephone and on-site consultations with physicians in the community and outlying areas.</del>	<del>E</del>	<del>E</del>
<del>_____ 20. Public education: injury prevention, in the home and industry, and on the highways and athletic fields; standard first aid, problems confronting public medical profession, and hospitals regarding optimal care of the injured.</del>	<del>E</del>	<del>E</del>
<del>_____ 21. Trauma Research Program</del>	<del>E</del>	<del>D</del>

<sup>5</sup> Multi-disciplinary regional trauma conferences shall include representatives from at least all members of the trauma team. The conferences shall assist the chief of trauma in administering the trauma program and its evaluation. Shall provide for the implementation of the requirements specified by state law and OCEMS policies and procedures, and provide for coordination with OCEMS.



## PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA



<b>FACILITY RESOURCES AND EQUIPMENT TITLE 22, 100259</b>	<b>Trauma Center Level I</b>	<b>Trauma Center Level II</b>
<del>a. Continuing Medical Education--formal programs in continuing education in trauma care provided by hospital for</del> <del>a. Staff physicians</del> <del>b. Staff nurses</del> <del>c. Staff allied health personnel</del> <del>d. Prehospital emergency medical care personnel to include at least EMT-Is and EMT-Ps</del> <del>e. Community physicians, health care personnel</del> <del>f. Affiliated trauma receiving hospitals.</del>	<del>E</del>	<del>E</del>
<del>23. Approved and accredited post graduate medical training program for residents at multiple levels of training in general surgery, internal medicine, and anesthesiology.</del>	<del>E</del>	<del>D</del>
<del>24. Disaster planning rehearsal.</del>	<del>E</del>	<del>E</del>
<del>25. Paramedic receiving center current certification.</del>	<del>E</del>	<del>E</del>
<del>26. Helipad and state helicopter permit.</del>	<del>E</del>	<del>E</del>
<del>27. Protocol to identify potential organ donors.</del>	<del>E</del>	<del>E</del>

15. OPERATIONAL REQUIREMENTS:~~A. Transfers~~

- ~~1. Designated trauma patients shall not be transferred from a paramedic trauma receiving center until the patient is unlikely to require trauma center care, within reasonable medical probability, as determined by the trauma surgeon.~~
- ~~2. All patients will be transferred physician-to-physician. The accepting physician shall be of the appropriate specialty to manage the patient's injuries.~~
- ~~3. Patients requiring additional acute care shall be transferred to a facility able to provide evaluation and care if there should be an unexpected change in their condition. These facilities shall substantially meet the requirements of paramedic receiving centers (OCEMS Policy 600.00), including appropriate physician consultants to include neurosurgery, urology, psychiatry, ophthalmology, and oral surgery if needed.~~
- ~~4. All facilities subsequently receiving the designated trauma patient shall provide needed appropriate follow-up information including the information on an Orange County trauma~~



**PARAMEDIC TRAUMA RECEIVING CENTER CRITERIA**

# 620.00  
Page 21 of 8  
Orig. Date: 1980  
Revised: 11/25/08



~~registry form with a simple disability score. The facility shall agree to cooperate with any OCEMS inquiries regarding patient care.~~

~~V. DESIGNATION REVIEW:~~

- ~~A. OCEMS shall review trauma center designation including compliance to criteria at least every three years. Such designation may be changed, renewed, canceled, or otherwise modified~~
- ~~B. OCEMS may deny, suspend, or revoke the approval of a trauma center for failure to comply with any acceptable OCEMS policies and procedures and/or state regulations.~~
- ~~C. The process for trauma center suspension or revocation shall adhere to OCEMS Policy and Procedure 645.00 (Base Hospital / Facilities / Training Programs / EMT-P Service Providers: Review Process for Suspension/Revocation of Approval/Designation).~~
- ~~D. The Orange County trauma center designation may be withdrawn by OCEMS upon 120-day written notice to the trauma center, or the trauma center may withdraw as a trauma center upon 120-day written notice to OCEMS. The Orange County trauma center designation is not transferable.~~

DRAFT Public Comment 11/25/08

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.01  
Pediatric Trauma Center Criteria  
Final Version



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

### I. AUTHORITY:

*Health and Safety (HS) Code, Division 2.5, Article 2.5, Sections 1798.160-1798.169; California Code of Regulations, Title 22, Division 9, Chapter 7. & Title 21 Sections 3525-3560; American College of Surgeons Resources for Optimal Care of the Injured Patient 2014.*

### II. APPLICATION:

This policy defines the requirements for designation as an Orange County Pediatric Level I or Level II Trauma Center.

A Pediatric Trauma Receiving Center (PedTC) will provide specialized trauma care for emergency and critically ill trauma pediatric patients presenting via the 9-1-1 system or by emergency interfacility transfer from an Orange County Emergency Medical Services (OCEMS) Emergency Receiving Center (ERC) or Comprehensive Children's Emergency Receiving Center (CCERC). Patients eligible for 9-1-1 field triage or transfer to a PedTC include pediatric trauma patients identified by the base hospital physician or transferring physician as critically ill and who would benefit from pediatric trauma specialty services.

The Level I PedTC shall annually admit 200 or more trauma patients younger than 15 years old.

The Level II PedTC shall annually admit 100 or more trauma patients younger than 15 years old.

### III. DESIGNATION:

#### A. Initial Designation Criteria

1. Hospitals applying for initial designation as a Pediatric Trauma Center must submit a request to Orange County Emergency Medical Services (OCEMS) and evidence of compliance to all criteria in this policy.
2. Hospital shall be designated as an Orange County Comprehensive Children's Emergency Receiving Center (CCERC) or have a written transfer agreement with an OCEMS designated CCERC.
3. Hospital will have a designated trauma resuscitation area.
4. Hospital will have a designated pediatric emergency department area.
5. OCEMS will evaluate the request and determine the need for an additional Pediatric Trauma Center. OCEMS evaluation may include:
  - a. Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).
  - b. Base hospital designation if applicable (number of calls, impact on patients, prehospital personnel, and other base hospitals).
  - c. Trauma care (number of trauma patients, impact on other hospitals, trauma centers, and trauma patients).
  - d. Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability).
  - e. Patient volume (number of patients annually, both 9-1-1 transported and walk-ins).



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

6. If OCEMS determines there is a need for an additional PedTC, OCEMS will request the interested hospital to provide:
    - a. A completed pre-review questionnaire.
    - b. Policies and agreements as described in Section IX of this policy.
  7. OCEMS will review the submitted material, perform a site visit, and meet with the hospital representatives. In addition, the following information will be collected by OCEMS and considered in the designation process:
    - a. Emergency Department diversion statistics during the past three years.
  8. Following review, OCEMS will provide the designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for designation of up to one year as a Pediatric Trauma Center.
  9. An OCEMS designated Pediatric Trauma Center will apply for the American College of Surgeons (ACS) initial verification review process within the first year of designation and shall complete the ACS verification review process prior to the end of the second year of designation as a PedTC.
  10. An OCEMS designated Pediatric Trauma Center will have a written agreement as described in Section IX of this policy and pay the established Health Care Agency fee.
- B. Continuing Designation**
1. OCEMS will review each designated Pediatric Trauma Center for compliance to criteria as described in this policy every three years or more often if deemed necessary by the OCEMS Medical Director.
  2. Each PedTC will be required to submit specific written materials to demonstrate evidence of compliance to criteria established by this policy and pay the established fee.
  3. Each PedTC shall complete the American College of Surgeons (ACS) re-verification process as a Level I or Level II PedTC.
  4. OCEMS will provide its designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for continued designation of up to three years.
- C. Change in Ownership / Change in Executive Management**
1. In the event of a change in ownership of the hospital, continued PedTC designation will require adherence to this policy with review and approval of continued designation by the OCEMS Medical Director. OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in hospital ownership. Change in hospital ownership may require re-designation by OCEMS.
  2. OCEMS shall be notified, in writing, at least 10 days prior to the effective date of any changes in key PedTC personnel as identified in Section V. A & L.
- D. Denial / Suspension / Revocation of Designation**
1. OCEMS may deny, suspend, or revoke the approval of a PedTC for failure to comply with any applicable OCEMS policies and procedures and/or state regulations.
  2. The process for PedTC suspension or revocation shall adhere to OCEMS Policy and Procedure # 640.00 and 645.00 (Base Hospital / Facilities / Training Programs / EMT-P Service Providers: Review Process for Suspension/Revocation of Approval/Designation).



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

3. The Orange County PedTC designation may be withdrawn by OCEMS upon 120 day written notice to the trauma center, or the PedTC may withdraw as a trauma center upon 120 days written notice to OCEMS. The Orange County trauma center designation is not transferable.

### **E. Cancellation of Designation / Reduction or Elimination of Services**

1. Pediatric Trauma Center designation may be cancelled by the PedTC upon 120 days written notice to OCEMS.
2. Hospitals considering a reduction or elimination of emergency services must notify the California Department of Public Health and the Orange County Health Care Agency/ OCEMS a minimum of 120 days prior to the planned reduction or elimination of services.

### **IV. HOSPITAL LICENSING AND ACCREDITATION:**

- A. Hospital shall possess a current California Department of Public Health permit for basic or comprehensive emergency services.
- B. Hospital shall maintain accreditation by an accreditation organization approved by the Centers for Medicare and Medicaid Services (CMS).
- C. Hospital shall notify OCEMS verbally and in writing any time the hospital is not in compliance with any applicable federal and/or state laws, and/or OCEMS policies, indicating reason(s), date(s), and time(s) for non-compliance and corrective actions that are being taken. OCEMS shall determine whether the hospital may continue to receive 9-1-1 patients during the period that corrective actions are underway.

### **V. MEDICAL PERSONNEL:**

- A. Trauma Medical Director (TMD)
  1. PedTC Level I TMD shall be a physician trained and experienced in pediatric trauma, as evidenced by:
    - a. Board Certified in pediatric surgery by the American Board of Surgery (ABS); or
    - b. Successful completion of an ABS, ACGEM accredited pediatric surgery residency within the past three years; or
    - c. A pediatric surgeon who is an American College of Surgeons Fellow with a special interest in pediatric trauma care.
  2. PedTC Level II TMD should be a physician trained and experienced in pediatric trauma, as evidenced by:
    - a. Certified in pediatric surgery by the American Board of Surgery (ABS); or
    - b. Successful completion of an ABS, ACGEM accredited pediatric surgery residency within the past three years; or
    - c. A pediatric surgeon who is an American College of Surgeons Fellow with a special interest in pediatric trauma care; or
    - d. The PedTC Level II TMD shall be a physician:
      - i. Certified in general surgery by the American Board of Surgery (ABS); or
      - ii. Successful completion of an ABS, ACGEM accredited general surgery residency within the past three years; and
      - iii. Credentialed by the hospital to provide pediatric trauma care.
  3. The Trauma Medical Director shall:
    - a. Participate in trauma call.
    - b. Maintain current Advanced Trauma Life Support® (ATLS®).
    - c. Accrue trauma-related verifiable external continuing medical education (16 hours annually, or 48 hours in 3 years) of which 12 hours in 3 years must be related to clinical pediatric trauma care.



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- d. The TMD must chair and attend a minimum of 50% of the multidisciplinary trauma peer review committee meetings.
    - e. Maintain membership and active participation in regional or national trauma organizations.
  - 4. The Trauma Medical Director shall be responsible for:
    - a. Establishing the policies and procedures, staffing, educational activities, quality assurance, and audit programs of the trauma service in conjunction with the medical staff.
    - b. Correcting deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria.
    - c. Performing an annual assessment of the trauma panel providers in the form of Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) when indicated by findings of the Performance Improvement and Patient Safety (PIPS) process.
    - d. Ensuring compliance with the requirements of this policy and cannot direct more than one trauma center.
    - e. Determining each pediatric/general surgeon's ability to participate on the trauma panel based on an annual review.
- B. Pediatric/General Surgery
  - 1. Trained and experienced in pediatric/general surgery, as evidenced by :
    - a. Board certification in pediatric surgery by the American Board of Surgery (ABS) or the equivalent as determined by the OCEMS Medical Director; or
    - b. Successful completion of an ABS or ACGEM accredited pediatric surgical residency within the last three years and will become board certified within three years of qualification for ABS board certification in pediatric surgery; or
    - c. Board certified in general surgery\* by the American Board of Surgery (ABS) or the equivalent as determined by the OCEMS Medical Director; or
    - d. Successful completion of an ABS or ACGEM accredited general surgical\* residency within the last three years and will become board certified within three years of qualification for ABS board certification in general surgery; and
    - e. The general surgeon must be credentialed by the hospital to provide pediatric trauma care, be a member of the pediatric trauma panel and be approved by the Pediatric Trauma Medical Director.
      - \* A PedTC Level I must have at a minimum of two surgeons certified in pediatric surgery by the American Board of Surgery (ABS),
      - \* A PedTC Level II must have at a minimum of one surgeon certified in pediatric surgery by the American Board of Surgery (ABS)
  - 2. Pediatric/General Surgeons shall:
    - a. Be credentialed by the hospital with pediatric/general surgery privileges.
    - b. Be dedicated to a single trauma center while on duty.
    - c. Be available 24 hours per day to respond immediately (within 15 minutes) from time of patient arrival with an 80 percent attendance threshold for the highest-level activations.
    - d. As the attending surgeon, be present in the operating room for all operations.
  - 3. Pediatric/General Surgeons shall be responsible for:
    - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Successful completion of the Advanced Trauma Life Support® (ATLS®) course at least once.
    - c. Maintaining a commitment to continuing medical education by participating in a minimum 16 hours of CME per year on average or by demonstrating participation in internal educational processes conducted by the trauma program.
  - 4. Pediatric/General Surgery call schedule
    - a. Hospitals with a trauma service shall have a published back-up call schedule for trauma surgery.





## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

### **C. Pediatric Neurosurgery**

1. Neurotrauma care should be organized and led by:
  - a. Director of neurosurgery or neurosurgical liaison.
2. PedTC Level I shall have at least one neurosurgeon trained and experienced in neurosurgery, as evidenced by:
  - a. Board certification in neurosurgery by the American board of Neurological Surgery (ABNS) or eligible for certification by an appropriate neurosurgical board according to the current requirements of that board and who also has had pediatric fellowship training.
  - b. There must be one additional ABNS board certified neurosurgeon or one neurosurgeon eligible for certification by an appropriate neurosurgical board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
3. PedTC Level II shall have at least one neurosurgeon trained and experienced in neurosurgery, as evidenced by:
  - a. Board certified in neurosurgery by the American Board of Neurological Surgery (ABNS) or eligible for certification by an appropriate neurosurgical board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
4. Neurosurgeons shall:
  - a. Be available 24 hours per day for all traumatic brain injury (TBI) and spinal cord injury patients and must be present and respond promptly (within 30 minutes) based on institutional-specific criteria. Qualified neurosurgeons should be regularly involved in the care of patients with head and spinal cord injuries.
  - b. Be credentialed by the hospital with general neurosurgical privileges.
  - c. Must be knowledgeable and current in the care of injured pediatric patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
5. Neurosurgery director or neurosurgery liaison shall be responsible for:
  - a. Attendance at a minimum of 50 percent the multidisciplinary trauma peer review committee meetings.
  - b. Accrual of an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.
6. Neurotrauma Call Schedule
  - a. Hospitals with a trauma service shall have a published back up call schedule for neurotrauma for times when the neurosurgeon is encumbered.

### **D. Pediatric Orthopaedic Surgery**

1. Orthopaedic trauma care should be organized and led by
  - a. Director of orthopedic surgery or orthopaedic trauma liaison.
2. PedTC Level I shall have at least one orthopaedic surgeon trained and experienced in orthopaedic surgery, as evidenced by:
  - a. Board certification in orthopaedic surgery by the American Board of Orthopaedic Surgery (ABOS) or eligible for certification by an appropriate orthopaedic surgical board according to the current requirements of that board and who also has had pediatric fellowship training.
  - b. There must be one additional ABOS board certified orthopaedic surgeon or one orthopaedic surgeon eligible for certification by an appropriate orthopaedic surgical board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
3. PedTC Level II shall have at least one orthopaedic surgeon trained and experienced in orthopaedic surgery, as evidenced by:



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

- a. Board certified in orthopaedic surgery by the American Board of Orthopaedic Surgery (ABOS) or eligible for certification by an appropriate orthopaedic surgery board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
  4. Orthopedic surgeons shall:
    - a. Be available 24 hours a day and in the trauma resuscitation area within 30 minutes after consultation has been requested by the surgical trauma team leader for multiple injured patients.
    - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  5. Orthopaedic surgeon director or liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Accrual of an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.
  6. Orthopaedic Surgery Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for orthopaedic surgery.
- E. Anesthesiology
  1. Anesthetic care should be organized and led by
    - a. Director of anesthesia or anesthesiologist liaison.
  2. Anesthesiologist shall be physicians:
    - a. Certified in anesthesiology by the American Board of Anesthesiology (ABA), American Osteopathic Association (AOA) or the equivalent as determined by the OCEMS Medical Director.
    - b. All anesthesiologists taking call must have successfully completed an anesthesia residency program.
  3. Anesthesiologist shall:
    - a. Be available in-house 24 hours a day to assist and continue trauma resuscitation.
    - b. Be promptly available (within 30 minutes) for emergency operations.
    - c. When anesthesiology senior residents or CRNAs are used to fulfill availability requirements, the attending anesthesiologist on call must be advised, available within 30 minutes at all times, and present for all operations.
    - d. Have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.
  4. Anesthesiologist director or liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Ensuring the trauma service is staffed with a panel of anesthesiologists who agree to rotate coverage for the trauma service. The depth of the back-up for anesthesia coverage shall be commensurate with the expected volume of the trauma service.
    - c. Commitment to and accrual of education in trauma-related anesthesia and educate other anesthesiologists and the entire trauma team.
  5. Anesthesia Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for Anesthesia.

**PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA****F. Trauma Center Physician Specialty**

1. The trauma service shall have priority for such personnel and facilities and they shall not be preempted for non-emergency purposes.
2. For all patients being transferred for specialty care, such as burn care, microvascular surgery, cardiopulmonary bypass capability, complex ophthalmologic surgery, or high-complexity pelvic fractures, transfer agreements with a similar or higher-qualified verified trauma center should be in place. If this approach is used, a clear plan for expeditious critical care transport, follow-up, and performance monitoring is required.

**G. PedTC Surgical Physician Specialty**

1. Pediatric Trauma Center surgical physician specialty shall include at least the following surgical specialties to properly serve trauma patients:

<b>Surgical Specialty</b>	<b>Availability</b>	<b>Level I Trauma Center</b>	<b>Level II Trauma Center</b>
General Surgery	Immediately	Essential	Essential
Cardiothoracic	Promptly	Essential	Essential
Vascular Surgery	Promptly	Essential	Essential
Neurologic	Promptly	Essential	Essential
Obstetric/Gynecologic	Promptly	Essential	Essential**
Ophthalmologic	Promptly	Essential	Essential
Orthopedic	Promptly	Essential	Essential
Oral/Maxillofacial or Head and Neck	Promptly	Essential	Essential
Plastic	Promptly	Essential	Essential
Urologic	Promptly	Essential	Essential
Pediatric	Promptly	Essential	Desirable
Replantation/Microvascular	Promptly	Essential	Essential
Hand Surgery	Promptly	Essential	Essential

**H. Pediatric Trauma Center Non-Surgical Physician Specialty**

1. Pediatric Trauma Center non-surgical physician specialty shall include at least the following specialties to properly serve trauma patients:

<b>Specialty</b>	<b>Availability</b>	<b>Level I Trauma Center</b>	<b>Level II Trauma Center</b>
Emergency Medicine	Immediately	Essential	Essential
Anesthesiology	Promptly	Essential	Essential
Cardiology	Promptly	Essential	Essential
Gastroenterology	Promptly	Essential	Essential
Hematology	Promptly	Essential	Essential
Infectious Disease	Promptly	Essential	Essential
Internal Medicine	Promptly	Essential	Essential
Neonatology			
Nephrology	Promptly	Essential	Essential
Neurology	Promptly	Essential	Essential
Pathology	Promptly	Essential	Essential
General Pediatrics	Promptly	Essential	Essential
Psychiatry	Promptly	Essential	Essential
Pulmonary	Promptly	Essential	Essential
Radiology	Promptly	Essential	Essential



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

2. Medical specialists on staff must include their respective support teams (for example, respiratory therapy, a dialysis team, and nutrition support).
- I. Radiologist
  1. Radiologist shall:
    - a. Be certified in radiology by the American Board of Radiology (ABR), American Osteopathic Association (AOA) or the equivalent as determined by the OCEMS Medical Director.
    - b. Have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.
  2. Radiologist shall be:
    - a. Qualified radiologists must be available within 30 minutes in person or by teleradiology for the interpretation of radiographs.
    - b. Qualified radiologists must be available within 30 minutes in person to perform complex imaging studies or interventional procedures or by tele-radiology for the interpretation of radiographs.
  3. A radiologist must be appointed as liaison to the trauma program.
    - a. The radiologist liaison must attend at least 50 percent of peer review meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services.
    - b. Radiologists must be involved in protocol development and trend analysis that relate to diagnostic imaging.
- J. Emergency Department Physician Staffing
  1. Emergency Department Physicians who participate as a member of the trauma team shall be have training and experience in emergency medicine, as evidenced by:
    - a. Board Certification by the American Board of Emergency Medicine (ABEM), American Osteopathic Board of Emergency Medicine (AOBEM) or the equivalent as determined by the OCEMS Medical Director; or
    - b. Successful completion of an ABEM, ACGEM or AOA accredited Emergency Medicine Residency within the past three years.
    - c. A resident in postgraduate year 4 or 5 or an attending emergency physician who is part of the trauma team may be approved to begin resuscitation while awaiting the arrival of the attending surgeon but cannot independently fulfill the responsibilities of, or substitute for, the attending surgeon.
    - d. In institutions in which there are emergency medicine residency training programs, supervision must be provided by an in-house attending emergency physician 24 hours per day.
    - e. ED Physician staffing PedTC Level I There must be two physicians who are board certified or eligible for certification by an appropriate emergency medicine board according the current requirements in pediatric emergency medicine.
    - f. The pediatric section of the emergency department must be staffed by individuals credentialed by the hospital to provide pediatric trauma care in their respective areas.
  2. Emergency Department Physician:
    - a. May initially evaluate the limited-tier trauma patient, but the center must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission.
    - b. Shall be present in the emergency department at all times and shall be regularly involved in the care of injured patients.
    - c. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

3. Emergency physician director or liaison shall be responsible for:
  - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
  - b. Must accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.
- K. Physician Assistants (PAs) and Nurse Practitioners (NPs) Staffing
  1. The TMD is responsible for establishing the roles and responsibilities for PAs and NPs participating in the trauma program.
  2. PA and NP scope of practice must be clearly delineated and must be consistent with state regulations.
  3. Credentialing procedures for PAs and NPs must meet the requirements of the local, state and federal jurisdiction.
    - c. The trauma program must demonstrate appropriate orientation and skill maintenance for advanced practitioners. PAs and NPs shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.
  4. PAs and NPs shall
    - a. Maintain current ACLS<sup>®</sup> and PALS<sup>®</sup> or APLS<sup>®</sup>.
    - b. Maintain verification as an Advanced Trauma Life Support<sup>®</sup> provider if the PA or NP participates in the initial evaluation of trauma patients.
- L. Trauma Program Manager (TPM)
  1. The TPM Shall:
    - a. Be a registered nurse with at least three years' experience in trauma nursing within the previous five years.
    - b. Be full time and dedicated to the trauma program. (Trauma Centers also designated as a Trauma Centers under OCEMS Policy #620.00 must have a separate full time dedicated TPM for the pediatric trauma program).
    - c. Demonstrate evidence of educational preparation and clinical experience in the care of injured patients with a minimum of 16 hours (internal or external) of trauma-related continuing education per year and clinical experience in the care of injured patients.
  2. TPM shall be responsible for:
    - a. Organization of services and systems necessary for a multidisciplinary approach to providing care to injured pediatric patients.
    - b. Process and performance improvement activities of nursing and ancillary staff
    - c. Identify events develop corrective action plans, and ensure methods of monitoring, reevaluation, and benchmarking.
    - d. Supervision of trauma registry staff, injury prevention coordinator, and trauma nurse clinicians.
- M. Trauma Nursing Staff
  1. The trauma team is responsible for the care of the patient from admission to discharge.
  2. Trauma team personnel must participate in in-service educational opportunities including regional trauma training programs.
  3. Certification:
    - a. All Trauma Nursing Staff shall maintain current Basic Life Support<sup>®</sup> (BLS) provider certification.
    - b. All Trauma Nursing staff shall maintain current Advanced Cardiac Life Support<sup>®</sup> (ACLS) provider certification.
    - c. All Trauma Nursing staff shall maintain current Pediatric Advanced Life Support<sup>®</sup> (PALS) certification or other approved pediatric resuscitation competency.



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

### **N. Education**

- a. The trauma program must demonstrate appropriate orientation and skill maintenance for trauma nursing staff.
- b. Trauma nursing staff shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.

### **VI. HOSPITAL SERVICES:**

Trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of verification.

#### **A. Surgical Service**

1. The Surgical Service Shall:
  - a. One operating suite that is available or being utilized for major trauma patients with in-house operating room staffing immediately available 24 hours a day unless operating on major trauma patients and back up personnel who are on-call and promptly available when needed.
  - b. Ensure an operating room must be adequately staffed and available within 15 minutes. If the first operating room is occupied, an adequately staffed additional room must be available.
  - c. Ensure a PACU with qualified nurses is available 24 hours per day to provide care for the patient if needed during the recovery phase.
    - i. If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses and compliance with this requirement must be documented by the PIPS program.
  - d. The PACU must have the necessary equipment to monitor and resuscitate patients, consistent with the process of care designated by the institution.
  - e. PACU nurses shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.

#### **B. Pediatric Intensive Care Unit (PICU) for trauma patients**

1. Designated Medical Director
  - a. The PICU medical director shall be a surgeon with board certification in surgical critical care for Level I PedTCs.
  - b. The PICU medical director or co-medical director shall be a surgeon with board certification in surgical critical care for Level II PedTCs.
  - c. The surgical director of the PICU must participate actively in the administration of the unit, as evidenced by the development of pathways and protocols for care of surgical patients in the PICU and in unit-based performance improvement and should be board certified in surgical critical care.
  - d. The designated medical director or co-director shall be actively involved in, and responsible for, setting policies and administrative decisions related to trauma PICU patients.
  - e. The designated medical director or co-director shall serve as a liaison or identify a physician liaison to the trauma service.
  - f. The PICU liaison must attend at least 50 percent of the multidisciplinary peer review meetings.
  - g. The PICU liaison to the trauma program shall accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.





## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

### **3. PICU Physicians**

- a. Shall be credentialed by the hospital to provide pediatric trauma care.
- b. Physician PICU staffing for PedTC Level I - There must be two physicians board certified or eligible for certification in Pediatric critical care medicine, according the current requirements in Pediatric critical care medicine or in pediatric surgery and surgical critical care by the American Board of surgery.
- c. Pediatric surgeons or trauma surgeons with pediatric privileges must be included in all aspects of the care of injured children admitted to a PICU.
- d. Shall be available in-house within 15 minutes to provide care for the PICU patients 24 hours per day.
- e. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
- f. If a trauma attending provides coverage, a backup PICU attending must be identified and readily available.
- g. The trauma surgeon must retain responsibility for the patient and coordinate all therapeutic decisions.
- h. The pediatric trauma service must maintain oversight of the patient's management while the patient is in the ICU.
- i. The trauma service should work collaboratively with the pediatric critical care providers, although significant therapeutic decisions must be approved by the trauma service, and the service must be made aware of all significant clinical changes.

### **4. PICU Nursing Staff**

- a. Nurse-patient ratios shall remain at a maximum of 1:2 on each shift.
- b. The PICU charge nurse will be assigned for each shift and shall not be registry.

### **5. PICU Equipment shall include:**

- a. Cardiac output monitoring devices
- b. Electronic blood pressure monitoring devices
- c. Intracranial pressure monitoring devices
- d. Pulmonary function measuring devices
- e. Rapid transfusion devices
- f. Thermal control devices
- g. Immediate access to clinical laboratory services
- h. Patient weighing devices

### **C. Ancillary Services**

In addition to requirements delineated in Title 22, hospitals shall maintain these trauma and emergency service capabilities 24 hours/day, 7 days/week for:

#### **1. Respiratory Services**

- a. In-house availability of respiratory therapist with qualifications and necessary equipment to care for pediatric trauma patients.

#### **2. Radiological Services**

- a. In-house radiological services with qualifications and necessary equipment to care for pediatric trauma patients 24 hours per day, including radiology technologist and CT technologist, with availability of general radiological procedures, plain X-Rays and computed tomography.
- b. Magnetic resonance imaging (MRI) capability must be available 24 hours per day, including MRI technologist who must be available within 60 minutes in person to perform MRI studies.
- c. Interventional radiologic procedures and sonography must be available 24 hours per day.

#### **3. Acute Hemodialysis**

- a. Acute hemodialysis with qualifications and necessary equipment to care for pediatric trauma patients must be available in Level I and II Pediatric Trauma Centers.





## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

4. Burn Care
  - a. May be provided through a written transfer agreement with a burn center.
5. Speech Therapy Service.
  - a. Must be available during the acute phase of care, including intensive care.
6. Physical Therapy Service
  - a. Must be available during the acute phase of care, including intensive care.
7. Occupational Therapy Service
  - a. Must be available during the acute phase of care, including intensive care.
8. Rehabilitation Center Service
  - a. Equipped for acute care of the critically injured pediatric patient with in-house personnel trained in pediatric trauma patient rehabilitation care.
  - b. May be provided through a written transfer agreement with a freestanding rehabilitation hospital.
9. Child Life and Family Support Programs
  - a. Child life and family support programs must be available for pediatric trauma patients during the acute phase of care, including intensive care.
10. Social Services
  - a. Pediatric social services must be available during the acute phase of care, including intensive care.
11. Acute Spinal Cord Injury Management Capability
  - a. May be provided through a written transfer agreement with a rehabilitation center.
12. Clinical Laboratory Services, supplies and equipment for pediatric trauma patients immediately available 24 hours a day to perform:
  - a. Standard blood analysis
  - b. Blood gas and pH determination
  - c. Urine and other body fluids osmolality
  - d. Blood typing and cross matching
  - e. Coagulation studies
  - f. Drug and alcohol screening
  - g. Other body fluids including micros sampling when appropriate
  - h. Microbiology studies
  - i. Comprehensive Blood Bank
    - i. With adequate in-house supply of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, and appropriate coagulation factors to meet the needs of injured patients.
    - ii. Must have a massive transfusion protocol developed collaboratively between the trauma service and the blood bank.
    - iii. Access to a community central blood bank.
13. Nutritional Support
  - a. Nutrition support services must be available.

## **VII. EQUIPMENT**

- A. In addition to requirements delineated in Title 22, hospitals shall have immediately available equipment and supplies necessary for pediatric resuscitation in all appropriate patient care areas. Sufficient size-specific equipment to adequately care for pediatric patients shall be available (e.g., An OCEMS approved length based resuscitation tape, pediatric crash carts, pediatric emergency medications and supplies consistent with the most current evidence based recommendations).
- B. The hospital shall ensure the following trauma and emergency equipment is available 24 hours/day, 7 days/week:
  1. Cardiothoracic surgery capabilities available 24 hours per day and should have cardiopulmonary bypass equipment.
  2. Operating microscope – required for Level I PedTC / desirable for Level II PedTC.
  3. Rapid fluid infusers.
  4. Thermal control equipment for patients, resuscitation fluids and blood.



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

5. Intraoperative radiologic capabilities.
6. Endoscopes, including at least bronchoscopes, esophagoscopes and gastroscopes
7. Craniotomy trays and necessary equipment to perform a craniotomy.
8. Equipment for fracture fixation.
9. Autotransfusion capability.

### **VIII. SYSTEM COORDINATION AND COMMUNICATION**

- A. Outreach programs
  - a. Telephonic and on-site consultations with physicians in the community and outlying area.
- B. Prevention Programs
  - a. All designated trauma centers must engage in public and professional education.
  - b. PedTCs must provide some means of referral and access to trauma center resources.
  - c. PedTCs must have an organized and effective approach to injury prevention and must prioritize those efforts based on the American College of Surgeons guidelines, community needs, local trauma registry and epidemiologic data.
  - d. The trauma center must have someone in a leadership position that has injury prevention as part of his or her job description.
    - i. In Level I centers, this individual must be a prevention coordinator (separate from the trauma program manager) with a job description and salary support.
  - e. Universal screening for alcohol use must be performed and documented for all injured patients meeting ACS registry inclusion criteria with a hospital stay of > 24 hours.
    - i. All patients who have screened positive must receive an intervention by appropriately trained staff, and this intervention must be documented.
  - f. PedTCs must implement at least two programs that address one of the major causes of injury in the community.
  - g. A trauma center's prevention program must include and track partnerships with other community organizations.
- C. Trauma Research Program
  - a. PedTC Level I shall have identifiable pediatric trauma research program equivalent to that of a Level I ATC.
  - b. Trauma centers designated as a Level I Trauma Center and a Level I PedTC – half of the research requirement must be pediatric research.
  - c. Trauma research program – desirable for PedTC Level II.
- D. Continuing Medical Education
  1. Providers who are not pediatric trained providers (anesthesiology, neurosurgery, orthopaedic surgery, emergency medicine, radiology, and rehabilitation) shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.
  2. The PedTC shall provide formal programs in CME in trauma care provided by hospital for:
    - a. Staff physicians
    - b. Staff allied health personnel
    - c. Prehospital emergency and medical care personnel to include at least EMTs and paramedics
    - d. Community physicians and health care personnel
    - e. Affiliated trauma receiving centers
- E. Post Graduate Medical Training
  - a. Approved and accredited post graduate medical training program for residents at multiple levels of training in general surgery, internal medicine and anesthesiology (required for Level I PedTC / desired for Level II PedTC).



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

- b. PedTC Level I must have continuous rotations in trauma surgery for senior residents who are part of an ACGME accredited program. These rotations should include residency programs in all of the following specialties General surgery, orthopaedic surgery, emergency medicine, and neurosurgery. They may also include support of a pediatric surgical fellowship.
- F. Disaster Planning
  - a. Pediatric trauma centers must participate in regional disaster management plans and exercises.
  - b. Trauma centers must meet the disaster-related requirements of the Joint Commission.
  - c. A surgeon from the trauma panel must be a member of the hospital's disaster committee.
  - d. Hospital drills that test the individual hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can substitute for drills.
  - e. All trauma centers must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent.
- G. Heliport
  - a. Maintain a heliport and state heliport permit from the California Department of Transportation.
- H. Organ Procurement
  - a. Trauma center must have an established relationship with a recognized organ procurement organization.
  - b. Trauma Center shall have a written policy must be in place for triggering notification of the regional organ procurement organization.
  - c. Trauma center must review its sold organ donation rate annually.
  - d. Trauma center have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.
- I. Trauma Center Diversion
  - a. The trauma director must be involved in the development of the trauma center's bypass (diversion) protocol.
  - b. Trauma center shall have a process to limit the total trauma centers annual diversion hours to a maximum of five (5) percent.

## **IX. HOSPITAL POLICIES AND AGREEMENTS**

- A. The hospital will have a written agreement with OCEMS indicating the concurrence of the institutional governing body, hospital administration and medical staff to meet the requirements for trauma program participation as specified in this policy.
- B. The hospital shall implement clearly defined criteria for graded activation with defined trauma team activation levels.
- C. The hospital shall establish a policy and process to assess children for maltreatment which should include screening, treatment, and referral guidelines.
- D. The trauma center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.
- E. The PedTC will have written transfer agreements with all nearby Emergency Receiving Centers (ERC) and/or Comprehensive Children's Emergency Receiving Centers (CCERC) and affiliated trauma care hospitals to accept in transfer those trauma patients recognized by both transferring and receiving physicians as needing higher level trauma care.
- F. Designated trauma patients shall not be transferred from a trauma receiving center until the patient is unlikely to require trauma center care, within reasonable medical probability, as determined by the trauma surgeon.
- G. All patients will be transferred physician-to-physician. The accepting physician shall be of the appropriate specialty to manage the patient's injuries.
- H. Patients requiring additional acute care shall be transferred to a facility able to provide evaluation and care if there should be an unexpected change in their condition. These facilities shall substantially



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

meet the requirements of comprehensive children's emergency receiving centers (OCEMS Policy 680.00), including appropriate physician consultants to include neurosurgery, urology, psychiatry, ophthalmology, and oral surgery if needed.

### **X. DATA COLLECTION**

- A. Participation in the trauma system OCEMS data management system and performance evaluation.
- B. Trauma data shall be made available to OCEMS for medical review (All patient information shall be confidential).
- C. Trauma Registry
  - 1. Trauma registry data must be collected and in compliance with the National Trauma Data Standard (NTDS) and submitted to the National Trauma Data Bank® (NTDB®) every year in a timely fashion so that they can be aggregated and analyzed at the national level.
  - 2. OCEMS trauma registry data elements shall be submitted to OC-MEDS trauma patient registry.
  - 3. Trauma registries should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge.
  - 4. Trauma centers shall use a risk-adjusted benchmarking system to measure performance and outcomes.
  - 5. The trauma center shall develop and implement strategies for monitoring data validity.
  - 6. Data shall be analyzed by the trauma center and findings shall be used to identify injury prevention priorities that are appropriate for local implementation.
- D. Trauma Registrar
  - 1. PedTC must have a dedicated pediatric trauma registrar.
  - 2. The trauma registrar shall attend or have previously attended two courses within 12 months of being hired: (1) the American Trauma Society's Trauma Registrar Course or equivalent provided by a state trauma program; and (2) the Association of the Advancement of Automotive Medicine's Injury Scaling Course.
  - 3. One full-time equivalent employee dedicated to the registry must be available to process the data capturing the NTDS data set for each 500–750 admitted patients annually.

### **XI. QUALITY ASSURANCE/IMPROVEMENT:**

- A. Integrated Pediatric Performance Improvement and Patient Safety (PIPS) program to ensure optimal care and continuous improvement in care for pediatric patients. PIPS review should include but shall not be limited to:
  - 1. Detailed audit of all trauma related death, major complications and transfers.
  - 2. Medical nursing audit, utilization review, tissue review.
  - 3. Rate of change in interpretation of radiologic studies.
  - 4. Review of all admissions to non-surgical services if trauma program admits more than 10% of trauma patients to non-surgical services.
  - 5. Review of anesthesia service availability, operating room availability, operating room and post anesthesia care unit response times, and response times for computed tomography technologist, magnetic resonance imaging technologist, and/or interventional radiology team when responding from outside of the trauma center.
- B. Multidisciplinary trauma peer review committee must meet at least monthly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as to propose improvements to the care of the injured and shall:
  - 1. Include representation with at least 50 percent attendance of all trauma team members, including but not limited to representation from pediatric general surgery, and liaisons to the trauma program from emergency medicine, orthopaedics, and anesthesiology, pediatric critical care medicine, neurosurgery, and radiology.
  - 2. Provide for the implementation of the requirements by state law and OCEMS policies and procedures and provide for coordination with OCEMS.



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

3. Include processes of event identification and levels of review that result in the development of corrective action plans, and methods of monitoring, reevaluation, and benchmarking must be present.
  4. Include problem resolution, outcome improvements, and assurance of safety ("loop closure") that are identifiable through methods of monitoring, reevaluation, benchmarking, and documentation.
- C. Annual performance evaluation based on criteria determined by the trauma operations committee.

### Approved:

---

Sam Stratton, MD, MPH  
OCEMS Medical Director

---

Tammi McConnell, MSN, RN  
OCEMS Administrator

Original Date: 7/1/2015  
Reviewed Date(s): 4/1/2015  
Revised Date(s): 4/1/2015; 6/26/2015  
Effective Date: XX/XX/2015

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.01  
Pediatric Trauma Center Criteria  
Redlined Version



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

### I. AUTHORITY:

*Health and Safety (HS) Code, Division 2.5, Article 2.5, Sections 1798.16~~02~~ and 1798.16~~93~~; California Code of Regulations, Title 22, Division 9, Chapter 7. & Title 21 Sections 3525-3560; American College of Surgeons Resources for Optimal Care of the Injured Patient 2014.*

### II. APPLICATION:

This policy defines the requirements for designation as an Orange County Pediatric Level I or Level II Trauma Center.

A Pediatric Trauma Receiving Center (PedTC) will provide specialized trauma care for emergency and critically ill trauma pediatric patients presenting via the 9-1-1 system or by emergency interfacility transfer from an Orange County Emergency Medical Services (OCEMS) Emergency Receiving Center (ERC) or Comprehensive Children's Emergency Receiving Center (CCERC). Patients eligible for 9-1-1 field triage or transfer to a PedTC include pediatric trauma patients identified by the base hospital physician or transferring physician as critically ill and who would benefit from pediatric trauma specialty services.

The Level I PedTC shall annually admit 200 or more trauma patients younger than 15 years old.

The Level II PedTC shall annually admit 100 or more trauma patients younger than 15 years old.

### III. DESIGNATION:

#### A. Initial Designation Criteria

1. Hospitals applying for initial designation as a Pediatric Trauma Center must submit a request to Orange County Emergency Medical Services (OCEMS) and evidence of compliance to all criteria in this policy.
2. Hospital shall be designated as an Orange County Comprehensive Children's Emergency Receiving Center (CCERC) or have a written transfer agreement with an OCEMS designated CCERC.
3. Hospital will have a designated trauma resuscitation area.
4. Hospital will have a designated pediatric emergency department area.
5. OCEMS will evaluate the request and determine the need for an additional Pediatric Trauma Center. OCEMS evaluation may include:
  - a. Geography (service area population density, travel time and distance to the next nearest facility, number and type of other available trauma services and availability of prehospital resources).
  - b. Base hospital designation (number of calls, impact on patients, prehospital personnel, and other base hospitals).
  - c. Trauma care (number of trauma patients, impact on other hospitals, trauma centers, and trauma patients).
  - d. Specialty services provided (neurosurgery, obstetrics, burn center, pediatrics and next nearest availability).
  - e. Patient volume (number of patients annually, both 9-1-1 transported and walk-ins).

5.6. If OCEMS determines there is a need for an additional PedTC such need is identified, OCEMS will request the interested hospital to provide:

---





## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- a. A completed pre-review questionnaire.
- b. Policies and agreements as described in Section IX of this policy.

~~6-7.~~ OCEMS will review the submitted material, perform a site visit, and meet with the hospital representatives. In addition, the following information will be collected by OCEMS and considered in the designation process:

- a. Emergency Department diversion statistics during the past three years.

~~7-8.~~ Following review, OCEMS will provide the designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for designation of up to one year as an ~~Adult~~ Pediatric Trauma Center.

~~8-9.~~ An OCEMS designated Pediatric Trauma Center will apply for the American College of Surgeons (ACS) initial verification review process within the first year of designation and shall complete the ACS verification review process prior to the end of the second year of designation as a PedTC.

~~9-10.~~ An OCEMS designated Pediatric Trauma Center will have a written agreement as described in Section IX of this policy and pay the established Health Care Agency fee.

### B. Continuing Designation

1. OCEMS will review each designated Pediatric Trauma Center for compliance to criteria as described in this policy every three years or more often if deemed necessary by the OCEMS Medical Director.
2. Each PedTC will be required to submit specific written materials to demonstrate evidence of compliance to criteria established by this policy and pay the established fee.
3. Each PedTC shall complete the American College of Surgeons (ACS) re-verification process as a Level I or Level II PedTC.
4. OCEMS will provide its designation decision to the Facilities Advisory Subcommittee and the Emergency Medical Care Committee for endorsement or denial of endorsement for continued designation of up to three years.

### C. Change in Ownership / Change in Executive Management

1. In the event of a change in ownership of the hospital, continued PedTC designation will require adherence to this policy with review and approval of continued designation by the OCEMS Medical Director. OCEMS shall be notified, in writing, at least 30 days prior to the effective date of any changes in hospital ownership. Change in hospital ownership may require re-designation by OCEMS.
2. OCEMS shall be notified, in writing, at least 10 days prior to the effective date of any changes in key PedTC personnel as identified in Section V. ~~(A)~~ & ~~(L)(K)~~.

### D. Denial / Suspension / Revocation of Designation

1. OCEMS may deny, suspend, or revoke the approval of a PedTC for failure to comply with any acceptable OCEMS policies and procedures and/or state regulations.
2. The process for PedTC suspension or revocation shall adhere to OCEMS Policy and Procedure # 640.00 and 645.00 (Base Hospital / Facilities / Training Programs / EMT-P Service Providers: Review Process for Suspension/Revocation of Approval/Designation).
3. The Orange County PedTC designation may be withdrawn by OCEMS upon 120 day written notice to the trauma center, or the PedTC may withdraw as a trauma center upon 120 days written notice to OCEMS. The Orange County trauma center designation is not transferable.

### E. Cancellation of Designation / Reduction or Elimination of Services

---



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

1. Pediatric Trauma Center designation may be canceled by the PedTC upon 120 days written notice to OCEMS.
2. Hospitals considering a reduction or elimination of emergency services must notify the California Department of Public Health and the Orange County Health Care Agency/ EMS a minimum of 120 days prior to the planned reduction or elimination of services.

### **IV. HOSPITAL LICENSING AND ACCREDITATION:**

- A. Hospital shall possess a current California Department of Public Health permit for basic or comprehensive emergency services.
- B. Hospital shall maintain accreditation by an accreditation organization approved by the Centers for Medicare and Medicaid Services (CMS).
- C. Hospital shall notify OCEMS verbally and in writing any time the hospital is not in compliance with any applicable federal and/or state laws, and/or OCEMS policies, indicating reason(s), date(s), and time(s) for non-compliance and corrective actions that are being taken. OCEMS shall determine whether the hospital may continue to receive 9-1-1 patients during the period that corrective actions are underway.

### **V. MEDICAL PERSONNEL:**

- A. Trauma Medical Director (TMD)
    1. PedTC Level I TMD shall be a physician trained and experienced in pediatric trauma, as evidenced by:
      - a. Board Certified in pediatric surgery by the American Board of Surgery (ABS); or
      - b. Successful completion of an ABS, ACGEM accredited pediatric surgery residency within the past three years; or
      - c. A pediatric surgeon who is an American College of Surgeons Fellow with a special interest in pediatric trauma care.
    2. PedTC Level II TMD should be a physician trained and experienced in pediatric trauma, as evidenced by:
      - a. Certified in pediatric surgery by the American Board of Surgery (ABS); or
      - b. Successful completion of an ABS, ACGEM accredited pediatric surgery residency within the past three years; or
      - c. A pediatric surgeon who is an American College of Surgeons Fellow with a special interest in pediatric trauma care; or
      - d. ~~At a minimum, the~~ PedTC Level II TMD shall be a physician
        - i. Certified in general surgery by the American Board of Surgery (ABS); or
        - ii. Successful completion of an ABS, ACGEM accredited general surgery residency within the past three years; and
        - iii. Credentialed by the hospital to provide pediatric trauma care.
  3. The Trauma Medical Director shall:
    - a. Participate in trauma call.
    - b. Maintain current Advanced Trauma Life Support® (ATLS®).
-



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- c. Accrue trauma-related verifiable external continuing medical education (16 hours annually, or 48 hours in 3 years) of which 12 hours (in 3 years must be related to clinical pediatric trauma care.
      - d. The TMD must chair and attend a minimum of 50% of the multidisciplinary trauma peer review committee meetings.
      - e. Maintain membership and active participation in regional or national trauma organizations.
    - 4. The trauma medical director shall be responsible for:
      - a. Establishing the policies and procedures, staffing, educational activities, quality assurance, and audit programs of the trauma service in conjunction with the medical staff.
      - b. Correcting deficiencies in trauma care and exclude from trauma call the trauma team members who do not meet specified criteria.
      - c. Performing an annual assessment of the trauma panel providers in the form of Ongoing Professional Practice Evaluation (OPPE) and Focused Professional Practice Evaluation (FPPE) when indicated by findings of the Performance Improvement and Patient Safety (PIPS) process.
      - d. Ensuring compliance with the requirements of this policy and cannot direct more than one trauma center.
      - e. Determining each pediatric/general surgeon's ability to participate on the trauma panel based on an annual review.
  - B. Pediatric/General Surgery
    - 1. Trained and experienced in pediatric/general surgery, as evidenced by :
      - a. Board certification in pediatric surgery by the American Board of Surgery (ABS) or the equivalent as determined by the OCEMS Medical Director; or
      - b. Successful completion of an ABS or ACGEM accredited pediatric surgical residency within the last three years and will become board certified within three years of qualification for ABS board certification in pediatric surgery; or
      - c. Board certified in general surgery\* by the American Board of Surgery (ABS) or the equivalent as determined by the OCEMS Medical Director; or
      - d. Successful completion of an ABS or ACGEM accredited general surgical\* residency within the last three years and will become board certified within three years of qualification for ABS board certification in general surgery; and
      - e. The general surgeon must be credentialed by the hospital to provide pediatric trauma care, be members of the pediatric trauma panel and be approved by the pediatric trauma medical director

\* A PedTC Level I must have at a minimum of two surgeons certified in pediatric surgery by the American Board of Surgery (ABS),

\* A PedTC Level II must have at a minimum of one surgeon certified in pediatric surgery by the American Board of Surgery (ABS)
    - 2. Pediatric/General Surgeons shall:
      - a. Be credentialed by the hospital with pediatric/general surgery privileges.
      - b. Be dedicated to a single trauma center while on duty.
      - c. Be available 24 hours per day to respond immediately (within 15 minutes) from time of patient arrival with an 80 percent attendance threshold for the highest-level activations.
      - d. As the attending surgeon, be present in the operating room for all operations.
    - 3. Pediatric/General Surgeons shall be responsible for:
      - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
      - b. Successful completion of the Advanced Trauma Life Support® (ATLS®) course at least once.
      - c. Maintaining a commitment to continuing medical education by participating in a minimum 16 hours of CME per year on average or by demonstrating participation in internal educational processes conducted by the trauma program.
    - 4. Pediatric/General Surgery Call Schedule
-



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- a. Hospitals with a trauma service shall have a published back up call schedule for trauma surgery.
- C. Pediatric Neurosurgery
1. Neurotrauma care should be organized and led by
    - a. Director of neurosurgery or neurosurgical liaison.
  2. PedTC Level I shall have at least one neurosurgeon trained and experienced in neurosurgery, as evidenced by:
    - a. Board certification in neurosurgery by the American board of Neurological Surgery (ABNS) or eligible for certification by an appropriate neurosurgical board according to the current requirements of that board and who also has had pediatric fellowship training.
    - b. There must be one additional ABNS board certified neurosurgeon or one neurosurgeon eligible for certification by an appropriate neurosurgical board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
  3. PedTC Level II shall have at least one neurosurgeon trained and experienced in neurosurgery, as evidenced by:
    - a. Board certified in neurosurgery by the American Board of Neurological Surgery (ABNS) or eligible for certification by an appropriate neurosurgical board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
  4. Neurosurgeons shall:
    - a. Be available 24 hours per day for all TBI and spinal cord injury patients and must be present and respond promptly (within 30 minutes) based on institutional-specific criteria. Qualified neurosurgeons should be regularly involved in the care of patients with head and spinal cord injuries.
    - b. Be credentialed by the hospital with general neurosurgical privileges.
    - c. Must be knowledgeable and current in the care of injured pediatric patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  5. Neurosurgery director or neurosurgery liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent the multidisciplinary trauma peer review committee meetings.
    - b. Accrual of an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.
  6. Neurotrauma Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for neurotrauma for times when the neurosurgeon is encumbered.
    - ~~b. The trauma service shall have contingency plans for times in which a neurosurgeon is encumbered upon the arrival of a neurotrauma case.~~
- D. Pediatric Orthopaedic Surgery
1. Orthopaedic trauma care should be organized and led by
    - a. Director of orthopedic surgery or orthopaedic trauma liaison.
  2. PedTC Level I shall have at least one orthopaedic surgeon trained and experienced in orthopaedic surgery, as evidenced by:
    - a. Board certification in orthopaedic surgery by the American Board of Orthopaedic Surgery (ABOS) or eligible for certification by an appropriate orthopaedic surgical board according to the current requirements of that board and who also has had pediatric fellowship training
    - b. There must be one additional ABOS board certified orthopaedic surgeon or one orthopaedic surgeon eligible for certification by an appropriate orthopaedic surgical board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
-



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

3. PedTC Level II shall have at least one orthopaedic surgeon trained and experienced in orthopaedic surgery, as evidenced by:
    - a. Board certified in orthopaedic surgery by the American Board of Orthopaedic Surgery (ABOS) or eligible for certification by an appropriate orthopaedic surgery board according to the current requirements of that board and identified with demonstrated interests and skills in pediatric trauma.
  4. Orthopedic surgeons shall:
    - a. Be available 24 hours a day and in the trauma resuscitation area within 30 minutes after consultation has been requested by the surgical trauma team leader for ~~multiply~~ multiple injured patients.
    - b. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  5. Orthopaedic surgeon director or liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Accrual of an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.
  6. Orthopaedic Surgery Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for Orthopaedic surgery.
- E. Anesthesiology
1. Anesthetic care should be organized and led by
    - a. Director of anesthesia or anesthesiologist liaison.
  2. Anesthesiologist shall be physicians:
    - a. Certified in anesthesiology by the American Board of Anesthesiology (ABA), American Osteopathic ~~Association Board of Surgery~~ (AO~~ABS~~) or the equivalent as determined by the OCEMS Medical Director.
    - b. All anesthesiologists taking call must have successfully completed an anesthesia residency program.
  3. Anesthesiologist shall:
    - a. Be available in-house 24 hours a day to assist and continue trauma resuscitation.
    - b. Be promptly available (within 30 minutes) for emergency operations.
    - c. When anesthesiology senior residents or CRNAs are used to fulfill availability requirements, the attending anesthesiologist on call must be advised, available within 30 minutes at all times, and present for all operations.
    - d. Have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialist
  4. Anesthesiologist director or liaison shall be responsible for:
    - a. Attendance at a minimum of 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Ensuring the trauma service is staffed with a panel of anesthesiologists who agree to rotate coverage for the trauma service. The depth of the back-up for anesthesia coverage shall be commensurate with the expected volume of the trauma service.
    - c. Commitment to and accrual of education in trauma-related anesthesia and educate other anesthesiologists and the entire trauma team.
  5. Anesthesia Call Schedule
    - a. Hospitals with a trauma service shall have a published back up call schedule for Anesthesia.
- F. ~~Trauma Center Surgical~~ Physician Specialty
-



**PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

1. The trauma service shall have priority for such personnel and facilities and they shall not be preempted for non-emergency purposes.
2. For all patients being transferred for specialty care, such as burn care, microvascular surgery, cardiopulmonary bypass capability, complex ophthalmologic surgery, or high-complexity pelvic fractures, agreements with a similar or higher-qualified verified trauma center should be in place. If this approach is used, a clear plan for expeditious critical care transport, follow-up, and performance monitoring is required.

**G. PedTC Surgical Physician Specialty -**

~~G.~~ 1. Pediatric Trauma Center surgical physician specialty s shall include at least the following surgical specialties to properly serve trauma patients ~~which are staffed by qualified specialist with documented training and experience in trauma surgery:~~

Surgical Specialty	Availability	Level I Trauma Center	Level II Trauma Center
General Surgery	Immediately	Essential	Essential
Cardiothoracic	Promptly	Essential	Essential
Vascular Surgery	Promptly	Essential	Essential
Neurologic	Promptly	Essential	Essential
Obstetric/Gynecologic	Promptly	Essential	Essential**
Ophthalmologic	Promptly	Essential	Essential
Orthopedic	Promptly	Essential	Essential
Oral/Maxillofacial or Head and Neck	Promptly	Essential	Essential
Plastic	Promptly	Essential	Essential
Urologic	Promptly	Essential	Essential
Pediatric	Promptly	Essential	Desirable
Reimplantation/Microvascular*	Promptly	Essential	Essential
Hand Surgery	Promptly	Essential	Essential

\*\*written tx agreement?

**H. Pediatric Trauma Center Non-Surgical Physician Specialty-**

~~H.~~ 1. Pediatric Trauma Center non-surgical physician specialty s shall include at least the following specialties to properly serve trauma patients ~~which are staffed by qualified specialist with documented training and experience in trauma surgery:~~

Specialty	Availability	Level I Trauma Center	Level II Trauma Center
Emergency Medicine	Immediately	Essential	Essential
Anesthesiology	Promptly	Essential	Essential
Cardiology	Promptly	Essential	Essential
Gastroenterology	Promptly	Essential	Essential
Hematology	Promptly	Essential	Essential
Infectious Disease	Promptly	Essential	Essential
Internal Medicine	Promptly	Essential	Essential
Neonatology			
Nephrology	Promptly	Essential	Essential
Neurology	Promptly	Essential	Essential
Pathology	Promptly	Essential	Essential
General Pediatrics	Promptly	Essential	Essential
Psychiatry	Promptly	Essential	Essential

**PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

Pulmonary	Promptly	Essential	Essential
Radiology	Promptly	Essential	Essential

1. Medical specialists on staff must include their respective support teams (for example, respiratory therapy, a dialysis team, and nutrition support).

**I. Radiologist****1. Radiologist shall:**

- a. Be certified in radiology by the American Board of Radiology (ABR), American Osteopathic ~~Board of Surgery Association~~ (AO~~BS~~ABS) or the equivalent as determined by the OCEMS Medical Director.
- b. Have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialist.

**2. Radiologist ~~s~~shall be:**

- a. Qualified radiologists must be available within 30 minutes in person or by teleradiology for the interpretation of radiographs.
- b. Qualified radiologists must be available within 30 minutes in person to perform complex imaging studies or interventional procedures or by tele-radiology for the interpretation of radiographs.

**3. A radiologist must be appointed as liaison to the trauma program.**

- a. The radiologist liaison must attend at least 50 percent of peer review meetings and should educate and guide the entire trauma team in the appropriate use of radiologic services.
- b. Radiologists must be involved in protocol development and trend analysis that relate to diagnostic imaging.

**J. Emergency Department Physician Staffing****1. Emergency Department Physicians who participate as a member of the trauma team shall be have training and experience in emergency medicine, as evidenced by:**

- a. Board Certification by the American Board of Emergency Medicine (ABEM), American Osteopathic Board of Emergency Medicine (AOBEM) or the equivalent as determined by the OCEMS Medical Director; or
- b. Successful completion of an ABEM, ACGEM or AOA accredited Emergency Medicine Residency within the past three years.
- c. A resident in postgraduate year 4 or 5 or an attending emergency physician who is part of the trauma team may be approved to begin resuscitation while awaiting the arrival of the attending surgeon but cannot independently fulfill the responsibilities of, or substitute for, the attending surgeon.
- d. In institutions in which there are emergency medicine residency training programs, supervision must be provided by an in-house attending emergency physician 24 hours per day. †
- e. ED Physician staffing PedTC Level I- There must be two physicians who are board certified or eligible for certification by an appropriate emergency medicine board according the current requirements in pediatric emergency medicine.
- f. The pediatric section ~~offe~~ the emergency department must be staffed by individuals credentialed by the hospital to provide pediatric trauma care in their respective areas.

**2. Emergency Department Physician:**

- a. May initially evaluate the limited-tier trauma patient, but the center must have a clearly defined response expectation for the trauma surgical evaluation of those patients requiring admission.
- b. Shall be present in the emergency department at all times and shall be regularly involved in the care of injured patients.
- c. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.





## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

3. Emergency physician director or liaison shall be responsible for:
    - a. Attending at least 50 percent of the multidisciplinary trauma peer review committee meetings.
    - b. Must accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.
  - K. Physician Assistants (PA's) and Nurse Practitioners (NP's) Staffing
    1. The TMD is responsible for establishing the roles and responsibilities for PA's and NPs participating in the trauma program.
    2. PA's and NP's scope of practice must be clearly delineated and must be consistent with state regulations.
    3. Credentialing procedures for PA's and NP's must meet the requirements of the local, state and federal jurisdiction.
      - c. The trauma program must demonstrate appropriate orientation and skill maintenance for advanced practitioners. PAs and NPs shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.
    4. PA's and NP's shall
      - a. Maintain current ACLS® and PALS® or APLS®.
      - b. Maintain verification as an Advanced Trauma Life Support® provider if the PA or NP participates in the initial evaluation of trauma patients.
  - L. Trauma Program Manager (TPM)
    - i. The TPM Shall:
      - a. Be a registered nurse with at least three years' experience in trauma nursing within the previous five years.
      - b. Be full time and dedicated to the trauma program. (Trauma Centers also designated as a Trauma Centers under OCEMS Policy #620.00 must have a separate full time dedicated TPM for the pediatric trauma program) PedTC Level I the TPM must be full time and dedicated to the pediatric trauma program.
      - c. Demonstrate evidence of educational preparation and clinical experience in the care of injured patients with a minimum of 16 hours (internal or external) of trauma-related continuing education per year and clinical experience in the care of injured patients.
    - ii. TPM shall be responsible for:
      - a. Organization of services and systems necessary for a multidisciplinary approach to providing care to injured pediatric patients.
      - b. Process and performance improvement activities of nursing and ancillary staff
      - c. Identify events; develop corrective action plans, and ensuring-ensure methods of monitoring, reevaluation, and benchmarking.
      - d. Supervision of trauma registry staff, injury prevention coordinator, and trauma nurse clinicians.
  - M. Trauma Nursing Staff
    1. The trauma team is responsible for the care of the patient from admission to discharge.
    2. Trauma team personnel must participate in in-service educational opportunities including regional trauma training programs.
    3. Certification:
      - a. All Trauma Nursing Staff shall maintain current Basic Life Support (BLS) provider certification.
      - b. All Trauma Nursing staff shall maintain current Advanced Cardiac Life Support (ACLS) provider certification.
      - c. All Trauma Nursing staff shall maintain current Pediatric Advanced Life Support (PALS) certification or other approved pediatric resuscitation competency.
  - N. Education
-



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- a. The trauma program must demonstrate appropriate orientation and skill maintenance for trauma nursing staff.
- b. Trauma nursing staff shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.

### VI. HOSPITAL SERVICES:

Trauma centers must be able to provide the necessary human and physical resources (physical plant and equipment) to properly administer acute care consistent with their level of verification.

#### A. Surgical Service

##### 1. The Surgical Service Shall:

- a. One operating suite that is available or being utilized for major trauma patients with in house operating room staffing immediately available 24 hours a day unless operating on major trauma patients and back up personnel who are on-call and promptly available when needed.
- b. Ensure an operating room must be adequately staffed and available within 15 minutes. If the first operating room is occupied, an adequately staffed additional room must be available.
- c. Ensure a PACU with qualified nurses is available 24 hours per day to provide care for the patient if needed during the recovery phase.
  - i. If this availability requirement is met with a team on call from outside the hospital, the availability of the PACU nurses and compliance with this requirement must be documented by the PIPS program.
- d. The PACU must have the necessary equipment to monitor and resuscitate patients, consistent with the process of care designated by the institution..
- e. PACU nurses shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists.

#### B. Pediatric Intensive Care Unit (PICU) for trauma patients

##### ~~i. The PedTC shall have a CGS approved PICU~~

##### ~~ii.i.~~ Designated Medical Director

- a. The PICU medical director shall be a surgeon with board certification in surgical critical care for Level one PedTCs.
- b. The PICU medical director or co-medical director shall be a surgeon with board certification in surgical critical care for Level two PedTCs.
- c. The surgical director of the PICU must participate actively in the administration of the unit, as evidenced by the development of pathways and protocols for care of surgical patients in the PICU and in unit based performance improvement and should be board certified in surgical critical care.
- d. The designated medical director or co-director shall be actively involved in, and responsible for, setting policies and administrative decisions related to trauma PICU patients.
- e. The designated medical director or co-director shall serve as a liaison or identify a physician liaison to the trauma service.
- f. The PICU liaison must attend at least 50 percent of the multidisciplinary peer review meetings.
- g. The PICU liaison to the trauma program shall accrue an average of 16 hours annually or 48 hours in 3 years of verifiable external CME, of which at least 12 hours (in 3 years) must be related to clinical pediatric trauma care.

##### 2. PICU Physicians

- a. Shall be credentialed by the hospital to provide pediatric trauma care.



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- b. Physician PICU staffing for PedTC Level I - There must be two physicians board certified or eligible for certification in Pediatric critical care medicine, according to the ~~the~~ current requirements in Pediatric critical care medicine or in pediatric surgery and surgical critical care by the American Board of surgery
  - c. Pediatric surgeons or trauma surgeons with pediatric privileges must be included in all aspects of the care ~~to~~ of injured children admitted to an PICU.
  - d. Shall be available in-house within 15 minutes to provide care for the PICU patients 24 hours per day.
  - e. Must be knowledgeable and current in the care of injured patients. This requirement may be met by documenting the acquisition of 16 hours of trauma-related CME per year on average or by demonstrating participation in an internal educational process conducted by the trauma program.
  - f. If a trauma attending provides coverage, a backup PICU attending must be identified and readily available.
  - g. The trauma surgeon must retain responsibility for the patient and coordinate all therapeutic decisions.
  - h. The pediatric trauma service must maintain oversight of the patient's management while the patient is in the ICU.
  - i. The trauma service should work collaboratively with the pediatric critical care providers, although significant therapeutic decisions must be approved by the trauma service, and the service must be made aware of all significant clinical changes.
3. PICU Nursing Staff
- a. Nurse patient ratios shall remain at a maximum of 1:2 on each shift.
  - b. The PICU charge nurse will be assigned for each shift, ~~and~~ shall not be registry.
4. PICU Equipment shall include:
- a. Cardiac output monitoring
  - b. Electronic blood pressure monitoring devices
  - c. Intracranial pressure monitoring devices
  - d. Pulmonary function measuring devices
  - e. Rapid transfusion devices
  - f. Thermal control devices
  - g. Immediate access to clinical laboratory services
  - h. Patient weighing devices
- C. Ancillary Services
- In addition to requirements delineated in Title 22, hospitals shall maintain these trauma and emergency service capabilities 24 hours/day, 7 days/week for:
- 1. Respiratory Services
    - a. In-house availability of respiratory therapist with qualifications and necessary equipment to care for pediatric trauma patients.
  - 2. Radiological Services
    - a. In-house radiological services with qualifications and necessary equipment to care for pediatric trauma patients 24 hours per day, including radiology technologist and CT technologist, with availability of general radiological procedures, plain X-Rays and Computed tomography.
    - b. Magnetic resonance imaging (MRI) capability must be available 24 hours per day, including MRI technologist who must be available within 60 minutes in person to perform MRI studies.
    - c. Interventional radiologic procedures and sonography must be available 24 hours per day.
  - 3. Acute Hemodialysis
    - a. Acute hemodialysis with qualifications and necessary equipment to care for pediatric trauma patients must be available in Level I and II Pediatric Trauma Centers.
  - 4. Burn Care
    - a. May be provided through a written transfer agreement with a burn center.
  - 5. Speech Therapy Service.
    - a. Must be available during the acute phase of care, including intensive care.
  - 6. Physical Therapy Service
-



## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

- a. Must be available during the acute phase of care, including intensive care.
7. Occupational Therapy Service
  - a. Must be available during the acute phase of care, including intensive care.
8. Rehabilitation Center Service
  - a. Equipped for acute care of the critically injured pediatric patient with in-house personnel trained in pediatric trauma patient rehabilitation care.
  - b. May be provided through a written transfer agreement with a freestanding rehabilitation hospital.
9. Child Life and Family Support Programs
  - a. Child life and family support programs must be available for pediatric trauma patients during the acute phase of care, including intensive care.
10. Social Services
  - a. Pediatric social services must be available during the acute phase of care, including intensive care.
11. Acute Spinal Cord Injury Management Capability
  - a. May be provided through a written transfer agreement with a rehabilitation center.
12. Clinical Laboratory Services, supplies and equipment for pediatric trauma patients immediately available 24 hours a day to perform:
  - a. Standard blood analysis.
  - b. Blood gas and pH determination
  - c. Urine and other body fluids osmolality.
  - d. Blood typing and cross matching
  - e. Coagulation studies
  - f. Drug and alcohol screening
  - g. Other body fluids including micros sampling when appropriate
  - h. Microbiology studies
  - i. Comprehensive Blood Bank
    - i. With adequate in-house supply of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, and appropriate coagulation factors to meet the needs of injured patients.
    - ii. Must have a massive transfusion protocol developed collaboratively between the trauma service and the blood bank.
    - iii. Access to a community central blood bank
13. Nutritional Support
  - a. Nutrition support services must be available.

### **VII. EQUIPMENT**

- a. In addition to requirements delineated in Title 22, hospitals shall have immediately available equipment and supplies necessary for pediatric resuscitation in all appropriate patient care areas. Sufficient size-specific equipment to adequately care for pediatric patients shall be available (e.g., An OCEMS approved length based resuscitation tape, pediatric crash carts, pediatric emergency medications and supplies consistent with the most current evidence based recommendations).
- b. The hospital shall ensure the following trauma and emergency equipment is available 24 hours/day, 7 days/week:
  1. Cardiothoracic surgery capabilities available 24 hours per day and should have cardiopulmonary bypass equipment.
  2. Operating microscope – required for Level I PedTC / desirable for Level II PedTC..
  3. Rapid fluid infusers.
  4. Thermal control equipment- for patients, resuscitation fluids and blood.
  5. Intraoperative radiologic capabilities.
  6. Endoscopes, including at least bronchoscopes, esophagoscopes and gastroscopes
  7. Craniotomy trays and necessary equipment to perform a craniotomy.
  8. Equipment for fracture fixation.
  9. Autotransfusion capability.

### **VIII. SYSTEM COORDINATION AND COMMUNICATION**

---



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

- A. Outreach programs
  - a. Telephonic and on-site consultations with physicians in the community and outlying area.
- B. Prevention Programs
  - a. All designated trauma centers must engage in public and professional education.
  - b. PedTCs must provide some means of referral and access to trauma center resources.
  - c. ~~PedTCs Trauma centers~~ must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.
  - d. The trauma center must have someone in a leadership position that has injury prevention as part of his or her job description.
    - i. In Level I centers, this individual must be a prevention coordinator (separate from the trauma program manager) with a job description and salary support.
  - e. Universal screening for alcohol use must be performed and documented for all injured patients meeting ACS registry inclusion criteria with a hospital stay of > 24 hours. ~~and must be documented.~~
    - i. All patients who have screened positive must receive an intervention by appropriately trained staff, and this intervention must be documented.
  - f. ~~PedTCs Trauma centers~~ must implement at least two programs that address one of the major causes of injury in the community.
  - g. A trauma center's prevention program must include and track partnerships with other community organizations.
- b. Trauma Research Program
  - a. PedTC Level I shall have identifiable pediatric trauma research program equivalent to that of a Level I ATC.
  - b. Trauma centers designated as a Level I ATrauma Center and a Level I PedTC – half of the research requirement must be pediatric research
  - c. Trauma research program – desirable for PedTC Level II
- c. Continuing Medical Education
  - 1. Providers who are not pediatric trained providers (anesthesiology, neurosurgery, orthopaedic surgery, emergency medicine, radiology, and rehabilitation) shall have sufficient training and experience in pediatric trauma care and be knowledgeable about current management of pediatric trauma in their specialty. The PedTC Program must make specialty-specific pediatric education available for these specialists
  - 2. The PedTC shall provide formal programs in CME in trauma care provided by hospital for:
    - a. Staff physicians
    - b. Staff allied health personnel
    - c. Prehospital emergency and medical care personnel to include at least EMTs and paramedics
    - d. Community physicians and health care personnel
    - e. Affiliated trauma receiving centers
- d. Post Graduate Medical Training
  - a. Approved and accredited post graduate medical training program for residents at multiple levels of training in general surgery, internal medicine and anesthesiology (required for Level I PedTC / desired for Level II PedTC).
  - b. PedTC Level I- must have continuous rotations in trauma surgery for senior residents who are part of an ACGME accredited program. These rotations should include residency programs in all of the following specialties General surgery, orthopaedic surgery, emergency medicine, and neurosurgery. They may also include support of a pediatric surgical fellowship
- e. Disaster Planning
  - a. Pediatric trauma centers must participate in regional disaster management plans and exercises.
  - b. Trauma centers must meet the disaster-related requirements of the Joint Commission.
  - c. A surgeon from the trauma panel must be a member of the hospital's disaster committee.
  - d. Hospital drills that test the individual hospital's disaster plan must be conducted at least twice a year, including actual plan activations that can substitute for drills.





## **PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA**

---

- e. All trauma centers must have a hospital disaster plan described in the hospital's policy and procedure manual or equivalent.
- f. Heliport
  - a. Maintain a heliport and state heliport permit from the California Department of Transportation.
- g. Organ Procurement
  - a. Trauma center must have an established relationship with a recognized organ procurement organization.
  - b. Trauma Center shall have a written policy must be in place for triggering notification of the regional organ procurement organization.
  - c. Trauma center must review its sold organ donation rate annually.
  - d. Trauma center have written protocols defining the clinical criteria and confirmatory tests for the diagnosis of brain death.
- h. Trauma Center Diversion
  - a. The trauma director must be involved in the development of the trauma center's bypass (diversion) protocol.
  - b. Trauma center shall have a process to limit the total trauma centers annual diversion hours to a maximum of five (5) percent.

### **IX. HOSPITAL POLICIES AND AGREEMENTS**

- A. The hospital will have a written agreement with OCEMS indicating the concurrence of the institutional governing body, hospital administration and medical staff to meet the requirements for trauma program participation as specified in this policy.
- B. The hospital shall implement clearly defined criteria for graded activation with defined trauma team activation levels.
- C. The hospital shall establish a policy and process to assess children for maltreatment which should include screening, treatment, and referral guidelines
- D. The trauma center must have policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to, and while in, the radiology department.
- E. The PedTC will have written transfer agreements with all nearby Emergency Receiving Centers (ERC) and/or Comprehensive Children's Emergency Receiving Centers (CCERC) and affiliated trauma care hospitals to accept in transfer those trauma patients recognized by both transferring and receiving physicians has needing higher level trauma care.
- F. Designated trauma patients shall not be transferred from a trauma receiving center until the patient is unlikely to require trauma center care, within reasonable medical probability, as determined by the trauma surgeon.
- G. All patients will be transferred physician-to-physician. The accepting physician shall be of the appropriate specialty to manage the patient's injuries.
- H. Patients requiring additional acute care shall be transferred to a facility able to provide evaluation and care if there should be an unexpected change in their condition. These facilities shall substantially meet the requirements of comprehensive children's emergency receiving centers (OCEMS Policy 680.00), including appropriate physician consultants to include neurosurgery, urology, psychiatry, ophthalmology, and oral surgery if needed.
- I. All facilities subsequently receiving the designated trauma patient shall provide needed appropriate follow-up information including the information on an Orange County trauma registry form with a simple disability score. The facility shall agree to cooperate with any OCEMS inquiries regarding patient care.

### **X. DATA COLLECTION**

- A. Participation in the trauma system OCEMS data management system and performance evaluation.
  - B. Trauma data shall be made available to OCEMS for medical review (All patient information shall be confidential).
  - C. Trauma Registry
-



## PEDIATRIC TRAUMA CENTER (PedTC) CRITERIA

---

1. Trauma registry data must be collected (CD 15–1) and in compliance with the National Trauma Data Standard (NTDS) and submitted to the National Trauma Data Bank® (NTDB®) every year in a timely fashion so that they can be aggregated and analyzed at the national level.
  2. OCEMS trauma registry data elements shall be submitted to OC-MEDS trauma patient registry.
  3. Trauma registries should be concurrent. At a minimum, 80 percent of cases must be entered within 60 days of discharge.
  4. Trauma centers shall use a risk-adjusted benchmarking system to measure performance and outcomes.
  5. The trauma center shall develop and implement strategies for monitoring data validity.
  6. Data shall be analyzed by the trauma center and findings shall be used to identify injury prevention priorities that are appropriate for local implementation.
- D. Trauma Registrar
1. PedTC must have a dedicated pediatric trauma registrar.
  2. The trauma registrar shall attend or have previously attended two courses within 12 months of being hired: (1) the American Trauma Society's Trauma Registrar Course or equivalent provided by a state trauma program; and (2) the Association of the Advancement of Automotive Medicine's Injury Scaling Course.
  3. One full-time equivalent employee dedicated to the registry must be available to process the data capturing the NTDS data set for each 500–750 admitted patients annually.

### XI. QUALITY ASSURANCE/IMPROVEMENT:

- A. Integrated Pediatric Performance Improvement and Patient Safety (PIPS) program to ensure optimal care and continuous improvement in care for pediatric patients. PIP review should include but shall not be limited to:
1. Detailed audit of all trauma related death, major complications and transfers.
  2. Medical nursing audit, utilization review, tissue review.
  3. Rate of change in interpretation of radiologic studies.
  4. Review of all admissions to non-surgical services if trauma program admits more than 10% of trauma patients to non-surgical services.
  5. Review of anesthesia service availability, operating room availability, operating room and post anesthesia care unit response times, and response times for computed tomography technologist, magnetic resonance imaging technologist, and/or interventional radiology team when responding from outside of the trauma center.
- B. Multidisciplinary trauma peer review committee must meet at least monthly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as to propose improvements to the care of the injured and shall:
1. Include representation with at least 50 percent attendance of all trauma team members, including but not limited to representation from pediatric general surgery, and liaisons to the trauma program from emergency medicine, orthopaedics, and anesthesiology, pediatric critical care medicine, neurosurgery, and radiology.
  2. Provide for the implementation of the requirements by state law and OCEMS policies and procedures and provide for coordination with OCEMS.
  3. Include processes of event identification and levels of review that result in the development of corrective action plans, and methods of monitoring, reevaluation, and benchmarking must be present.
  4. Include problem resolution, outcome improvements, and assurance of safety ("loop closure") that are identifiable through methods of monitoring, reevaluation, benchmarking, and documentation.
- C. Annual performance evaluation based on criteria determined by the trauma operations committee.
- ~~1.—Measurement of patient outcomes versus triage criteria and injury severity.~~
  - ~~2.—Adequacy of prehospital care.~~
  - ~~3.—Rates of under triage and over triage monitored and reviewed quarterly.~~



EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.07  
Trauma System Design  
Final Version



## TRAUMA SYSTEM DESIGN

---

### I. AUTHORITY:

*Health and Safety Code 1798.165. Local emergency medical services (EMS) agencies may designate trauma facilities as part of their trauma care system pursuant to the regulations promulgated by the authority.*

*The health facility shall only be designated to provide the level of trauma care and service for which it is qualified and which is included within the system implemented by the agency.*

*Title 22 (T-22), 100254: The local EMS agency which has implemented a trauma care system shall:*

- *Establish policies and/or procedures to assure compliance of the trauma system with the provisions of the law, at a minimum; and*
- *Submit its trauma system plan to the EMS Authority for approval.*

The local EMS Agency may specify additional and/or more rigorous trauma system and/or trauma center requirements than those specified in the law exclusive of the definitions in the law.

*After approval of a trauma system plan, the local EMS agency shall submit to the EMS Authority for approval any significant changes to that trauma system plan prior to the implementation of the changes. In those instances where a delay in approval would adversely impact the current level of trauma care, the local EMS Agency may institute the changes and then submit the changes to the EMS Authority for approval within thirty (30) days of their implementation.*

### II. APPLICATION:

Title 22, 100253: (a) A local EMS agency which has implemented or plans to implement a trauma care system shall develop a written trauma care system plan that includes policies and/or procedures to assure compliance of the trauma system with the provisions of this Chapter.

- A local EMS agency may specify additional requirements in addition to those specified in this Chapter.
  - A local EMS agency that implements a trauma care system on or after the effective date of this Chapter shall submit its trauma system plan to the EMS Authority and have it approved prior to implementation.
- (d) A local EMS agency that has implemented a trauma system prior to the effective date of the revisions to this Chapter shall submit its updated trauma system plan to the EMS Authority within two (2) years of the effective date of the revisions to this Chapter which is August 12, 1999.
- (e) The EMS Authority shall notify the local EMS agency submitting its trauma care system plan within fifteen (15) days of receiving the plan that:
- its plan has been received, and
- (2) it contains or does not contain the information requested in Section 100255 of this Chapter.
- (f) The EMS Authority shall:
- notify the local EMS agency either of approval or disapproval of its trauma system plan within sixty (60) days of receipt of the plan; and
-



## TRAUMA SYSTEM DESIGN

- provide written notification of approval or the reasons for disapproval of a trauma system plan.
- (g) If the EMS Authority disapproves a trauma system plan, the local EMS agency shall have six (6) months from the date of notification of the disapproval to submit a revised trauma system plan which conforms to this Chapter or to appeal the decision to the Commission on Emergency Medical Services (EMS) which shall make a determination within four (4) months of receipt of the appeal. If a revised trauma system plan is approved by the EMS Authority the local EMS agency shall begin implementation of the plan within six (6) months of its approval.
- (h) If the EMS Authority determines that a local EMS agency has failed to implement the trauma system in accordance with the approved plan, the approval of the plan may be withdrawn. The local EMS agency may appeal the decision to the Commission on EMS, which shall make a determination within six (6) months of the appeal.
- After approval of a trauma system plan, the local EMS agency shall submit to the EMS Authority for approval any significant changes to that trauma system plan prior to the implementation of the changes. In those instances where a delay in approval would adversely impact the current level of trauma care, the local EMS agency may institute the changes and then submit the changes to the EMS Authority for approval within thirty (30) days of their implementation.
  - The local 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 trauma plan goals and objectives.
  - No health care facility shall advertise in any manner or otherwise hold themselves out to be a trauma center unless they have been so designated by the local EMS agency, in accordance with this Chapter.
  - No provider of prehospital care shall advertise in any manner or otherwise hold itself out to be affiliated with the trauma system or a trauma center unless they have been so designated by the local EMS agency, in accordance with this Chapter.

### III. CRITERIA:

*T-22, 100254: A local EMS agency that plans to implement or modify a trauma system shall include with the trauma plan, a description of the rationale used for trauma system design planning for number and location of trauma centers including:*

- *projected trauma patient volume and projected number and level of trauma centers necessary to provide access to trauma care;*
- (A) *No more than one (1) Level I or II trauma center shall be designated for each 350,000 population within the service area.*
- (B) *Where geography and population density preclude compliance with subsection (a)(1)(A), exemptions may be granted by the EMS Authority with the concurrence of the Commission on EMS on the basis of documented local needs.*
- (2) *resource availability to meet staffing requirements for trauma centers;*
- *transport times;*
  - *distinct service areas; and*
  - *coordination with neighboring trauma systems.*



## TRAUMA SYSTEM DESIGN

- *The local EMS agency may authorize the utilization of air transport within its jurisdiction to geographically expand the primary service area(s) provided that the expanded service area does not encroach upon another trauma system, or that of another trauma center, unless written agreements have been executed between the involved local EMS agencies and/or trauma centers.*
- *A local EMS agency may require trauma centers to have helicopter landing sites. If helicopter landing sites are required, then they shall be approved by the Division of Aeronautics, Department of Transportation pursuant to Division 2.5, Title 21 of the California Code of Regulations.*
- *All prehospital emergency medical care personnel rendering trauma patient care within an organized trauma system shall be trained in the local trauma triage and patient care methodology.*
- *All trauma patient transport vehicles shall be equipped with two-way telecommunications equipment capable of accessing hospitals, in accordance with local EMS agency policies regarding communication.*
- *All prehospital providers shall have a policy approved by the local EMS agency for the early notification of trauma centers of the impending arrival of a trauma patient.*

### IV. POLICY DEVELOPMENT:

CCR Title 22,(T-22) 100255: *A local EMS agency planning to implement a trauma system shall develop policies which provide a clear understanding of the structure of the trauma system and the manner in which it utilizes the resources available to it. The trauma system policies shall address at least the following:*

- *system organization and management;*
- *trauma care coordination within the trauma system;*
- *trauma care coordination with neighboring jurisdictions, including EMS agency/system agreements;*
- *data collection and management;*
- *fees, including those for application, designation and redesignation, monitoring and evaluation; establishment of service areas for trauma centers;*
- *trauma center designation/re-designation process to include a written agreement between the local EMS agency and the trauma center;*
- *coordination with all health care organizations within the trauma system to facilitate the transfer of an organization member in accordance with the criteria set forth in Article 5 of this Chapter;*
- *coordination of EMS and trauma system for transportation including intertrauma center transfer and transfers from a receiving hospital to a trauma center;*
- *the integration of pediatric hospitals, if applicable;*
- *trauma center equipment;*



## TRAUMA SYSTEM DESIGN

---

- *ensuring the availability of trauma team personnel;*
- *criteria for activation of trauma team;*
- *mechanism for prompt availability of specialists;*
- *quality improvement and system evaluation to include responsibilities of the multidisciplinary trauma peer review committee;*
- *criteria for pediatric and adult trauma triage, including destination;*
- *training of prehospital EMS personnel to include trauma triage;*
- *public information and education about the trauma system;*
- *marketing and advertising by trauma centers and prehospital providers as it relates to the trauma care system; and*
- *coordination with public and private agencies and trauma centers in injury prevention programs.*

### V. DATA COLLECTION:

T-22, 100257: (a) *The local EMS agency shall develop and implement a standardized data collection instrument and implement a data management system for trauma care.*

- (1) *The system shall include the collection of both prehospital and hospital patient care data, as determined by the local EMS agency;*
  - (2) *trauma data shall be integrated into the local EMS agency and State EMS Authority data management system; and*
  - (3) *all hospitals that receive trauma patients shall participate in the local EMS agency data collection effort in accordance with local EMS agencies policies and procedures.*
- (b) *The prehospital data shall include at least those data elements required on the EMT-II or EMT-P patient care record, as specified in Section 100129 of the EMT-II regulations and Section 100176 of the EMT-P regulations.*
- (c) *The hospital data shall include at least the following, when applicable:*
- (1) *Time of arrival and patient treatment in:*
    - (A) *Emergency department or trauma receiving area; and*
    - (B) *operating room.*
  - (2) *Dates for:*
    - (A) *Initial admission;*
    - (B) *Intensive care; and*
    - (C) *discharge.*
-



## TRAUMA SYSTEM DESIGN

---

(3) *Discharge data, including:*

(A) *Total hospital charges (aggregate dollars only);*

(B) *patient destination; and*

(C) *discharge diagnosis.*

(4) *The local EMS agency shall provide periodic reports to all hospitals participating in the trauma system.*

(d) Trauma registry criteria based on inclusion criteria determined by the trauma operations committee.

### Approved:

---

Sam Stratton, MD, MPH  
OCEMS Medical Director

---

Tammi McConnell, MSN, RN  
OCEMS Administrator

Original Date: 4/1986  
Reviewed Date(s): 9/1996; 8/6/2007; 4/1/2015; 6/26/2015  
Revised Date(s): 9/1996; 8/6/2007; 4/1/2015; 6/26/2015  
Effective Date: 7/1/2015

EMCC Meeting

October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.07

Trauma System Design

Redlined Version





**I. AUTHORITY:**

*Health and Safety Code 1798.165. Local emergency medical services (EMS) agencies may designate trauma facilities as part of their trauma care system pursuant to the regulations promulgated by the authority.*

*The health facility shall only be designated to provide the level of trauma care and service for which it is qualified and which is included within the system implemented by the agency.*

*Title 22 (T-22), 100254: The local EMS agency which has implemented a trauma care system shall:*

- *Establish policies and/or procedures to assure compliance of the trauma system with the provisions of the law, at a minimum; and*
- *Submit its trauma system plan to the EMS Authority for approval.*

The local EMS Agency may specify additional and/or more rigorous trauma system and/or trauma center requirements than those specified in the law exclusive of the definitions in the law.

*After approval of a trauma system plan, the local EMS agency shall submit to the EMS Authority for approval any significant changes to that trauma system plan prior to the implementation of the changes. In those instances where a delay in approval would adversely impact the current level of trauma care, the local EMS Agency may institute the changes and then submit the changes to the EMS Authority for approval within thirty (30) days of their implementation.*

**II. APPLICATION:**

Title 22, 100253: (a) A local EMS agency which has implemented or plans to implement a trauma care system shall develop a written trauma care system plan that includes policies and/or procedures to assure compliance of the trauma system with the provisions of this Chapter.

- A local EMS agency may specify additional requirements in addition to those specified in this Chapter.
- A local EMS agency that implements a trauma care system on or after the effective date of this Chapter shall submit its trauma system plan to the EMS Authority and have it approved prior to implementation.

(d) A local EMS agency that has implemented a trauma system prior to the effective date of the revisions to this Chapter shall submit its updated trauma system plan to the EMS Authority within two (2) years of the effective date of the revisions to this Chapter which is August 12, 1999.

(e) The EMS Authority shall notify the local EMS agency submitting its trauma care system plan within fifteen (15) days of receiving the plan that:

- its plan has been received, and
- (2) it contains or does not contain the information requested in Section 100255 of this Chapter.

~~ITACICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE OCEMS~~

Approved:

  


P/P: 620.07  
Implementation Date: September, 1996  
Reformatted: August 2007



(f) The EMS Authority shall:

- notify the local EMS agency either of approval or disapproval of its trauma system plan within sixty (60) days of receipt of the plan; and
- provide written notification of approval or the reasons for disapproval of a trauma system plan.

(g) If the EMS Authority disapproves a trauma system plan, the local EMS agency shall have six (6) months from the date of notification of the disapproval to submit a revised trauma system plan which conforms to this Chapter or to appeal the decision to the Commission on Emergency Medical Services (EMS) which shall make a determination within four (4) months of receipt of the appeal. If a revised trauma system plan is approved by the EMS Authority the local EMS agency shall begin implementation of the plan within six (6) months of its approval.

(h) If the EMS Authority determines that a local EMS agency has failed to implement the trauma system in accordance with the approved plan, the approval of the plan may be withdrawn. The local EMS agency may appeal the decision to the Commission on EMS, which shall make a determination within six (6) months of the appeal.

- After approval of a trauma system plan, the local EMS agency shall submit to the EMS Authority for approval any significant changes to that trauma system plan prior to the implementation of the changes. In those instances where a delay in approval would adversely impact the current level of trauma care, the local EMS agency may institute the changes and then submit the changes to the EMS Authority for approval within thirty (30) days of their implementation.
- The local 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 trauma plan goals and objectives.
- No health care facility shall advertise in any manner or otherwise hold themselves out to be a trauma center unless they have been so designated by the local EMS agency, in accordance with this Chapter.
- No provider of prehospital care shall advertise in any manner or otherwise hold itself out to be affiliated with the trauma system or a trauma center unless they have been so designated by the local EMS agency, in accordance with this Chapter.

### III. CRITERIA:

*T-22, 100254: A local EMS agency that plans to implement or modify a trauma system shall include with the trauma plan, a description of the rationale used for trauma system design planning for number and location of trauma centers including:*

- *projected trauma patient volume and projected number and level of trauma centers necessary to provide access to trauma care;*

*(A) No more than one (1) Level I or II trauma center shall be designated for each 350,000 population within the service area.*

*ITALICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE OCEMS*

Approved:

  


P/P: 620.07  
Implementation Date: September, 1996  
Reformatted: August 2007



*(B) Where geography and population density preclude compliance with subsection (a)(1)(A), exemptions may be granted by the EMS Authority with the concurrence of the Commission on EMS on the basis of documented local needs.*

*(2) resource availability to meet staffing requirements for trauma centers;*

- transport times;*
- distinct service areas; and*
- coordination with neighboring trauma systems.*
- The local EMS agency may authorize the utilization of air transport within its jurisdiction to geographically expand the primary service area(s) provided that the expanded service area does not encroach upon another trauma system, or that of another trauma center, unless written agreements have been executed between the involved local EMS agencies and/or trauma centers.*
- A local EMS agency may require trauma centers to have helicopter landing sites. If helicopter landing sites are required, then they shall be approved by the Division of Aeronautics, Department of Transportation pursuant to Division 2.5, Title 21 of the California Code of Regulations.*
- All prehospital emergency medical care personnel rendering trauma patient care within an organized trauma system shall be trained in the local trauma triage and patient care methodology.*
- All trauma patient transport vehicles shall be equipped with two-way telecommunications equipment capable of accessing hospitals, in accordance with local EMS agency policies regarding communication.*
- All prehospital providers shall have a policy approved by the local EMS agency for the early notification of trauma centers of the impending arrival of a trauma patient.*

#### **IV. POLICY DEVELOPMENT:**

*Title 22, (T-22) 100255: A local EMS agency planning to implement a trauma system shall develop policies which provide a clear understanding of the structure of the trauma system and the manner in which it utilizes the resources available to it. The trauma system policies shall address at least the following:*

- system organization and management;*
- trauma care coordination within the trauma system;*
- trauma care coordination with neighboring jurisdictions, including EMS agency/system agreements;*
- data collection and management;*
- fees, including those for application, designation and redesignation, monitoring and evaluation;*

*establishment of service areas for trauma centers;*

*~~ITAIICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE OCEMS~~*

Approved:

*Samuel H. Hahn*  
*Greg L. Hall*

P/P: 620.07  
Implementation Date: September, 1996  
Reformatted: August 2007



- *trauma center designation/redesignation process to include a written agreement between the local EMS agency and the trauma center;*
- *coordination with all health care organizations within the trauma system to facilitate the transfer of an organization member in accordance with the criteria set forth in Article 5 of this Chapter;*
- *coordination of EMS and trauma system for transportation including intertrauma center transfer and transfers from a receiving hospital to a trauma center;*
- *the integration of pediatric hospitals, if applicable;*
- *trauma center equipment;*
- *ensuring the availability of trauma team personnel;*
- *criteria for activation of trauma team;*
- *mechanism for prompt availability of specialists;*
- *quality improvement and system evaluation to include responsibilities of the multidisciplinary trauma peer review committee;*
- *criteria for pediatric and adult trauma triage, including destination;*
- *training of prehospital EMS personnel to include trauma triage;*
- *public information and education about the trauma system;*
- *marketing and advertising by trauma centers and prehospital providers as it relates to the trauma care system; and*
- *coordination with public and private agencies and trauma centers in injury prevention programs.*

**V. DATA COLLECTION:**

**T-22, 100257:** *(a) The local EMS agency shall develop and implement a standardized data collection instrument and implement a data management system for trauma care.*

*(1) The system shall include the collection of both prehospital and hospital patient care data, as determined by the local EMS agency;*

*(2) trauma data shall be integrated into the local EMS agency and State EMS Authority data management system; and*

*(3) all hospitals that receive trauma patients shall participate in the local EMS agency data collection effort in accordance with local EMS agencies policies and procedures.*

*ITALICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE OCEMS*

Approved:

  


P/P: 620.07  
Implementation Date: September, 1996  
Reformatted: August 2007



**TRAUMA SYSTEM DESIGN**



*(b) The prehospital data shall include at least those data elements required on the EMT-II or EMT-P patient care record, as specified in Section 100129 of the EMT-II regulations and Section 100176 of the EMT-P regulations.*

*(c) The hospital data shall include at least the following, when applicable:*

*(1) Time of arrival and patient treatment in:*

*(A) Emergency department or trauma receiving area; and*

*(B) operating room.*

*(2) Dates for:*

*(A) Initial admission;*

*(B) intensive care; and*

*(C) discharge.*

*(3) Discharge data, including:*

*(A) Total hospital charges (aggregate dollars only);*

*(B) patient destination; and*

*(C) discharge diagnosis.*

*(4) The local EMS agency shall provide periodic reports to all hospitals participating in the trauma system.*

*(d) Trauma registry criteria based on inclusion criteria determined by the trauma operations committee.*

*ITALICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE OCEMS*

Approved:

*Samuel Hahn*  
*Guy L. Bell*

P/P: 620.07  
Implementation Date: September, 1996  
Reformatted: August 2007

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.11  
Trauma System Marketing  
Final Version



## TRAUMA SYSTEM MARKETING AND ADVERTISING BY TRAUMA CENTERS AND PREHOSPITAL CARE PROVIDERS

---

### I. AUTHORITY:

*Health and Safety Code 1798.165. No health care provider shall use the terms trauma facility, trauma hospital, trauma center, trauma care provider, trauma vehicle, or similar terminology in its advertisements, or in printed materials and information it furnishes to the general public, unless the use is authorized by the local EMS agency.*

*Title 22, Section 100256. A local EMS agency planning to implement a trauma system shall develop policies and procedures which address the marketing and advertising by trauma centers and prehospital care providers as it related to the trauma system.*

### II. APPLICATION:

This policy establishes the direction for assuring all trauma centers and prehospital care providers abide by marketing and advertising restrictions for trauma services specified by State Law and Regulations.

### III. DEFINITIONS:

*T-100249: "Trauma care system" or "trauma system" or "regional trauma care system" means a formally organized arrangement of health care resources, that has been described in writing by a local EMS agency, by which major trauma patients are triaged, transported to, and treated at designated trauma care hospitals.*

*T-100250: "Trauma center" or "designated trauma center" means licensed acute care hospital which has been designated as a Level I, II, or III trauma center by the local EMS agency ....*

**"Prehospital care provider"** means any public or private agency or business and its employees, paid or volunteer, engaged in providing life protection and/or support services in the prehospital care setting.

### IV. AUTHORIZED ADVERTIZING:

*Only OCEMS designated trauma centers may advertise as being a "trauma center," "trauma care provider," or use similar terminology in their signs and printed materials and information furnished to the public.*

*The trauma center designation level of the facility shall be included in all printed materials or signs furnished to the public where "trauma center," "trauma facility," "trauma hospital," "trauma care provider," or similar terminology is used.*

### V. MONITORING:

*The OCEMS shall monitor health care provider compliance with trauma system related marketing and advertising restrictions through, at a minimum, the following means:*

- A. During the designation/re-designation surveys of the different facilities, the EMS Agency shall review all trauma system related printed materials, signs, and information furnished to the public.*
- B. OCEMS shall review complaints against providers which pertain to trauma care.*
- C. OCEMS shall conduct spot inspections of provider marketing, advertising, and public information and education printed materials.*





**TRAUMA SYSTEM MARKETING AND ADVERTISING BY  
TRAUMA CENTERS AND PREHOSPITAL CARE PROVIDERS**

---

**Approved:**

---

Sam Stratton, MD, MPH  
OCEMS Medical Director

---

Tammi McConnell, MSN, RN  
OCEMS Administrator

Original Date: 7/28/1983  
Reviewed Date(s): 2/2004; 4/1/2015  
Revised Date(s): 5/11/1988; 2/2004; 6/26/2015  
Effective Date: 7/1/2015

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.11  
Trauma System Marketing  
Redline Version



**TRAUMA SYSTEM MARKETING AND ADVERTISING BY  
TRAUMA CENTERS AND PREHOSPITAL CARE PROVIDERS**



I. AUTHORITY:

*Health and Safety Code 1798.165. No health care provider shall use the terms trauma facility, trauma hospital, trauma center, trauma care provider, trauma vehicle, or similar terminology in its advertisements, or in printed materials and information it furnishes to the general public, unless the use is authorized by the local EMS agency.*

*Title 22, Section 100256. A local EMS agency planning to implement a trauma system shall develop policies and procedures which address the marketing and advertising by trauma centers and prehospital care providers as it related to the trauma system.*

II. APPLICATION:

This policy establishes the direction for assuring all trauma centers and prehospital care providers abide by marketing and advertising restrictions for trauma services specified by State Law and Regulations.

III. DEFINITIONS:

*T-100249: "Trauma care system" or "trauma system" or "regional trauma care system" means a formally organized arrangement of health care resources, that has been described in writing by a local EMS agency, by which major trauma patients are triaged, transported to, and treated at designated trauma care hospitals.*

*T-100250: "Trauma center" or "designated trauma center" means licensed acute care hospital which has been designated as a Level I, II, or III trauma center by the local EMS agency ....*

**"Prehospital care provider"** means any public or private agency or business and its employees, paid or volunteer, engaged in providing life protection and/or support services in the prehospital care setting.

IV. AUTHORIZED ADVERTIZING:

Only OCEMS ~~Agency~~ designated trauma centers may advertise as being a "trauma center," "trauma care provider," or use similar terminology in their signs and printed materials and information furnished to the public.

*The trauma center designation level of the facility shall be included in all printed materials or signs furnished to the public where "trauma center," "trauma facility," "trauma hospital," "trauma care provider," or similar terminology is used.*

V. MONITORING:

The OCEMS ~~Agency~~ shall monitor health care provider compliance with trauma system related marketing and advertising restrictions through, at a minimum, the following means:

A. During the designation/redesignation surveys of the different facilities, the EMS Agency shall review all trauma system related printed materials, signs, and information furnished to the public.

*ITALICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE THE OCEMS AGENCY.*

Approved:

P/P: 620.11

Reformatted Date: February, 2004



**TRAUMA SYSTEM MARKETING AND ADVERTISING BY  
TRAUMA CENTERS AND PREHOSPITAL CARE PROVIDERS**



- | B. ~~The~~ OCEMS ~~Agency~~ shall review complaints against providers which pertain to trauma care.
- | C. ~~The~~ OCEMS ~~Agency~~ shall conduct spot inspections of provider marketing, advertising, and public information and education printed materials.

Approved:

*Ben Hymowitz*

*Dolene Ivese*

P/P: 620.11

Reformatted Date: February, 2004

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.13

Trauma System Public Information/Education  
Final Version



## TRAUMA SYSTEM PUBLIC INFORMATION AND EDUCATION

---

### I. AUTHORITY:

*Title 11, 100257. The EMS agency planning to implement a trauma system shall develop policies which address at least the following: Public information and education about the trauma system.*

### II. APPLICATION:

This policy establishes the criteria for trauma center public information and education relating to the Orange County Trauma System.

### III. DEFINITION:

**Public Information and Education** means the mechanism by which greater awareness of the Orange County Trauma System and its components is achieved and maintained.

### IV. CRITERIA:

A. *Each trauma center shall provide the following Trauma System related information to the citizens and service providers within its service area:*

1. *EMS agency designation level (e.g., Level I, II or III)*
2. *The purpose of the trauma center*
3. *The services the trauma center provides*
4. *Methods of accessing the center for use of its services.*

B. *Trauma Centers should developed an organized approach to prioritize injury prevention efforts based on the American College of Surgeons guidelines, community needs, local trauma registry and epidemiologic data.*

C. *Restrictions -- Health and Safety Code 1798.165:*

*No health care provider shall use the terms trauma facility, trauma hospital, trauma center, trauma care provider, trauma vehicle, or similar terminology in its signs or advertisements, or in printed materials and information its furnishes to the general public, unless the use is authorized by the local EMS Agency.*

### Approved:

---

Sam Stratton, MD, MPH  
OCEMS Medical Director

---

Tammi McConnell, MSN, RN  
OCEMS Administrator

Original Date: 5/1988  
Reviewed Date(s): 5/11/1988; 4/1/2015  
Revised Date(s): 5/11/1988; 2/2004; 4/1/2015; 6/26/2015  
Effective Date: 7/1/2015

---

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.13

Trauma System Public Information/Education  
Redline Version





**TRAUMA SYSTEM PUBLIC INFORMATION AND EDUCATION**



I. AUTHORITY:

*Title 11, 100257. The EMS agency planning to implement a trauma system shall develop policies which address at least the following: Public information and education about the trauma system.*

II. APPLICATION:

This policy establishes the criteria for trauma center public information and education relating to the Orange County Trauma System.

III. DEFINITION:

**Public Information and Education** means the mechanism by which greater awareness of the Orange County Trauma System and its components is achieved and maintained.

IV. CRITERIA:

A. Each trauma center shall provide the following Trauma System related information to the citizens and service providers within its service area:

1. EMS agency designation level (e.g., Level I, II or III)
2. The purpose of the trauma center
3. The services the trauma center provides
4. Methods of accessing the center for use of its services.

~~B. Each trauma center shall provide for the following public education to the citizens and service providers within its service area:~~

- ~~1. Injury prevention in the home and industry, and on the highways and athletic fields~~
- ~~2. Standard first aid~~
- ~~3. Problems confronting the public, the medical profession, and hospitals regarding optimal care of the injured~~

**Trauma centers should develop an organized approach to prioritize injury prevention efforts based on ACS guidelines, community needs local trauma registry and epidemiologic data.**

C. Restrictions -- Health and Safety Code 1798.165:

No health care provider shall use the terms trauma facility, trauma hospital, trauma center, trauma care provider, trauma vehicle, or similar terminology in its signs or advertisements, or in printed materials and information its furnishes to the general public, unless the use is authorized by the local EMS Agency.

*ITALICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE THE OCEMS AGENCY*

Approved:

P/P: 620.13  
Reformatted: February, 2004

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.14

Integration of Pediatric Care in the Trauma  
System

Final Version



## INTEGRATION OF PEDIATRIC CARE IN THE TRAUMA SYSTEM

---

### I. AUTHORITY:

*Title 22, 100256. A local emergency medical agency planning to implement a trauma system shall develop policies which address at least the following: The integration of pediatric hospitals, when applicable, into the overall trauma care system.*

### II. APPLICATION:

This policy establishes the criteria for the integration of pediatric trauma care within the Orange County Trauma System.

### III. DEFINITION:

**"Integration"** means to join, unite, to make parts into a whole by bringing those parts together.

**"Pediatric Trauma"** means the trauma care provided persons younger than 15 years old.

### IV. CRITERIA:

- A. Pediatric patients shall be provided the level of care within the trauma system appropriate to the level of trauma and their age.
- B. *Trauma centers shall not deny emergency medical care to trauma patients because of age (SB 12, 1317).*
- C. All transfers shall comply with law and standards in the community.

### V. MONITORING:

- A. Orange County Emergency Medical Services (OCEMS) shall monitor compliance to this policy at the time of the biennial trauma center site survey and at any time otherwise deemed necessary by the OCEMS.
- B. Infractions will be investigated and disciplinary action may be implemented up to and including cancellation of designation.

**Approved:**



## INTEGRATION OF PEDIATRIC CARE IN THE TRAUMA SYSTEM

---

\_\_\_\_\_  
Sam Stratton, MD, MPH  
OCEMS Medical Director

\_\_\_\_\_  
Tammi McConnell, MSN, RN  
OCEMS Administrator

Original Date: 5/1988  
Reviewed Date(s): 5/11/1988  
Revised Date(s): 5/11/1988; 2/2004; 4/1/2015; 6/26/2015  
Effective Date: 7/1/2015

EMCC Meeting  
October 2, 2015

ATTACHMENT # 8

OCEMS Policy 620.14

Integration of Pediatric Care in the Trauma  
System

Redline Version



## INTEGRATION OF PEDIATRIC CARE IN THE TRAUMA SYSTEM



### I. AUTHORITY:

*Title 22, 100256. A local emergency medical agency planning to implement a trauma system shall develop policies which address at least the following: The integration of pediatric hospitals, when applicable, into the overall trauma care system.*

### II. APPLICATION:

This policy establishes the criteria for the integration of pediatric trauma care within the Orange County Trauma System.

### III. DEFINITION:

"**Integration**" means to join, unite, to make parts into a whole by bringing those parts together.

"**Pediatric Trauma**" means the trauma care provided persons younger than 15 years old ~~fourteen (14) years of age or less.~~

### IV. CRITERIA:

A. Pediatric patients shall be provided the level of care within the trauma system appropriate to the level of trauma and their age.

B. *Trauma centers shall not deny emergency medical care to trauma patients because of age (SB 12, 1317).*

~~C. Trauma centers shall have pediatric intensive care units approved by California Children's Services (CCS) or shall have transfer agreements with a pediatric hospital(s) or hospitals which have CCS approved pediatric intensive care units.~~

D. All transfers shall comply with law and standards in the community.

### V. MONITORING:

A. ~~The~~ Orange County Emergency Medical Services (OCEMS) shall monitor compliance to this policy at the time of the biennial trauma center site survey and at any time otherwise deemed necessary by the OCEMS.

B. Infractions will be investigated and disciplinary action may be implemented up to and including cancellation of designation.

*ITALICIZED TEXT IDENTIFIES QUOTATIONS FROM AN AUTHORITY OUTSIDE THE OCEMS.*

Approved:

P/P: 620.14  
Reformatted: February, 2004