

**STATE OF CALIFORNIA**  
**COMMISSION ON EMERGENCY MEDICAL SERVICES**  
December 14, 2016  
09:00 A.M. – 11:30 A.M.  
(Meeting may end early at the completion of all agenda items)  
**Marines' Memorial Club and Hotel**  
**609 Sutter Street**  
**San Francisco, CA 94102**  
**(415) 673-6672**

**AMENDED (11/22/16)**

1. **Call to Order and Pledge of Allegiance**
2. **Review and Approval of September 21, 2016 Minutes**
3. **Director's Report**
  - A. EMSA Program Updates
4. **Consent Calendar**
  - A. Legislative Report
  - B. Administrative and Personnel Report
  - C. Enforcement Report
  - D. Trauma System Update
  - E. Preventive Health Training Program Update
  - F. EMS Plan Review Process
  - G. EMS Systems Regulations Workgroup Update
  - H. Office of Administrative Law Rulemaking Calendar

**Regular Calendar**

5. **EMS Personnel**
  - A. Physician Order for Life Sustaining Treatment (POLST) Registry Guidelines
  - B. Trial Study Reports:
    - a) Ventura County EMS Agency Air-Q Trial Study Report
    - b) Riverside County and Inland Counties EMS Agencies Tranexamic Acid Trial Study Report
  - C. Community Paramedicine Pilot Project
  - D. EMT Regulation Revisions
6. **EMS Systems**
  - A. EMS Plan Appeal Update
  - B. Ambulance Patient Offload Time (APOT)
  - C. Local Governmental Quality Assurance Committees
  - D. State Support of EMS Systems for Data
  - E. Wireless 9-1-1 Call Routing

- 7. Disaster Medical Services Division**
  - A. Mobile Medical Shelter Regional Modules
  - B. Hospital Incident Command System (HICS)
- 8. Nomination of Officers for March 2017 – March 2018**
- 9. Approval of 2018 Meeting Dates**
- 10. Items for Next Agenda**
- 11. Public Comment**
- 12. Adjournment**

**A full agenda packet will not be provided at the meeting; however, you can print a full packet, including the agenda from the Department's website at [www.emsa.ca.gov](http://www.emsa.ca.gov).** This event will be held in an accessible facility. Individuals with disabilities requiring auxiliary aids or services to ensure accessibility such as language interpreting, assisted listening device, materials in alternate formats or other accommodation, should contact Sandi Baker at (916) 431-3701, no less than 7 days prior to the meeting.

**STATE OF CALIFORNIA  
COMMISSION ON EMS  
WEDNESDAY, SEPTEMBER 21, 2016  
HOLIDAY INN BAYSIDE SAN DIEGO  
4875 NORTH HARBOR DRIVE  
SAN DIEGO, CA 92106  
800-662-8899 OR 619-224-3621 – Reservation line**

**MINUTES**

**COMMISSIONERS PRESENT:**

Steve Barrow, Dan Burch, Jaison Chand, Steve Drowniany, James Dunford, MD, Mark Hartwig, James Hinsdale, MD, Richard O. Johnson, MD, David Rose, Eric Rudnick, MD, Carole Snyder, RN, Dave Teter, Atilla Uner, and Susan Webb

**COMMISSIONERS ABSENT:**

Aaron Hamilton, Daniel Margulies, MD, Jane Smith, and Lewis Stone

**EMS AUTHORITY STAFF PRESENT:**

Howard Backer, MD, Daniel R. Smiley, Craig Johnson, Lou Meyer, Priscilla Rivera, and Sean Trask

**AUDIENCE PRESENT:**

Larmon Baxter, MD, Geffen School of Medicine  
Mike DuRee, President-Elect, California Fire Chiefs Association  
Justin Hager  
Ed Hill, Local EMS Agency Administrator, Kern County EMS Agency  
Ray Ramirez, California Fire Chiefs Association  
Severo Rodriguez, National Registry

**1. CALL TO ORDER AND PLEDGE OF ALLEGIANCE**

Chairman Dan Burch called the meeting to order at 10:02 a.m. Fourteen Commissioners were present. He asked Commissioner Rose to lead the Pledge of Allegiance and it was recited.

Chairman Burch moved Item 6E to the Consent Calendar as Item I to be accepted as a written report only, and moved the oral report by Dr. Salvucci to the December meeting.

**2. REVIEW AND APPROVAL OF JUNE 15, 2016, MINUTES**

Commissioner Johnson stated he was not in attendance at the June meeting.

**Action: Commissioner Rudnick moved approval of the June 15, 2016, Commission on Emergency Medical Services Meeting Minutes as amended. Commissioner Hinsdale seconded. Motion carried unanimously.**

### **3. DIRECTOR'S REPORT**

Howard Backer, M.D., the EMSA Medical Director, introduced new Commissioner Atilla Uner and welcomed him to EMSA. He also introduced Craig Johnson, the new Chief of Disaster Medical Services.

Dr. Backer presented his report:

#### **A. EMSA Budget Status**

There were no reductions in this year's budget. There are two proposals to increase spending related to the Personnel Division. The EMSA budget is favorable due to several grants and no reductions in state-level funding. Federal support for the data transition that will go out as local assistance will be discussed in the EMS System Report.

#### **B. EMSA Program Updates [DMS][Personnel][Systems]**

##### Legislation

The Legislative Report is on the Consent Calendar. Unlike previous years, EMSA was given no new large tasks or programs through legislation, although the epinephrine certification and reporting program will be expanded to include businesses and other entities under the new bill's broader definition of authorized users.

##### Ambulance Patient Offload Time

Staff made minor clarifying modifications to the specifications approved at the last Commission meeting and drafted a new guidance document for local EMS agencies (LEMSAs) to implement for ambulance patient offload time (APOT) measurement. EMS administrators and medical directors met yesterday to provide input on issues such as defining a nonstandard transfer time and the event that represents when the transfer of care has occurred. The guidance document will be presented to the Commission for approval in the December meeting.

##### NEMSIS 3.4 Transition

The National Association of State EMS Officials (NASEMSO) and the National Highway Traffic Safety Administration (NHTSA), which funds the National EMS Information System (NEMSIS), is maintaining the transition date of January 1, 2017, for NEMSIS 3.4. EMSA plans to transition by the end of the year. More information on this topic will be discussed in the EMS System Division Report.

##### Training Discussion Meetings

Two training discussion meetings are scheduled next week.

##### EMS Memorial Bike Ride

EMSA will host the EMS Memorial Bike Ride, memorializing California EMS providers. Participants will ride through Sacramento on their six-day ride from Lake Tahoe to San Francisco. Bruce Barton, his spouse, and Dave Magneno will participate in

segments of this ride. Dave Magneno, along with Michael Frenn, will help host events for the riders.

### Protection of Quality Improvement Activities

Evidence Code Section 1157 provides that neither the proceedings nor the records of organized committees or peer review bodies that have the responsibility of evaluation and improvement of quality of care shall be subject to discovery. The EMS is not specifically mentioned in the list of various medical providers, but it is the opinion of legal counsel that the clear legislative intent to protect quality improvement entities from discovery would include entities such as EMS.

### 911 Emergency Communications

Bill Anderson, of the Governor's Office of Emergency Services (Cal OES), was unable to produce the delay time data between answering and rerouting a call, as requested after his presentation at the last Commission meeting. He did provide staff with general wireless 911 information, as follows:

- 70 percent of all calls go directly to a public safety answering point. 30 percent go to the California Highway Patrol.
- Based on the analysis of 2014 data, there were 3.2 million transfers out of 21.2 million wireless calls, for a 15 percent transfer rate, of which 9 percent was primary-to-primary and 6 percent was primary-to-secondary.
- The Cal OES 2015 Wireless Routing Project reviewed 300,000 sectors to determine if the call was being sent to the correct answering point the first time. After that review, they submitted a request to the cell carriers to reroute 4,348 cell sectors. They expect a similar number of reroute requests to reroute this year.
- AB 1564 mandates Cal OES to do an annual review of cell sectors to minimize the number of sectors with incorrect first-call answering points.

### Questions and Discussion

Commissioner Barrow requested a written report from legal counsel on the topic of protection of quality improvement activities.

Commissioner Barrow asked if routing issues primarily occur in rural or urban areas and if that data is tracked. Dr. Backer stated he will ask Mr. Anderson those questions.

## **4. CONSENT CALENDAR**

### **A. Legislative Report**

### **B. Administrative and Personnel Report**

### **C. Legal Report**

### **D. Enforcement Report**

### **E. EMT Regulation Revision Report**

### **F. Paramedic Regulation Revision Report**

**G. EMS Plan Status Update**  
**H. EMS Plan Appeals Update**

**Action: Vice Chairman Drewniany moved approval of the consent calendar. Commissioner Rudnick seconded. Motion carried unanimously. The item was noted and filed.**

**REGULAR CALENDAR**

**5. COMMISSION ON EMS BYLAWS COMMENTS**

Sean Trask, the Chief of the EMS Personnel Division, stated staff has responded to the public comments from the June meeting in an issue memo included in the meeting packet.

**6. EMS PERSONNEL**

**A. Tactical Casualty Care Guidelines Update**

Mr. Trask stated draft tactical guidelines were presented to the Commission for approval at the June meeting. Concerns were raised from stakeholders, specifically members of the California Tactical EMS Committee (C-TEMS) and their subcommittee, who provided input on the course content items contained in Chapters 3 and 4 of the draft guidelines. Staff brought the draft guidelines back to C-TEMS in August for further input. The revised Chapter 3 draft is included in the meeting packet. Chapter 4 is a work in progress.

Questions and Discussion

Commissioner Webb asked if the committee includes qualified educators. Mr. Trask stated the subcommittee is made up of individuals who are certified to teach various POLST courses to their different agencies.

Commissioner Webb suggested that the objectives lead with action statements. She offered to provide suggestions. Mr. Trask stated the idea was that the instructor be allowed greater input on evaluating the level of EMS experience of the students so they are not required to teach every topic.

**B. Community Paramedicine Pilot Project Status Update**

Lou Meyer, the EMS Project Manager, stated the Community Paramedicine Symposium will take place tomorrow with an expected 186 attendees. Progress continues in the overall Community Paramedic Pilot Projects. The early data shows that most of these projects have improved patient care and reduced hospital readmission rates. Challenges include low numbers of enrollees within the alternate destination urgent care centers and the November expiration of the authorization to continue the pilot projects. A request for continuance through November of 2017 has been filed with the Office of Statewide Health Planning and Development (OSHDP).

Dr. Backer stated OSHPD approved the inclusion of the San Francisco Sobering Center Program. It will be considered along with the current pilot projects in the request for extension.

#### Questions and Discussion

Commissioner Barrow asked about the number of alternative destinations centers. Mr. Meyer stated it is less than 100. A greater number of enrollees are expected next year.

Commissioner Barrow asked about sustainability. Mr. Meyer stated sustainability will be discussed at tomorrow's symposium. He suggested that Commissioners view the video recording of the symposium if they will not be in attendance to listen to guest speakers and view their PowerPoint presentations.

#### **C. Preventive Health Training Standards for Child Care Providers Update**

Priscilla Rivera, the Manager of the EMSA Personnel Standards Unit, stated EMSA is required by statute to approve and review programs that provide training to child care providers in first aid, CPR, and preventive health. The American Red Cross will be closing their preventive health program at the end of this year. It is the largest provider for the preventive health program and will leave a large gap in training for licensing available to the child care providers, which could lead to an inability of child care licensing to license child care providers in the future. EMSA is taking steps with the California Department of Education (CDE) and the community care licensing departments to try to close this gap.

#### Questions and Discussion

Commissioner Barrow stated there is a funding source dedicated through legislation done in 1992 to help support and certify training for licensed child care providers. The funding streams need to be readjusted to enhance preventive care and safety training for child care providers.

Mr. Trask stated one of the problems with the legislation is that this is a one-time-only course, which is one reason the American Red Cross is pulling out of California. A refresher requirement would make training programs more feasible.

#### **D. Physician Orders for Life Sustaining Treatment (POLST) Registry Update**

Mr. Meyer stated the governor signed into the law last year a bill to support a pilot project to move to an e-registry database to allow POLST forms to be electronically accessible. Mr. Meyer, as the coordinator for this pilot project, is the primary point of contact with key partners and contractors and convenes statutory interest groups to develop operation guidelines, which will be presented to the Commission for review and approval in December. Since part of the legislation states that no state funds can be used for this project, Mr. Meyer also collaborates with the main funding sponsors, the California Coalition of Compassionate Care and the California Health Care Foundation.

Two pilot sites have been selected: one in San Diego, led by San Diego Health Connect, and another in Contra Costa County, led by the Contra Costa County Medical Association. The guidelines task force will have its first conference call next week.

Mr. Meyer has spoken with Vinka, the software vendor, and some of the major providers within the sites regarding combining software.

### Questions and Discussion

Vice Chairman Drewniany asked about adding end-of-life act data to the POLST form. Dr. Backer stated there will be no overt connections because there are no regulations involved in this act. However, many medical directors will incorporate reference to the end-of-life act into medical protocols for end of life. For EMS responders, they may look for the attestation form or prescription pill bottle.

Commissioner Barrow asked if LEMSAs can incorporate that into their local EMS plans. Dr. Backer stated medical directors write the EMS protocols for the providers within their jurisdiction.

Commissioner Dunford stated it is important on a national level to set aside competition and share data for a health information exchange. It is exciting to see medical records personnel working to make records available to meet the needs of individuals in the field.

### **E. Ventura County EMS Agency's Air-Q Trail Study 18 Month Report**

Chairman Burch moved this item to the Consent Calendar as Item I to be accepted as a written report only. An oral report is scheduled for the December meeting.

## **7. EMS SYSTEMS**

Dan Smiley, the EMSA Chief Deputy Director, filled in for Tom McGinnis, who was attending the National Association of State EMS Officials meeting. Mr. Smiley introduced new Assistant Division Chief for the EMS Systems Division, Angela Wise. Mr. Smiley presented his report:

### **A. Trauma Plan Status and ACS Site Visit Review**

Staff is going through the administrative process of review for the EMS Plan and the American College of Surgeons site visit. A full understanding of possible ramifications is critical as the trauma plan moves through approval processes. Staff expects to brief the Department of Finance and the governor's office on this issue. Currently, there is no estimate on when the trauma plan will be released.

### **B. Core Measures Reports for 2015**

The 2015 data core measures have been released, are posted on the website, and were included as part of the Commission agenda.

There has been a continual improvement in reporting by the LEMSAs. Over 75 percent are reporting 15 out of 17 core measures; 29 LEMSAs out of 33 reported at least one measure this year.

Not only has the quality of the data improved, but there are certain trends that validate some of the data elements. Many lessons learned can be transferred to the EMS

Compass Project at the national level. Some of the data dictionary references will need to be redone for the move to NEMSIS 3.4, but currently the data is overall successful.

Dr. Backer stated he attended one of the last meetings of the EMS Compass Project, where they approved about ten measures that will be rolled out as the first set of national performance measures for EMS. These measures have been evaluated from an evidence-based standpoint and were designed for NEMSIS 3.4. He recommended replacing or updating the core measures with the national measures. He summarized several overlapping or similar measures and pointed out measures that may be of interest.

#### Questions and Discussion

Chairman Burch asked Dr. Backer to provide Commissioners with a copy of the national core measure standards for review. Dr. Backer stated they will be released soon. He will forward them to Commissioners when he receives them.

Commissioner Rudnick thanked the Authority for taking the lead in this and embracing the future. Dr. Backer stated it will be easier once everyone migrates to NEMSIS 3.4 compliant software and data systems.

Commissioner Barrow asked what will be done to help challenge the LEMSAs. Mr. Smiley stated this question will be answered in the next agenda item.

#### **C. CEMSIS Update: NEMSIS 3 Transition**

The movement to NEMSIS 3.4 is on track to a cutover on January 1, 2017. Most agencies are ready to meet this date. To assist LEMSAs and providers, EMSA is holding trainings and webinars with the collaboration of the Executive Data Advisory Group. Also, since AB 1129 specifically required that EMS providers who submit data to LEMSAs utilize an electronic health record, EMSA has collaborated with the Office of Traffic Safety to receive a grant of about \$1.2 million to be able to provide mobile devices to EMS providers who could not afford them.

#### Questions and Discussion

Commissioner Barrow asked if EMS was on the list of entities for the health information exchange requirements.

Mr. Smiley stated the Center for Medicaid and Medicare Services released a Medicaid Directors' Advisory Letter allowing EMS, as well as many other public health entities, to receive Medi-Cal funding for the onboarding, design, implementation, and development of interoperable systems to allow hospitals to meet Stage 2 and Stage 3 responsibilities. This funding opportunity, through the California Department of Health Care Services, allows for a 90/10 match program for EMS purposes of reimbursement.

Commissioner Barrow requested that population levels in rural areas be taken into consideration so that rural hospitals can also receive matching funds.

#### **D. Ambulance Patient Offload Time (APOT)**

Dr. Backer stated this was addressed in the Director's Report. There will be an item on the next agenda for approval of the guidelines that will go out for implementation of the measurement standards.

## **8. DISASTER MEDICAL SERVICES DIVISION**

Craig Johnson, Chief of the Disaster Medical Services Division, presented his report:

### **A. Mobile Medical Assets Update**

The EMS Authority has redesigned the mobile field hospital program into the mobile medical shelter program to modify and expand potential uses, including providing local support during disasters and emergencies. Assets to be mobilized include structures and durable equipment, not biomedical equipment or medical supplies. The first mobile field hospital will remain in Sacramento at EMSA to be used as modules to support the state. The second mobile field hospital will be broken up into modules to be distributed to Cal OES mutual aid regions; this will be done with LEMSAs without needing state approval or request. The third mobile field hospital has been transferred to the state military department to be used by the California National Guard.

The California Medical Assistance Team (CAL-MAT) program is currently managed by external contract, which will end at the end of the year. EMSA put out a Request for Proposals but has determined the program will be best managed internally with EMSA staff. EMSA was recently approved through CalHR and the Department of General Services to use the emergency hire process for CAL-MAT members, which will grant them some benefits. Other improvements to the program include increased outreach and enhanced training. There will be a biannual field training exercise focusing on base of operations setup and utilization of equipment; this will be mandatory for all CAL-MAT members. Additionally, mobile field hospital equipment and the disaster health care volunteer system will bolster the CAL-MATs.

## **9. ITEMS FOR NEXT AGENDA**

Chairman Burch stated the Commission would like to see a report that addresses the ability of EMS for confidentiality and peer review process, and specifically addresses the authority of EMSA in its advisory groups to have jurisdiction to review the quality of care provided at the local level. If the state finds that it has the authority to review patient care at the local level, the next question is where in the Evidence Code or Civil Code it is given the ability to have this dialogue protected from discovery.

Commissioner Barrow requested a presentation in an upcoming meeting on how the state will move forward in filling the gap the Red Cross will leave in training licensed child care providers, as well as how to adjust the funding streams to accommodate changes.

Commissioner Rudnick requested remaining focused on wireless 911 redirection issues, including receiving regular progress reports. Dr. Backer stated the intent to invite

Cal OES back at least annually to address their data and activities with the Commission in Sacramento meetings.

Chairman Burch requested creating a standing item for an update on EMS communications in the next few agendas, asking Cal OES to send a representative to the June meeting to provide an update on wireless 911, and asking the state EMS Authority to ensure that the Commission receives up-to-date information on all aspects of EMS communications.

Commissioner Dunford requested specific data on the delay times for landlines versus cell phones in routing to the proper public safety answer points (PSAPs), to the extent that Cal OES is able to define it. Response times are one of the most important determinants of survival and have not been thoroughly analyzed.

Chairman Burch recommended appointing a subcommittee in December to explore this issue and develop questions and metrics. He asked Commissioners Dunford and Rudnick to consider serving on this subcommittee.

Commissioner Webb agreed with the request for a follow-up on the gap for child care training. She asked how Commissioners will be informed of the ongoing edits to the matrix for APOT. Dr. Backer stated staff is currently seeking stakeholder input; the final draft will be posted to the website. Updates will be available to the Commission for approval.

Commissioner Rudnick requested an update on House Bill 4365.

## **10. PUBLIC COMMENT**

There were no questions or comments from the public.

## **11. ADJOURNMENT**

**Action: Commissioner Drowniany moved to adjourn the meeting. Commissioner Barrow seconded. Motion carried unanimously.**

Chairman Burch adjourned the meeting at 11:51 a.m.

**Emergency Medical Services Authority  
Disaster Medical Services Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p><b>1. Ambulance Strike Team (AST)/Medical Task Force (MTF)</b></p>	<p>Michael Frenn, ext. 435</p>	<p>AST/MTF Leader Trainings are conducted on an ongoing basis, upon request. In August, courses were conducted in South Lake Tahoe and Contra Costa county. The curriculum continues to improve and a standardized method for tracking units working a strike team is being developed. Information regarding the AST Program can be found at: <a href="http://www.emsa.ca.gov/Ambulance_Strike_Team">http://www.emsa.ca.gov/Ambulance_Strike_Team</a>.</p> <p>The Disaster Medical Support Units (DMSU), which support affiliated ASTs are strategically placed with local EMS Agencies and ambulance providers throughout the State. All available DMSUs have been distributed, providing a total of 41 DMSUs with affiliated ASTs in the State.</p>
<p><b>2. California Medical Assistance Teams (CAL-MAT) Program</b></p>	<p>Michael Frenn, ext. 435</p>	<p>The CAL-MAT contract has been extended through April 2017 to ensure deployment readiness while EMSA continues to transition the program from external to internal management. EMSA is working with Cal HR and the Department of General Services to complete requirements to enable deployment of CAL-MAT members utilizing the Emergency Hire process. EMSA has made significant progress and expects the CAL-MAT program to be under full internal management by the second quarter of 2017. EMSA maintains a response readiness level for this program in accordance with previously published standards.</p>
<p><b>3. CAL-MAT Cache</b></p>	<p>Bill Hartley, ext. 1802</p>	<p>EMSA has completed bi-annual inventory maintenance on all three CAL-MAT caches. Medical supplies and pharmaceuticals are 100% accounted for and ready for immediate deployment. Annual servicing of the biomedical equipment has been completed. The revision of the pharmacy formulary is complete. The formulary has been updated with new medications and streamlined to ensure effectiveness while keeping cost to a minimum.</p>
<p><b>4. California Public Health and Medical Emergency Operations Manual (EOM)</b></p>	<p>Jody Durden, ext. 702</p>	<p>The Regional Disaster Medical and Health Specialists (RDMHS) conduct EOM training on an ongoing basis. The EOM Workgroup is currently in the process of revising the EOM based on lessons learned since the initial 2011 release. Additional Function Specific topics will be added.</p>
<p><b>5. California Crisis Care Operations Guidelines</b></p>	<p>Bill Campbell, ext. 728</p>	<p>EMSA is coordinating with CDPH to initiate the Crisis Care/Scare Resources planning document.</p>
<p><b>6. Disaster Interest Group (DIG)</b></p>	<p>Patrick Lynch, ext. 467</p>	<p>The DIG has been suspended due to the re-prioritization of DMS staff projects.</p>

**Emergency Medical Services Authority  
Disaster Medical Services Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p><b>7. Disaster Healthcare Volunteers (DHV) of California (California’s ESAR-VHP program): Registering, Credentialing &amp; Mobilizing Health Care Personnel</b></p>	<p>Patrick Lynch, ext. 467</p>	<p>The DHV Program has nearly 22,000 volunteers registered. Over 19,000 of these registered volunteers are in healthcare occupations.</p> <p>All 58 counties have trained System Administrators. EMSA provides routine training and system drill opportunities for all DHV System Administrators.</p> <p>Over 8,900 of the nearly 22,000 DHV registered responders are Medical Reserve Corps (MRC) members. EMSA trains and supports DHV System Administrators in each of the 41 participating MRC units.</p> <p>DHV System Administrator training, DHV user group webinars, and quarterly DHV drills are ongoing.</p> <p>EMSA has distributed copies of the “DHV Volunteer Handbook.” This handbook informs volunteers about the state’s DHV Program, and provides information about deploying in response to a disaster.</p> <p>EMSA publishes the “DHV Journal” newsletter for all volunteers on a tri-annual basis. The most recent issue was released September 13, 2016.</p> <p>The “DHV Journal” is available on the DHV webpage of the EMSA webpage: <a href="http://www.emsa.ca.gov/disaster_healthcare_volunteers_journal_page">http://www.emsa.ca.gov/disaster_healthcare_volunteers_journal_page</a>.</p> <p>The DHV website is: <a href="https://www.healthcarevolunteers.ca.gov">https://www.healthcarevolunteers.ca.gov</a>.</p> <p>The DHV Deployment Operations Manual (DOM) is available on the EMSA webpage: <a href="http://www.emsa.ca.gov/Media/Default/PDF/DHV%20DOM%20%205-24-2016%20ver%202.1.pdf">http://www.emsa.ca.gov/Media/Default/PDF/DHV%20DOM%20%205-24-2016%20ver%202.1.pdf</a></p>

**Emergency Medical Services Authority  
Disaster Medical Services Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p><b>8. Exercises and Training</b></p> <p><b>Weapons of Mass Destruction (WMD)</b></p> <p><b>Medical Health Operations Center Support Activities (MHOCSA)</b></p> <p><b>Statewide Exercises:</b></p>	<p>Bill Campbell, ext. 728</p> <p>Bill Campbell, ext. 728</p> <p>Bill Campbell, ext. 728</p>	<p>The California Emergency Medical Response to Weapons of Mass Destruction Incidents (with Med-Plus) course is offered on a continuous basis, requiring a minimum enrollment of 12 students.</p> <p>The initial Medical Health Operations Center Support Activities (MHOCSA) course was offered in Southern California on February 23 &amp; 24, 2016. Future courses will be offered but the dates are still to be determined. A Train-The-Trainer course will be offered in San Luis Obispo in February 2017</p> <p>EMSA participated in the 2016 Statewide Medical Health Exercise, described below. The lessons learned in the exercise will be tested in upcoming exercises.</p>
<p><b>2016 Statewide Medical and Health Exercise (2016 SWMHE)</b></p>	<p>Theresa Gonzales, ext. 1766</p>	<p>On November 17th, 2016 the EMS Authority participated in the Statewide Medical and Health Exercise (SWMHE) in partnership with the California Department of Public Health (CDPH). The exercise was designed as a multiphase exercise program for statewide participants to exercise response to a multi-casualty incident. The SWMHE included objectives for Ambulance Services, Community Clinics, EMS Agencies, Fire Services, Hospitals, Law Enforcement, Long Term Care Facilities, Medical Examiners/Coroners, Offices of Emergency Management, and Public Health. The jurisdiction-specific objectives were designed to further enhance participants' exercise play.</p>
<p><b>9. Hospital Available Beds for Emergencies and Disasters (HAvBED)</b></p>	<p>Nirmala Badhan, ext. 1826</p>	<p>Federal requirements for HAvBED reporting have been discontinued. However, EMSA is working with the California Department of Public Health (CDPH) and other partners to determine how to continue to integrate hospital data collection for California use.</p>

**Emergency Medical Services Authority  
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Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<p><b>10. Hospital Incident Command System (HICS)</b></p>	<p><a href="mailto:hics@emsa.ca.gov">hics@emsa.ca.gov</a></p>	<p>The Fifth Edition of HICS was released in May of 2014 and is available on the EMSA website for download: <a href="http://www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system">http://www.emsa.ca.gov/disaster_medical_services_division_hospital_incident_command_system</a>.</p> <p>The 2014 revision project did not include the development of education and training materials. Refer to the list of HICS Trainers to view vendors that have identified themselves as providers HICS training based on The HICS Guidebook, Fifth Edition: <a href="http://www.emsa.ca.gov/media/default/HICS/HICS_Training_7.pdf">http://www.emsa.ca.gov/media/default/HICS/HICS_Training_7.pdf</a> . The California Emergency Medical Services Authority does not endorse or recommend any provider. If you are a trainer that would like to be added to this list, please send a request to: <a href="mailto:hics@emsa.ca.gov">hics@emsa.ca.gov</a> along with your contact information.</p> <p>EMSA would like to receive copies of After Action Reports (AAR) and presentations on the use of HICS. This information will aid future revisions. These informative documents should be addressed to the HICS Coordinator via email: <a href="mailto:hics@emsa.ca.gov">hics@emsa.ca.gov</a>.</p>
<p><b>11. Medical Sheltering</b></p>	<p>Bill Campbell, ext. 728</p>	<p>The California Department of Public Health (CDPH) released the guidance entitled “California Guidance and Toolkit for Sheltering Persons with Medical Needs” in October 2014. This document will be used as a foundational document when EMSA has the staff resources to revise the “Emergency Medical Services Field Treatment Site (EMS FTS) Guidelines.”</p>
<p><b>12. Mission Support Team (MST) System Development</b></p>	<p>Michael Frenn, ext. 435</p>	<p>The MST program is being reviewed in an effort to structure it to adequately support EMSA’s Mobile Medical Assets. Inter-Governmental Employee Exchange Agreements are now being sent to local governments to permit compensation for their employee’s participation when deployed by EMSA on an MST. Duty Statements being developed for various CAL-MAT positions are also being written to support the MST positions where appropriate and have been submitted to the Department of General Services for approval.</p>

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December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-4336</b>	<b>Updates</b>
<b>13. Response Resources</b>	Bill Hartley, ext. 1802	<p>The Bi-annual inventory maintenance of the Mission Support Team (MST) caches has been completed. The MST caches are constantly being refined on After Action Reports following exercises and real word deployments. In addition, the Response Resources Unit (RRU) is currently working to add I.T. equipment to improve MST networking and Internet functionality in the field.</p> <p>The RRU conducts annual audits on the 42 Disaster Medical Support Unit (DMSU) vehicles located around the State. During the audits, EMSA will verify that all the DMSU vehicles are being properly maintained and utilized according to written agreements. All 42 DMSUs were audited in 2016 with no major problems noted.</p> <p>Annual servicing of the biomedical equipment for the California Medical Assistance Teams (CAL-MAT) caches is completed. A multi-year contract to service the CAL-MAT biomedical equipment has been established.</p> <p>General annual maintenance for generators, forklifts, and fleet vehicles has been completed with no major problems noted.</p>
<b>14. Regional Disaster Medical/Health Specialists (RDMHS) Program and Medical Mutual Aid System</b>	Nirmala Badhan, ext. 1826	<p>The RDMHS program continues to work with EMSA and California Department of Public Health (CDPH) staff in supporting major disaster planning activities in addition to supporting information management processes. The RDMHSs have been instrumental in the response to recent events in California.</p>
<b>15. Medical Reserve Corps (MRC)</b>	Sheila Martin, ext. 465	<p>41 MRC units have trained Disaster Healthcare Volunteers (DHV) System Administrators. These MRCs are regular users of the DHV system and active participants in quarterly DHV drills and quarterly DHV user group webinars. Over 8,900 of the DHV Program's nearly 22,000 volunteers are Medical Reserve Corps volunteers. EMSA's Response Personnel Unit staff is planning a two-day MRC Workshop at EMSA in early March 2017.</p>
<b>16. Statewide Emergency Plan (SEP) Update</b>	Jody Durden, ext. 702	<p>The Governor's Office of Emergency Services (Cal OES) is in the process of updating the Statewide Emergency Plan (SEP) and is moving toward implementing Emergency Functions (EFs). EMSA is a lead participant in the development of the Public Health and Medical Emergency Function of the SEP and is a support agency in the development of six other EFs.</p>

**Emergency Medical Services Authority  
 Disaster Medical Services Division  
 Major Program Activities  
 December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-4336</b>	<b>Updates</b>
<b>17. Patient Movement Plan</b>	Jody Durden, ext. 702	The Statewide Patient Movement Workgroup will meet in January 2017 to participate in a tabletop exercise based on the draft plan in development. The exercise will provide an opportunity to test the plan and identify gaps. Currently the draft plan is approximately 80% complete and is expected to be completed prior to the January 2017 tabletop exercise.
<b>18. Bay Area Catastrophic Earthquake Plan</b>	Bill Campbell, ext. 728	EMSA participated as part of the Medical Planning Group for the Bay Area Catastrophic Earthquake Plan revision. EMSA continues to participate in the socialization of the plan.
<b>19. Northern California Catastrophic Flood Response Plan</b>	Nirmala Badhan, ext. 1826	EMSA is working with the Governor's Office of Emergency Services (Cal OES) to develop a response plan for a catastrophic flood event in 10 counties located in Northern California.

**Emergency Medical Services Authority  
EMS Personnel Division  
Major Program Activities  
December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-9875</b>	<b>Updates</b>
<b>1. First Aid Practices for School Bus Drivers</b>	Mark Olivas, ext. 445	There are 8 school bus driver training programs currently approved. We are reviewing one program renewal. Technical assistance to school staff and school bus drivers is ongoing. The EMSA Child Care Training website was updated.
<b>2. Child Care Provider First Aid/CPR Training Programs</b>	Mark Olivas, ext. 445	There are 16 currently approved programs. We are reviewing 3 program renewals. Technical assistance is being provided to child care training program instructors and directors, licensing staff, and child care providers. EMSA First Aid and CPR sticker sales are ongoing. EMSA is continuing work to revise the Chapter 1.1 Training Standards for Child Care Providers, which includes first aid and CPR training standards.
<b>3. Child Care Preventive Health Training Programs</b>	Lucy Chaidez, ext. 434	There are 21 preventive health training programs approved. There are 8 program renewal reviews that are awaiting modifications. There are three new programs being reviewed. EMSA is continuing its work to revise the Chapter 1.1 Training Standards for Child Care Providers, which include preventive health training standards. EMSA completed its project with the CDC and CDPH on a grant for a MiniCOLIN, a project to update children's nutrition resources for the EMSA child care nutrition web page. EMSA was a partner in developing the newly published Child Care Disaster Plan and Annex to the State Disaster Plan. This publication provides written emergency preparedness plans, policies, and instructions for disaster drills to be held in child care facilities. Technical assistance to instructors and child care providers is ongoing. EMSA Preventive Health sticker sales are ongoing.
<b>4. Child Care Training Provider Quality Improvement/Enforcement</b>	Mark Olivas, ext. 445 and Lucy Chaidez, ext. 434	Technical assistance and education regarding compliance issues is provided to approved training programs, child care providers, DSS community care licensing, and child care resource and referral staff. Review of rosters, an auditing tool, is ongoing. Currently, there are no open complaint cases involving EMSA-approved training programs.

**Emergency Medical Services Authority  
EMS Personnel Division  
Major Program Activities  
December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-9875</b>	<b>Updates</b>
<p><b>5. Automated External Defibrillator (AED) Requirements for EMT's, Public Safety and Layperson</b></p>	<p>Betsy Slavensky, ext. 461</p>	<p>On September 3, 2015 Senate Bill (SB) 658 (Hill, 2015) <i>Automated external defibrillators</i> was signed by the Governor. The statute removes numerous requirements that are identified in Chapter 1.8 (Lay Rescuer AED Regulations), making these regulations inconsistent and in conflict with the statute. In order to eliminate the inconsistency and reduce any confusion, the EMS Authority has repealed Chapter 1.8, Division 9, Title 22 of the California Code of Regulations effective September 1, 2016. If there are any questions on requirements for AED, one should refer to the Statutes Section 1714.21 of the Civil Code and Section 1797.196 of the Health and Safety Code. Ongoing technical support and clarification is provided to public safety agencies, LEMSA's and the general public regarding all AED regulations.</p>
<p><b>6. BLS Training and Certification Issues</b></p>	<p>Betsy Slavensky, ext. 461</p>	<p>Provide ongoing daily support and technical assistance to EMTs, prospective EMTs and 73 Certifying Entities. The public comment period, as well as the Public Hearing, for the proposed revisions to the EMT regulations ended September 27, 2016. Ninety five pages of comments were received. EMSA is reviewing the comments will be posted and a 15 day comment period will ensue. EMSA anticipates seeking approval of the regulations from the Commission on EMS at the March 2017 meeting. The proposed regulations can be found on the EMSA website under Popular Links - <i>Public Comment</i>.</p>
<p><b>7. State Public Safety Program Monitoring</b></p>	<p>Betsy Slavensky, ext. 461</p>	<p>Provide ongoing review, approval &amp; monitoring of EMSA approved Public Safety First Aid/CPR, EMR, EMT and CE programs for statutory and regulatory compliance. Revisions to the Chapter 1.5 regulations were approved and took effect April 1, 2015. The regulations require 21 hours of initial training for peace officers, firefighters and lifeguards, and eight hours of retraining every two years. Provide continued assistance to POST as they develop the curriculum and testing competency standards for peace officers. All training programs must include a curriculum that complies with the new public safety course content no later than April 1, 2017. Provide support and clarification to LEMSAs and other statewide public safety agencies regarding the Chapter 1.5 regulations and new approval requirements.</p>

**Emergency Medical Services Authority  
EMS Personnel Division  
Major Program Activities  
December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-9875</b>	<b>Updates</b>
<b>8. My License Office/ EMT Central Registry Audit</b>	Betsy Slavensky, ext. 461	EMSA is continuing to monitor the EMT Central Registry to verify that the 73 certifying entities are in compliance with the California Code of Regulations regarding data entry, including background checks and disciplinary notification for all EMT personnel. Correspondence is maintained via Newsletter, email, phone, and EMS Coordinator meetings with certifying entities to disseminate updates, changes and corrections. Website improvements, such as the new EMT page and FAQs, continue to be implemented for ease of certification staff use and EMT resources. The new FAQs answer many EMT certification questions and redirect questions from EMSA to the LEMSAs. Ongoing development of discipline and certification procedures is in progress to support central registry processes and reduce time spent on technical support.
<b>9. Epinephrine Auto-injector Training and Certification</b>	Corrine Fishman, ext. 927	On January 1, 2016 the EMS Authority began accepting applications for training programs to provide training and certification for the administration of epinephrine auto-injectors to the general public and off-duty EMS personnel. EMSA has approved seven training programs with another in process and has issued 138 lay rescuer certification cards.

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
1. Trauma	Farid Nasr, ext. 424	<p><u>State Trauma Advisory Committee (STAC):</u> The next STAC meeting will be held on November 29, 2016. The main agenda items will be the May 2017 Trauma Summit planning, the status of State Trauma Plan, an update on the trauma regulation revision process and the taskforce, the re-triage guidance draft, and the Re-Triage Project for the Strategic Highway Safety Program.</p> <p><u>Regional Trauma Coordinating Committees (RTCC)</u> Each Regional Trauma Coordinating Committee had their annual face to face meeting or Grand Rounds for the year of 2017. An EMSA representative participated in each of these meetings and provided State Trauma System status to each region. The chair of each RTCC provides a report on regional activity updates at the STAC meeting and provides documents approved by the RTCC that are available for statewide use. Details of current activities can be found on the EMSA website at <a href="http://www.emsa.ca.gov">www.emsa.ca.gov</a>.</p> <p><u>Performance Improvement and Patient Safety (PIPS) Plan</u> The draft PIPS Plan has been distributed to appropriate EMS constituent groups and posted on the EMSA website for public comment. The public comment period ended on October 7, 2016. The comments are under review at EMSA and will be reviewed with the PIPS Work Group and the State Trauma Advisory Committee, after which the appropriate revisions will be submitted to the commission for approval.</p> <p><u>Regional Trauma Network for Re-Triage Subcommittee</u> The <i>Regional Trauma Network for Re-Triage</i> guidance document draft was submitted to the EMSA executives for review and will be sent out for public comment after final revision, based on the executives' comments. The document provides guidelines for non-trauma centers on early management protocols, data collection and analysis regarding re-triage and IFT patterns throughout the state. The objective is to reduce delays on patient transfer, improve communication, and optimize continuation of care for Trauma patient.</p>

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-4336</b>	<b>Updates</b>
<b>2. STEMI/Stroke Systems of Care</b>	Farid Nasr, ext. 424	<p><u>STEMI and Stroke Regulations</u> EMSA staff is finalizing the draft of regulations based on internal comments and has created the documentation required for submission of the STEMI and Stroke Regulations packages to the Office of Administration Law (OAL) under the Administrative Procedure Act.</p> <p><u>California Stroke Registry</u> EMSA staff is working on a project in collaboration with the California Department of Public Health to create and implement a Stroke Registry based on the Paul Coverdell National Acute Stroke Program. This will allow the Stroke Centers in California to capture the data variables related to Stroke patients and use them for program quality improvement, based on National recommendations for stroke patient management. There are two work groups created for this project: Pre-hospital and hospital work groups. The first conference call was on October 18 to go over goals, objectives, and planning. Meanwhile, they are recruiting hospitals for implementation and data collection.</p>
<b>3. EMS System, Standards, and Guidelines</b>	Lisa Galindo, ext. 423	EMS System, Standards, and Guidelines, #101 - #103 (dated June 1993 and March 1994) are currently under revision. An EMS Plan Workgroup was developed in November 2015 to revise the guidelines. The workgroup meets regularly and continues to discuss and develop draft changes to the guidelines.

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
<b>4. EMS Transportation</b>	Laura Little, ext. 412	<p><u>EMS Systems Regulations Work Group / Chapter 13 Task Force:</u> On hiatus, pending outcome of litigation related to the subject matter involved in the regulation draft.</p> <p><u>Request for Proposals:</u> Request for Proposals (RFPs) for Exclusive Operating Areas continue to go through a dual review process, to ensure that they meet statutory requirements as well as address EMSA Guideline #141 "Competitive Process for Creating Exclusive Operating Areas". EMSA continues to provide technical assistance to LEMSAs by email, phone, and mail in order to help them create a RFP that meets all required criteria.</p> <p><u>Bi-Annual Statewide Public Safety Air Rescue Inspections:</u> Bi-Annual inspections of all CHP helicopters began on October 12, 2016, with seven of eleven ALS rescue helicopters being inspected. The remaining four will be inspected in January 2017.</p>
<b>5. Poison Center program</b>	Lisa Galindo, ext. 423	<p>The California Poison Control System (CPCS) is one of the largest single providers of poison control services in the U.S. The CPCS is made up of four designated Poison Control Centers. The CPCS receives approximately 330,000 calls a year from both the public and health professionals through a toll-free hotline that is accessible 24-hours a day, 7 days a week.</p> <p>Quarterly reports continue to be submitted to the EMS Authority for evaluation of poison control system operations and to ensure contractual compliance.</p>
<b>6. EMS Plans</b>	Lisa Galindo, ext. 423	<p>The EMS Authority continues to review EMS Plans and annual Plan Updates submitted by the LEMSAs. A quarterly update has been provided to the Commission reflecting the progress and timelines of EMS Plan submissions.</p>

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
7. EMS for Children Program	Heidi Wilkening, ext. 556	<p><u>Regulations:</u> The EMS for Children regulations have been submitted for internal EMSA approval and will be submitted to Health and Human Services Agency for review and approval prior to submission to OAL.</p> <p><u>Educational Forum:</u> The EMS for Children Educational Forum in northern California was held on October 24, 2016 in Sacramento at the Doubletree by Hilton Hotel. Topics included pediatric burns, pediatric psychiatric issues, and current street drug trends.</p> <p><u>HRSA Grant:</u> The next four-year HRSA grant cycle will start on March 1, 2017. Discussions have begun regarding the upcoming 2017-2021 HRSA grant application.</p>

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

Activity & Description	Primary Contact EMSA (916) 322-4336	Updates
8. CEMSIS EMS Data	Adrienne Kim, ext. 742	<p>CEMSIS now has 22 LEMSAs participating at some level in the submission of EMS data. We are in the process of providing technical assistance and guidance to local EMS agencies, providers and software vendors on the transition to NEMSIS Version 3.4 consistent with AB 1129 which implemented HSC 1797.227 on January 1, 2016. We will be transitioning NEMSIS Version 3.4 effective January 1, 2017.</p> <p><u>Data Summit:</u> Two Data Summits were held on September 27, 2016 at EMSA in Sacramento and on September 29, 2016 at the Embassy Suites Anaheim South in Garden Grove to provide technical and policy discussion on the NEMSIS 3.4 transition.</p> <p><u>Grant – EHR devices:</u> The funds from the grant are in the final stages for approval and will be distributed to the LEMSAs in the near future to purchase ePCR-ready hardware for use in the field.</p> <p><u>Reports:</u> Staff is developing reports to confirm the LEMSA data that were submitted into CEMSIS from the previous quarter. These reports are expected to be available in mid-2017.</p> <p><u>Annual EMS &amp; LEMSA Reports:</u> Staff is developing reports for 2014 and 2015. These reports are expected to be available mid-2017. Staff developed reports for 2013 and 2014 for each LEMSA that submitted data for that period. These reports are expected to be available by December 2016.</p> <p><u>Annual Statewide Trauma Reports:</u> Staff is currently in the process of developing trauma reports. These reports are expected to be available in early 2017.</p>

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-4336</b>	<b>Updates</b>
<b>9. CEMSIS – Trauma Data</b>	Nancy Marker, Ext. 460	There are 27 Local EMS agencies (LEMSA) with designated Trauma Centers. Trauma Centers are physically located in 37 of the 58 counties. Currently 26 LEMSAs are transmitting into CEMSIS-Trauma representing 73 of the 75 designated Trauma Centers. The State Trauma Coordinator is providing technical assistance to Imperial County (2-level IV Trauma Centers) to obtain their trauma data. The EMS Authority is continuing to develop a report for each LEMSA showing data completion compliance to be shared with their Trauma Centers.
<b>11. Communications</b>	Heidi Wilkening, ext. 556	EMSA personnel are continuing to work with the Office of Emergency Services (OES) to address public concerns on issues related to Wireless 9-1-1. A coordinator position at EMSA is currently vacant and a recruitment process will start in the near future.
<b>12. Core Measures</b>	Adam Davis, ext. 409	The Core Measure Report for 2015 data was released at the previous Commission Meeting held in September 2015. EMSA has since met with the Core Measures Task Force to discuss reporting of 2016 data, the various NEMSIS formats in which data has been collected for the 2016 data year, as well as approaches to incorporating the Federal EMS Compass Project measures into the California EMS Core Measures Set. The task force expects to meet at least one more time prior to the end of the year to finalize approaches to the 2016 data year as well as approve the Core Measures Instruction Manual for distribution.
<b>13. HIE Summit</b>	Adam Davis, ext. 409	EMSA is planning to host another HIE Summit in April of 2017. EMSA has sent out bid requests and is determining the best location to host this event. EMSA staff is working to develop curriculum and speaker sessions for attendees featuring leaders in the field of HIE. EMSA expects a broad audience from across the nation to attend this event. EMSA will be working with both State and Federal partners to spread the work about this upcoming event.

**Emergency Medical Services Authority  
EMS Systems Division  
Major Program Activities  
December 14, 2016**

<b>Activity &amp; Description</b>	<b>Primary Contact EMSA (916) 322-4336</b>	<b>Updates</b>
<b>14. Office Support</b>	Lori O'Brien, ext 401	<p>As always, daily duties continue with routine correspondence tracking, report formatting, and other general duties. In addition: participated in planning and support activities for the 19<sup>th</sup> Annual EMS for Children Educational Forum. Currently working to complete the Non-Employee TECs for the Forum speakers and committee members. Provided support for two data transition workshops. Provided formatting support for the Annual EMS Report and 17 individual LEMSA Annual EMS Reports. Scheduled interviews and assisted interview panel with scheduling for the HPS II Position. Completed required Defensive Driver Training. Proofed and edited the STEMI and Stroke Regulations and ISORs. Proofed and edited EMSC Regulations and ISORs. Proofed and edited the Maddy Fund report to the Legislature. Participated as support crew for the National EMS Memorial Bike Ride. Researched and/or ordered equipment and supplies for division. Tracked grant time lines and deliverables and ensured reporting deadlines were met in the absence of a Grant coordinator. Elicited responses from program managers for grant reporting purposes.</p>

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Adam Willoughby, MA  
Legislative & External Affairs Analyst

**SUBJECT:** Legislative Report

**RECOMMENDED ACTION:**

Information only.

**FISCAL IMPACT:**

Unknown

**DISCUSSION:**

The following is a summary of H.R. 4365 and companion bill, S. 2932. While the overall intent of these two bills is very similar, there are minor technical differences between the two. The general intent of the two bills is to codify in federal statute the explicit ability of medical directors to issue standing orders for use of controlled substances, to provide the Drug Enforcement Agency (DEA) oversight necessary to monitor and prevent drug diversion, and provide guidance regarding the receipt, movement, storage and use of controlled substances in prehospital settings.

**H.R.4365 - Protecting Patient Access to Emergency Medications Act of 2016**

Author: Rep. Hudson, Richard [R-NC-8] (Introduced 01/12/2016)

Bill Status: Passed House on 11/14/16, next will move to the Senate for referral to a policy committee.

Bill Summary: For the purpose of creating an explicit federal statute that allows EMS professionals<sup>1</sup> to administer controlled substances in schedules II, III, IV, and V, this bill

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<sup>1</sup> The term 'emergency medical services professional' means a health care professional (including a nurse, paramedic, or emergency medical technician) licensed or certified by the State in which the professional practices and credentialed by a medical director of the respective emergency medical services agency to provide emergency medical services within the scope of the professional's State license or certification.

would require the U.S. Attorney General to register all EMS agencies<sup>2</sup> that stock, administer or transport controlled substances. A registrant agency shall be required to maintain the following records:

- All deliveries, administration and disposal of controlled substances.
- All EMS professionals who administer controlled substances using the agency's registration.
- Standing orders<sup>3</sup> issued by the medical director authorizing the use of controlled substances.

This bill permits the U.S. Attorney General to deny an EMS agency's registration application if it does not meet specified requirements, and permits the issuance of regulations that address the following:

- The types of locations that may receive controlled substances.
- The manner in which a registered EMS agency notifies the U.S. Attorney General prior to transporting controlled substances from a registered location to an unregistered location.
- Controlled substance storage and delivery requirements.

Full bill text is available here: <https://www.congress.gov/bill/114th-congress/house-bill/4365/text>

### S.2932 - Protecting Patient Access to Emergency Medications Act of 2016

Author: Sen. Cassidy, Bill [R-LA] (Introduced 05/16/2016)

Bill Status: 05/16/2016 Introduced in Senate and referred to the Committee on Health, Education, Labor, and Pensions.

Bill Summary: For the purpose of creating an explicit federal statute that allows EMS practitioners<sup>4</sup> to administer controlled substances in schedules II, III, IV, and V, this bill would require the U.S. Attorney General to register all EMS agencies<sup>5</sup> that stock, administer or transport controlled substances. A registrant agency shall be required to maintain the following records and provide them upon request:

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<sup>2</sup> The term 'emergency medical services agency' means an organization providing emergency medical services, including such an organization that (i) is governmental (including fire-based and hospital-based agencies), nongovernmental (including hospital-based agencies), private, or volunteer-based; (ii) provides emergency medical services by ground, air, or otherwise; and (iii) is authorized by the State in which the organization is providing such services to provide emergency medical care, including the administering of controlled substances, to members of the general public on an emergency basis.

<sup>3</sup> The term 'standing order' means a written medical protocol in which a medical director determines in advance the medical criteria that must be met before administering controlled substances to individuals in need of emergency medical services.

<sup>4</sup> The term 'emergency medical services practitioner' means a health care practitioner (including a nurse, a paramedic, or an emergency medical technician) licensed or certified by a State and credentialed by a medical director of the respective emergency medical services agency to provide emergency medical services to individuals within the scope of the State license or certification of the practitioner.

<sup>5</sup> The term 'emergency medical services agency' means an organization providing emergency medical services, including an organization that (A) is governmental (including a fire-based agency), nongovernmental (including a hospital-based agency), private, or volunteer-based; and (B) provides emergency medical services by ground, air, or otherwise.

- All deliveries, administration and disposal of controlled substances.
- Standing orders<sup>6</sup> issued by the medical director authorizing the use of controlled substances.

This bill also requires that a registrant EMS agency shall have one or more licensed physicians responsible for providing medical oversight over the agency.

Full bill text is available here: <https://www.congress.gov/bill/114th-congress/senate-bill/2932/text>

Both authors have issued the following background statement on their respective bills:

*“The triage, treatment, and transport emergency medical service practitioners provide can often be the difference between life and death for patients with a medical emergency. The unique nature of emergency medical services is unlike other health care services governed by the Controlled Substances Act. There is a routinely encountered clinical need for controlled substance medications in the practice of EMS medicine, ranging from the administration of pain narcotics to anti-seizure medications. Emergency Medical Technicians and Paramedics need to administer these lifesaving drugs as quickly as they are able to reach and assess the patient, and any delay wastes valuable time in the provision of care. Established practice allows emergency medical service practitioners to administer and deliver these controlled substances under the oversight of physicians, primarily through directional guidelines written by physicians, commonly known as standing orders. Laws and regulations have not kept up with the evolution of modern medicine however, and in a recent review of the Controlled Substances Act (CSA), the Department of Justice determined that legislation is needed to codify “standing orders.” Absent Congressional action, patients may lose access to those lifesaving medications in emergency situations and established practice will be disrupted because laws have not kept up with the evolution of medicine.*

*To remedy this dilemma, Senator Cassidy authored S. 2932 and Representative Hudson authored H.R. 4365, the Protecting Patient Access to Emergency Medications Act. This bill clarifies that current practice of physician Medical Directors overseeing care provided by paramedics and other emergency medical service practitioners via “standing orders” is statutorily allowed and protected. The use of “standing orders” is necessary so that physician Medical Directors can establish these pre-set protocols which emergency medical service practitioners follow in delivering emergency medical care. In the absence of standing orders, patients would not have access to the time-sensitive and potentially life-saving interventions they so desperately need.”*

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<sup>6</sup> The term ‘standing order’ means a written medical protocol in which a medical director prescribes in advance the medical criteria to be followed by emergency medical services practitioners in administering a controlled substance to an individual in need of emergency medical services.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Rick Trussell, Chief  
Fiscal, Administration, and Information Technology Division

**SUBJECT:** Administrative and Personnel Report

**RECOMMENDED ACTION:**

Information Only

**FISCAL IMPACT:**

None

**DISCUSSION:****EMS Authority Budget:**

The Department is currently in the process of transitioning from CalSTARS to the Financial Information System for California (**FI\$Cal**), which is a business transformation project for state government in the areas of budgeting, accounting, procurement, and cash management. There has been considerable change in the year-end close process, and we are working closely with the Department of General Services Contracted Fiscal Services (DGS/CFS) to help us achieve our goal of completing the year-end closing process as soon as possible.

DGS has indicated that May (FM11) has been closed as of November 1<sup>st</sup>, and they are working on the June (FM 12) reconciliation. It is anticipated that accurate accounting reports will be available by November 30, 2016, and an updated report will be distributed prior to the next Commission meeting. Once DGS/CFS has completed the reconciliation, any remaining outstanding items will be resolved so that year-end statements can be generated. Internally, we are in the midst of reviewing 2015-16 accounting transactions to ensure proper allocation to funding sources/appropriations; we will then forward proposed corrections to DGS on a flow basis. We continue to work closely with DGS while we navigate the new system.

EMS Authority Staffing Levels:

The EMS Authority is currently authorized 67 positions and also has 19 temporary (blanket positions and retired annuitants) positions for an overall staffing level of 86. Of the 86 positions, 3 positions are vacant at this time and we are in the process of recruiting to fill the positions.

	<b>Admin/Exec Division</b>	<b>DMS Division</b>	<b>EMSP Division</b>	<b>EMS Division</b>	<b>Total</b>
Authorized	14	19	25	9	67
Temporary Staff	8	2	4	5	19
<b>Staffing Level</b>	<b>22</b>	<b>21</b>	<b>29</b>	<b>14</b>	<b>86</b>
Authorized (Vacant)	-1	-3	0	0	3
Temporary (Vacant)	0	0	0	0	0
<b>Current Staffing Level</b>	<b>21</b>	<b>18</b>	<b>29</b>	<b>14</b>	<b>83</b>

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
 Director

**PREPARED BY:** M.D. Smith  
 Supervising Special Investigator  
 Enforcement Unit

**SUBJECT:** Enforcement Report

**RECOMMENDED ACTION:**

Receive information on Enforcement Unit activities.

**FISCAL IMPACT:**

None

**DISCUSSION:****Unit Staffing:**

As of November 4, 2016, the Enforcement Unit has 4 full-time Special Investigators, 1 vacant Special Investigator position and 1 Retired Annuitant working as Special Investigator.

**Investigative Workload:**

The following is a summary of currently available data extracted from the paramedic database.

Cases opened since January 1, 2016, including:

Cases opened:	295
Cases completed and/or closed:	287
EMT-Paramedics on Probation:	225

In 2015:

Cases opened:	337
Cases completed and/or closed:	366
EMT-Paramedics on Probation:	236

Status of Current Cases:

The Enforcement Unit currently has 113 cases in “open” status.

As of November 4, 2016, there are 21 cases that have been in “open” status for 180 days or longer: 6 Fire Fighters’ Bill of Rights (FFBOR) cases and 8 California Society of Addiction Medicine CSAM cases (Respondents are directed to a physician who specializes in addition medicine for an examination/review).

Those 21 cases are divided among 4 Special Investigators and are in various stages of the investigative process, (i.e. awaiting documents, preparing for and/or setting up interviews, report writing and corrections to be made, awaiting action by local law enforcement jurisdictions, the courts, etc.).

[Delays in the interview process are common due to unforeseen difficulties in obtaining certified copies of documents, court records, availability of witnesses and/or the subject(s) of an investigation due to medical action/disability issues, on-going investigations for FFBOR staff or on-going criminal investigations, court actions, plus the routine requirement for two or more follow-up interviews.]

**EMERGENCY MEDICAL SERVICES AUTHORITY**

10901 GOLD CENTER DR., SUITE 400  
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(916) 322-4336 FAX (916) 324-2875



**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Farid Nasr, MD,  
State Specialty Care Systems Specialist

**SUBJECT:** Trauma System Update

**RECOMMENDED ACTION**

Receive information regarding the State Trauma System Status.

**FISCAL IMPACT**

None

**DISCUSSION****State Trauma Plan**

The State Trauma Plan has been submitted to the Health and Human Services Agency and Department of Finance (DOF) for review. The draft plan had been previously revised, based on the American College of Surgeon's recommendations made during their visit to California in March 2016. There is no time estimate for the reviews by Agency and DOF. The Commission will be kept informed of the Trauma Plans' status.

**Trauma Regulation Revision**

The current version of trauma regulations was implemented in 1999. The EMS Authority is in the process of establishing a review committee to begin considering revision to these regulations. The EMS Authority will establish a taskforce of stakeholders to consider revisions to the current trauma regulations. The taskforce should begin work on trauma regulation revision in the first quarter of 2017.

### Trauma Summit

EMS Authority staff is planning for the Annual Trauma Summit in May, 2017, to provide education on clinical and system aspects of trauma care to improve trauma care in California. The summit will held at Holiday Inn Bayside Hotel in San Diego on May 2<sup>nd</sup> and 3<sup>rd</sup> 2017. Additional information about the summit will be shared as the curriculum is developed.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Lucy Chaidez  
Program Analyst

**SUBJECT:** Preventive Health Training Program Update

**RECOMMENDED ACTION:**

Receive information regarding the EMS Authority's Preventive Health and Safety Practices (PHSP) program and the statewide impact of the closure of programs.

**FISCAL IMPACT:**

None

**DISCUSSION:**

The American Red Cross (ARC) will close its child care provider Preventive Health and Safety Practices (PHSP) training programs on December 31, 2016, and began reducing its PHSP training in July, 2016. The ARC has provided the bulk of the PHSP training throughout the state since 2000. Their exit from the program has caused concern regarding shortages of training in several counties. Shortages in training can directly impact the ability of child care providers to operate child care businesses, as they must have this training in order to obtain child care licenses.

A few training entities have come forward to try to fill the training gaps. The EMS Authority has received inquiries from current ARC instructors interested in applying to have their own PHSP training programs. The initial concern from child care providers searching for training has calmed as instructors from other approved training programs travel to provide training in under-served areas of the state. Additionally, the California Department of Education (CDE) is providing funding for a new training program that, once approved, will provide the PHSP training in every county in the state.

Background:

Health and Safety Codes Sections 1596.866 and 1797.191 mandate the EMS Authority (EMSA) to oversee the Child Care Training curriculum standards program. EMSA sets standards and approves first aid, CPR, and preventive health and safety practices (PHSP) training programs that are taught to child care providers. The PHSP training is a one-time course that one staff member per child care facility must complete. The statute specifies that this training cannot be taken in a home-study format.

Current Status of Training Programs in California:

There are currently 21 approved programs providing the EMSA PHSP training throughout California. The counties that have the most training available are in Southern California and the Bay Area. The ARC continues to provide a limited amount of PHSP training through December 2016. Some of EMSA's approved program instructors are travelling to underserved counties to provide the training.

EMSA has received three new programs for review and approval. All were submitted by former ARC instructors, who will continue to use the ARC curriculum for training. Several ARC instructors have chosen to affiliate with already-approved EMSA PHSP training programs, allowing these programs to provide more classes.

The California Department of Education is providing grants totaling \$1,529,275.00 to begin a new PHSP program that will be administered by the UCSF California Childcare Health Program (CCHP) and will be taught by the state's Child Care Resource and Referral Agencies in every county. Training for the trainers of the new program is expected to begin in February 2017.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Lisa Galindo  
EMS Plans Coordinator

**SUBJECT:** EMS Plan Review Process

**RECOMMENDED ACTION:**

Receive updated information from the EMS Authority (EMSA) on EMS Plan preview status and progress related to the EMS Plan Workgroup.

**FISCAL IMPACT:**

None

**DISCUSSION:****EMS Plan Activity:**

EMSA is providing the Commission with an update on the statewide EMS Plan activity. Please refer to the attached document for a summary of the following items:

- Appeals and EMS Plan Submissions
- EMS Plan Determinations and Average Review Time of Plans Submitted

**EMS Plan Workgroup:**

An EMS Plan Workgroup was developed in November 2015 to focus on improving processes related to EMS plans. The workgroup consists of EMSA and LEMSA Administrators who meet twice a month. To date, the workgroup has discussed meeting goals and objectives, proposed online database configurations, and has finalized the draft changes to the Minimum Standards/Recommended Guidelines section of *EMSA Guidelines, #101*. The workgroup is in the process of revising the Table section of *EMSA Guidelines, #103*; the goal is to complete this section by December 30, 2016.

EMSA will continue to keep the Commission apprised of the activity involving EMS Plans and the progress of the EMS Plan Workgroup.

## EMS PLAN ACTIVITY

Report Summary As of November 2, 2016		
Appeals		# of Plans
Plans Not Approved due to Transportation issues		2
EMS Plan Submissions	# of LEMSAs	Percentage
Timely Submissions	26	79%
Late Submissions	2	6%
Past Due	5	15%

Quarterly Report August 1 – October 31, 2016	
EMS Plan Determinations	# of Plans
Plans Submitted	7
Plans Approved*	8
Plans Not Approved*	2
Average Review Time of Plans Submitted	# of Days
LEMSA submission of a <u>Complete</u> plan through EMSA plan determination	25

\* May represent plans submitted during a previous quarter.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Laura Little, EMT  
Transportation Coordinator

**SUBJECT:** EMS Systems Regulations Workgroup Update

**RECOMMENDED ACTION:**

Receive information regarding the process for EMS Systems Regulations development.

**FISCAL IMPACT:**

None

**DISCUSSION:**

The EMS Systems Regulation Development work group is still on hiatus.

The Commission will be kept informed of any changes in status of the work group or the draft EMS Systems Regulations.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Corrine Fishman, Policy and Program Analyst  
Personnel Standards Unit

**SUBJECT:** Office of Administrative Law Rulemaking Calendar

**RECOMMENDED ACTION:**

Approve the 2017 Rulemaking Calendar projected for the EMS Authority.

**FISCAL IMPACT:**

There is no fiscal impact.

**DISCUSSION:****Background:**

Government Code section 11017.6 requires every state agency responsible for implementing a statute pursuant to the Administrative Procedure Act to prepare, by January 30, a rulemaking calendar for that year. The rulemaking calendar must be (1) prepared in accordance with the format specified by the Office of Administrative Law (OAL), (2) approved by the head of the department or, if the rulemaking agency is an entity other than a department, by the officer, board, commission, or other entity which has been delegated the authority to adopt, amend, or repeal regulations, and (3) published in the California Regulatory Notice Register (Notice Register). (Gov. Code, sec. 11017.6.)

**2017 Rulemaking Calendar:**

The rulemaking calendar represents estimation by the department, of rulemaking files that may be opened during the 2017 calendar year. Rulemaking files that may be opened to implement statutes enacted in the 2016 legislative session are listed on Schedule A. Schedule B contains rulemaking files that may be opened to implement statutes enacted prior to 2016, and would likely represent revisions to existing regulations. The rulemaking calendar provides OAL with an estimate of the workload to

be expected, and offers the advance notification of potential regulation amendments that may be of interest to stakeholders and the public.

#### Attachments

The following documents are attached and require review and approval from the Commission on EMS:

- Schedule A: Proposed Regulations Implementing Statutes Enacted During the Year 2016,
- Schedule B: Proposed Regulations Implementing Statutes Enacted Prior to the Year 2016.

**Health and Human Services Agency**  
**2017 RULEMAKING CALENDAR**

**SCHEDULE A: PROPOSED REGULATIONS IMPLEMENTING STATUTES ENACTED DURING THE YEAR 2016**

Subject: Lay Rescuer Epinephrine Auto-injector Regulations		CCR Title & Sections Affected: CCR Title & Sections Affected: § 100031. – 100043.		Statute(s) Being Implemented: Statute(s) Being Implemented: AB 1386, Chapter 374, Statutes of 2016  Health and Safety Code sections: 1797.107, 1797.197a, 1797.197	
Responsible Agency Unit: Emergency Medical Services Authority Personnel Standards Unit	Contact Person & Phone Number: Corrine Fishman (916) 431-3727	Projected Dates:			
		Notice Published: March, 2017	Public Hearing: May, 2017	Adoption by your agency: September, 2017	To OAL for review: October, 2017

**Health and Human Services Agency**  
**2017 RULEMAKING CALENDAR**

**SCHEDULE B: PROPOSED REGULATIONS IMPLEMENTING STATUTES ENACTED PRIOR TO THE YEAR 2016**

Subject: Paramedic Regulations		CCR Title & Sections Affected: Title 22, Division 9, Chapter 4 Sections 100135-100180	Statute(s) Being Implemented: AB 1598, Chapter 668, Statute of 2014. Health and Safety Codes 1797.107, 1797.172 and 1797.116			
Responsible Agency Unit: Emergency Medical Services Authority Personnel Standards Unit	Contact Person & Phone Number: Corrine Fishman (916) 431-3727	Projected Dates:				
		Notice Published: February, 2017	Public Hearing: April, 2017	Adoption by your agency: September, 2017	To OAL for review: October 2017	
Report on the status of all uncompleted rulemaking described on previous calendars: <ul style="list-style-type: none"> <li>Paramedic Regulations were projected to be open by October, 2016. This chapter is now projected to be opened in February 2017.</li> </ul>						
Subject: EMT Regulations		CCR Title & Sections Affected: Title 22, Division 9, Chapter 2 §100056 - §100086	Statute(s) Being Implemented: SB 1438, Chapter 491, Statutes of 2014. AB 1598, Chapter 668, Statute of 2014 Health and Safety Codes 1797.107, <b>1797.116</b> , <b>1797.170</b> , 1797.184, <b>1797.197</b>			
Responsible Agency Unit: Emergency Medical Services Authority Personnel Standards Unit	Contact Person & Phone Number: Corrine Fishman (916) 431-3727	Projected Dates:				
		Notice Published: 8/5/2016	Public Hearing: 9/27/2016	Adoption by your agency: March, 2017	To OAL for review: April, 2017	
Report on the status of all uncompleted rulemaking described on previous calendars: <ul style="list-style-type: none"> <li>The EMT Regulations are currently going through public comment periods.</li> </ul>						
Subject: Training Standards for Child Care Providers		CCR Title & Sections Affected: Title 22, Division 9, Chapter 1.1 §100000.1 - §100000.35	Statute(s) Being Implemented: AB 290, Chapter 734, Statutes of 2013. Health & Safety Codes 1596.865, 1596.866 and 1596.8661			

Responsible Agency Unit: Emergency Medical Services Authority Personnel Standards Unit	Contact Person & Phone Number: Corrine Fishman (916) 431-3727	Projected Dates:			
		Notice Published: February 2017	Public Hearing: April, 2017	Adoption by your agency: September 2017	To OAL for review: October 2017
Report on the status of all uncompleted rulemaking described on previous calendars: <ul style="list-style-type: none"> <li>These regulations have not been on any previous calendars.</li> </ul>					
Subject: EMS for Children		CCR Title & Sections Affected: Title 22, Division 9, Chapter 14, Section 100270		Statute(s) Being Implemented: Health and Safety Code Sections 1799.202, 204, and 205	
Responsible Agency Unit: Systems Division	Contact Person & Phone Number: Tom McGinnis (916) 431-3695	Projected Dates:			
		Notice Published: February, 2017	Public Hearing: April, 2017	Adoption by your agency: September, 2017	To OAL for review: October 2017
Report on the status of all uncompleted rulemaking described on previous calendars: The EMS for Children Regulations					
Subject: ST Elevation Myocardial Infarction (STEMI) Systems of Care		CCR Title & Sections Affected: Title 22, Division 9, Chapter 7.2, Sections 133270.100-144		Statute(s) Being Implemented: Health and Safety Code Sections 1797.103(d), 1797.176, 1797.220	
Responsible Agency Unit: Systems Division	Contact Person & Phone Number: Tom McGinnis (916) 431-3695	Projected Dates:			
		Notice Published: February 2017	Public Hearing: April 2017	Adoption by your agency: September, 2017	To OAL for review: October 2017
Report on the status of all uncompleted rulemaking described on previous calendars: The STEMI regulations are in final drafting and being prepared for submission to Agency for review prior to submission to OAL.					
Subject: Stroke Systems of Care		CCR Title & Sections Affected: Title 22, Division 9, Chapter 7.2, Sections 133270.100-144		Statute(s) Being Implemented: Health and Safety Code Sections 1797.103(d), 1797.176, 1797.220	
Responsible Agency Unit: Systems	Contact Person & Phone Number:	Projected Dates:			

Division	Tom McGinnis (916) 431-3695	Notice Published: February, 2017	Public Hearing: April, 2017	Adoption by your agency: September, 2017	To OAL for review: October 2017
<p>Report on the status of all uncompleted rulemaking described on previous calendars:  The Stroke regulations are in final drafting and being prepared for submission to Agency for review prior to submission to OAL.</p>					

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Priscilla Rivera, Manager  
Personnel Standards Unit

**SUBJECT:** Physician Orders for Life Sustaining Treatment (POLST) Registry Guidelines

**RECOMMENDED ACTION:**

Receive information regarding POLST eRegistry Pilot Project

**FISCAL IMPACT:**

None

**DISCUSSION:**

Decisions on end of life care for oneself and for that of loved ones are difficult for anyone to make. The Physician Orders for Life-Sustaining Treatment (POLST) is a process that encourages open and thoughtful discussion between physicians, and their patients regarding end of life care. In California, the POLST form allows a patient to clearly state what level of medical treatment is desired toward the end of life. POLST differs from advanced directives, because the form is signed by both the patient and the medical provider and represents a physician's order. SB 3000 (Wolk, Chapter 266, 2008) requires that POLST be honored in all care settings and gives immunity to medical providers who honor the document in good faith. SB 3000 also gave the EMS Authority (EMSA) oversight of this form, which is approved through the Commission on EMS.

To address the current limitations in accessibility to POLST information, in October 2015 California's Governor signed SB 19 (Wolk, Chapter 504, 2015) authorizing a POLST electronic registry (eRegistry) pilot project under the aegis of EMSA.

Partners/Stakeholders:

EMSA identified the California HealthCare Foundation (CHCF) and the California Coalition for Compassionate Care (the Coalition) as two partners with high level of involvement in the current POLST system. CHCF has worked to promote adoption of the POLST form in California since 2007, with the Coalition being a key grantee for efforts that have helped California become one of only three states (with OR and WV) to meet national guidelines on POLST adoption.

Pilot sites:

Two pilot sites were selected: City of San Diego California, led by the San Diego Health Connect (SDHC) and Contra Costa County, led by the Alameda Contra Costa Medical Association (ACCOMA). The software vendor contract has been awarded to Vynca.

These sites are currently working with the Coalition, CHCF and their local stakeholder groups to ensure that the provisions of SB 19 are appropriately implemented.

EMSA POLST eREGISTRY Coordination:

The EMSA POLST eRegistry pilot project coordinator: Lou Meyer

1. Is supporting EMSA's role in POLST eRegistry, serving as primary point of contact for key partners and contractors;
2. Convened a workgroup of Stakeholders to assist with the development of Guidelines for the operation of the POLST eRegistry;
  - a) A "Working Draft" of the Guidelines is being reviewed by the California Office of Health Information Integrity (CalOHI) prior to being sent back out to the Working Group for comment prior to being sent to the EMS Commission;
3. Is acting as state liaison to EMS Community in planning and implementation of the POLST registry within the pilot jurisdictions;
4. Is collaborating with the Coalition, CHCF and other stakeholder organizations, including local EMS agencies, technology vendors, and local coalition groups to identify issues, challenges and the development of solutions, as it relates to implementation of the POLST eRegistry.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Sean Trask, Chief  
EMS Personnel Division

**SUBJECT:** Ventura County EMS Agency's Air-Q Trail Study Report

**RECOMMENDED ACTION:**

Receive the preliminary 18-month report on the Ventura County EMS Agency's Air-Q Airway Device trial study and extend the trial study for an additional 18-month period.

**FISCAL IMPACT:**

None

**DISCUSSION:**

The EMS Authority approved a trial study request from the Ventura County EMS Agency to study the effectiveness of placing an Air-Q (supra-glottic) airway device in lieu of other advanced and basic airway management techniques on December 8, 2014. The Ventura County EMS Agency started enrolling patients on December 12, 2014. The 18-month report was due June 12, 2016. The same trial study was approved for Santa Barbara County which started enrolling patients on May 18, 2015, under the same local EMS agency medical director, Angelo Salvucci, MD.

**Description of the Device:**

The Air-Q airway is a supra-glottic airway device similar to the laryngeal mask airway that is inserted blindly and sits above the vocal cords.

**Description of Ventura County EMS System:**

Total number of ambulances in County: 33  
Total other ALS response vehicles: 27 (this includes 1 air squad)  
List of ALS agencies: AMR, Gold Coast, Lifeline, Ventura County Fire, Ventura City Fire, Ventura County Sheriff's SAR, Fillmore Fire Dept.

Anticipated locations of training: Moorpark, Camarillo, Oxnard, Ventura, Fillmore, Thousand Oaks, Ojai  
Total number of paramedics that need training: 252

### Purpose of the Study:

The purpose of this study is to evaluate the safety and effectiveness of the Air-Q airway when used by paramedics in the prehospital setting. The hypothesis of the study is that the Air-Q will be easier and quicker to insert than an endotracheal tube, provide better ventilation and aspiration protection than a bag-valve-mask, and be safer (risk of aspiration, reduction of carotid blood flow) than laryngeal tubes such as the King Airway.

For this trial study, the Air-Q would be used as an airway adjunct during cardiac arrest, respiratory failure with a decreased level of consciousness, or for an altered level of consciousness that requires an airway intervention. In the early part of the Ventura County arm of this trial study, the Air Q was the primary airway in cardiac arrests. In July of 2015 the Air-Q device was changed to an alternate airway for cardiac arrests if BLS airway management techniques were not successful. There were two reasons for this change:

1. The mechanism to secure the Air-Q was not adequate. This was later changed to a device similar to the ones used to secure endotracheal tubes.
2. The need for a larger diameter suctioning tube to suction vomitus from the bowl of the airway. The suctioning issue is being addressed through redesign by the manufacturer of the Air-Q and by using a different suctioning device.

### Outcomes:

Attached is the preliminary report that includes a table of outcome measures. There was a total of 270 patients with an attempt to place the device with completed documentation in 266 of those cases. This fell short of the initially estimated 720 uses of the device (40 cardiac arrests per month for 18-months). There were 9 failures to insert. Successful insertion was defined as “no air leak” or “small air leak”. There were 213 cases of successful insertion, for an overall success rate of 80.0%. Of the 70 patients (26%) that vomited, the device did not provide adequate suctioning in 34 of those 70 cases (48.6%). In 32 of the 70 cases (45.7%) with vomiting, the device did provide for adequate suctioning.

### Recommendation from Ventura County EMS Agency:

Ventura County EMS Agency is requesting an extension of the trial study to evaluate the new suction device and alternative insertion methods and will have more detail at the December 14, 2016 Commission on EMS meeting.

August 26, 2016

Howard Backer, MD, MPH, FACEP  
Director, California Emergency Medical Services Authority  
10901 Gold Center Drive, Suite 400  
Rancho Cordova, CA 95670

Dear Dr. Backer:

This is the 18-month report on the Ventura County EMS trial on the paramedic use of the air-Q sp.

On page 2 is a table of the results through July 2016. There has been a total of 270 patients with an attempt to place the device with complete documentation in 266. There were 9 failures to insert. We have defined a successful insertion as "no air leak" or "small air leak". There were 213 cases of successful insertion, for an overall success rate of 80.0%

The air-Q was initially made the primary airway device, to be utilized after initial cardiac arrest measures (CPR, defibrillation, vascular access, first medication(s)). Revisions in Cardiac Arrest Management training has been a confounder in evaluating cardiac arrest outcomes, but we did not see an improvement during the initial portion of the trial. Because of this we altered our airway treatment protocol in July 2015 to make the air-Q an optional advanced airway device, to be considered if bag-mask ventilation was inadequate.

The two primary concerns with the device was an inadequate securing mechanism and regurgitated stomach contents. An improved securing device, similar to a standard endotracheal tube holder, is now available. The manufacturer is working on a more effective suction mechanism to address regurgitation.

The role of supraglottic devices in the management of cardiac arrest patients remains unclear. Attached is a review by Drs. Carlson and Wang.

We plan to continue the trial to evaluate the new suction device and alternative insertion methods.

Sincerely,



Angelo Salvucci, MD, FACEP  
Assistant Medical Director

Ventura County EMS Agency  
 Use of air-Q  
 December 12, 2014 to July 31, 2016

Note: on July 10, 2015, the air-Q was moved in priority of airway management from primary to secondary, to be used only if BLS airway management techniques were not successful

Total patients with an attempt to place air-Q		270	%
Ease of Use	Very Easy to Use	69	25.5%
	Easy to Use	106	39.3%
	Neither Easy nor Difficult to Use	57	21.1%
	Difficult to Use	29	10.7%
	Impossible to Use	5	1.9%
	Not Documented	4	1.5%
Did patient vomit with air-Q?	Yes	70	25.9%
	No	196	72.6%
	Not Documented	4	1.5%
If vomiting, did air-Q allow adequate suctioning? (N=70)	Yes	32	45.7%
	No	34	48.6%
	Not Documented	4	1.5%
Did securing strap function well?	Yes	169	62.6%
	No	97	35.9%
	Not Documented	4	1.5%
Was seal adequate for ventilation?	Yes, no audible air leak noted	137	50.7%
	Small audible air leak noted	76	28.1%
	No, large audible air leak; unable to ventilate	44	16.3%
	NA, unable to insert	8	3.0%
	NA, "not placed due to rigor"	1	0.37%
	Not Documented	4	1.5%
Complications	NO complications	171	63.3%
	Failure to ventilate	46	17.0%
	Gastric distention	19	7.0%
	Bleeding	15	5.6%
	Unable to insert	11	4.1%
	Difficult to insert	3	1.1%
	Unable to insert "rigor"	1	0.37%
	Not Documented	4	1.5%

**TAKE-HOME MESSAGE**

In observational studies, intubation is associated with better outcomes than supraglottic airway devices in out-of-hospital cardiac arrest; however, the results of ongoing prospective trials are needed to confirm these findings.

**METHODS****DATA SOURCES**

The authors searched PubMed, Scopus, and the Cochrane Database through April 2014 for relevant articles. They also forward- and backward-searched the references of all identified articles and contacted experts in the field for additional articles.

**STUDY SELECTION**

Observational and experimental studies comparing intubation to any supraglottic airway (eg, laryngeal mask airway, King laryngeal tube, esophageal-tracheal twin-lumen airway device) in adult, nontraumatic, out-of-hospital cardiac arrest victims treated by emergency medical services were included.

**DATA EXTRACTION AND SYNTHESIS**

Two investigators independently assessed each study for quality and risk of bias, using the Grading of Recommendations Assessment, Development and Evaluation system. Key outcomes included return of spontaneous circulation, survival to hospital admission, survival to hospital discharge, and neurologically intact survival to hospital discharge. The authors calculated the odds ratios for each of the 4 outcomes for intubation versus supraglottic airway, using a random-effects

**Does Intubation Improve Outcomes Over Supraglottic Airways in Adult Out-of-Hospital Cardiac Arrest?****EBEM Commentators**

Jestin N. Carlson, MD, MS

*Department of Emergency Medicine*

*Saint Vincent Hospital*

*Erie, PA*

*Department of Emergency Medicine*

*University of Pittsburgh School of Medicine*

*Pittsburgh, PA*

Henry E. Wang, MD, MS

*Department of Emergency Medicine*

*University of Alabama at Birmingham*

*Birmingham, AL*

**Results**

Meta-analytic results of combined data for intubation versus supraglottic airway.

	ETI, n	SGA, n	OR (95% CI)
<b>All studies</b>			
ROSC	33,256	40,594	1.28 (1.05–1.55)
Neurologically intact survival to hospital discharge	28,911	38,918	1.33 (1.09–1.61)
<b>Sensitivity analysis*</b>			
ROSC	31,405	36,205	1.30 (0.94–1.81)
Neurologically intact survival to hospital discharge	28,749	38,416	1.33 (1.04–1.69)

ETI, Intubation; SGA, supraglottic airway; OR, odds ratio; CI, confidence interval; ROSC, return of spontaneous circulation.

\*Studies categorized as “very low” quality of evidence were not included in the sensitivity analysis.

Of 3,454 potential studies, the authors included 10 observational studies meeting inclusion, encompassing 34,533 intubation patients and 41,116 supraglottic airway patients. Intubation was associated with greater odds of return of spontaneous circulation, survival to hospital admission, and neurologically intact survival to hospital discharge compared with supraglottic airway; however, there was substantial heterogeneity reported for all of the outcomes

except for the neurologic outcome ( $I^2=20\%$ ). In the sensitivity analysis based on quality (ie, excluding the very-low-quality studies), intubation was associated only with greater odds of neurologically intact survival to hospital discharge.

**Commentary**

The ideal method for managing the airway during out-of-hospital cardiac arrest remains an area of controversy. Previous work

model, and reported on heterogeneity. The authors also performed sensitivity analyses based on the quality of individual studies and to account for included studies involving overlapping databases.

describes the numerous challenges associated with intubation in the out-of-hospital setting, including unrecognized endotracheal tube misplacement, multiple attempts, and interruptions in chest compressions.<sup>1,2</sup> Because of these pitfalls and the difficulty of maintaining proficiency in intubation, there has been a movement to use supraglottic airways in the out-of-hospital cardiac arrest population.<sup>3-5</sup> Although supraglottic airways may require less initial education and ongoing training for proficiency relative to intubation, there are other challenges that accompany supraglottic airway insertion.<sup>6,7</sup> The first-attempt success rate with supraglottic airways is lower in clinical practice than initially proposed.<sup>7,8</sup> Also, animal studies have suggested that supraglottic airways may impair carotid blood flow, potentially explaining the difference in long-term neurologic outcomes between supraglottic airways and intubation.<sup>9</sup> However, supraglottic airways did not appear to compress the carotid artery on cross-sectional computed tomography imaging in a limited series of patients resuscitated with supraglottic airways.<sup>10</sup> These recent works highlight the limited understanding of advanced airway maneuvers in the out-of-hospital cardiac arrest population and require additional study to further define their role in providing optimal out-of-hospital care.

All of the studies evaluated in the systematic review by Benoit et al<sup>11</sup> were observational and of low or very low quality of evidence. The authors did not identify any prospective trials comparing supraglottic airway to intubation in the out-of-hospital setting. Although observational data can help identify areas for further study and knowledge gaps in our understanding of airway management strategies, they are unable to fully account for the many sources of potential bias. The most prominent limitation of the included observational studies is confounding by indication; that is, the decision to use intubation or supraglottic airway may have been influenced by the clinical presentation of the patient. For example, intubation has long been advocated as the preferred airway management strategy in out-of-hospital cardiac arrest, and as such, providers may have favored intubation in patients who they suspected had a better chance of survival. Although a powerful technique, multivariable adjustment cannot fully overcome confounding by indication.<sup>12</sup>

Another key limitation to these observational data is a limited understanding of the proficiency of the provider performing the resuscitation. It is plausible that patients who receive intubation are resuscitated by providers with a different experience level than those resuscitated with supraglottic airways. Prospective randomized controlled trials are needed to overcome these limitations and determine the role of intubation and supraglottic airways in out-of-hospital cardiac arrest. Current efforts have established the feasibility of such trials, which are under way in the United Kingdom

and the United States<sup>13</sup>; the UK Airway Management in Cardiac Arrest Patients trial study (<http://www.isrctn.com> ISRCTN08256118) and the US Pragmatic Airway Resuscitation Trial (<http://www.clinicaltrials.gov> NCT02419573) will help answer this important clinical question.

Editor's Note: This is a clinical synopsis, a regular feature of the *Annals'* Systematic Review Snapshot (SRS) series. The source for this systematic review snapshot is:

**Benoit JL, Gerecht RB, Steuerwald MT, et al. Endotracheal intubation versus supraglottic airway placement in out-of-hospital cardiac arrest: a meta-analysis. *Resuscitation*. 2015;93:20-26. <http://dx.doi.org/10.1016/j.resuscitation.2015.05.007>.**

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- Michael Brown, MD, MSc, and Alan Jones, MD, serve as editors of the SRS series.*

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Sean Trask, Chief  
EMS Personnel Division

**SUBJECT:** Riverside County and Inland Counties EMS Agencies Tranexamic  
Acid Trial Study Report

**RECOMMENDED ACTION:**

1. Extend the Inland Counties tranexamic acid (TXA) trial study for an additional 18-month period.
2. Extend the Riverside County TXA trial study for an additional 18-month period.

**FISCAL IMPACT:**

None

**DISCUSSION:**

The EMS Authority approved a trial study requests from the Inland Counties EMS and the Riverside County EMS Agencies to study the role of prehospital administration of TXA to improve hemorrhagic shock outcomes and prevent massive internal bleeding by stabilizing clot formation and decrease extravascular bleeding in trauma patients. The Inland Counties EMS Agency began enrolling patients on March 18, 2015 and Riverside County started enrolling patients June 17, 2015. Attached is the combined Riverside and Inland Counties 18-month report. A similar TXA trial study has been approved in Alameda County.

**Methods:**

Trauma patients identified in the pre-hospital setting by paramedics with signs of hemorrhagic shock are administered 1 gram of TXA infused over 10 minutes. Upon arrival to the hospital, patients still meeting inclusion criteria will be administered a second dose of 1 gram of TXA infused over 8 hours. Patients who are administered TXA will make up the interventional group. Control group patients will exhibit similar injury severity scores (ISS), hemodynamic profiles and mechanism of injury as those who have been administered TXA. They will be chosen randomly from the trauma

registry at participating trauma centers. The primary outcome is mortality, measured at 24 hours, 48 hours, and 28 days. Additional outcomes to be measured include the total blood product units transfused during resuscitation efforts and during the hospital stay, as well as any known adverse events associated with TXA administration.

Results:

Preliminary analyses were conducted on the 128 patients included in the interventional group and 125 patients included in the control group. Analyses of primary outcome trends showed that the pre-hospital group had a lower 24 hours mortality rate (3.9% vs 7.2% for intervention and control, respectively,  $p=0.2519$ ), 48 hours mortality rate (6.3% vs 7.2% for intervention and control, respectively,  $p=0.7628$ ), 28 days mortality rate (6.3% vs 10.4% for intervention and control, respectively,  $p=0.2316$ ). Furthermore, it was noted that there was a reduced total blood product requirement following the administration of TXA. There was no significant difference observed in known adverse events associated with TXA administration in the interventional group.

Conclusions:

Early evidence from the Cal-PAT trial suggests that TXA decreases mortality and utilization of blood products in trauma-induced hemorrhagic shock. Additionally, it has been demonstrated that it is feasible for paramedics to identify and safely administer TXA to trauma patients in the pre-hospital setting.

Scope of Practice Committee Recommendation:

The Emergency Medical Services Medical Directors' Association of California Scope of Practice Committee reviewed the attached 18-month report and received a presentation from Dr. Michael M. Neeki at their September 20, 2016 meeting. The Scope of Practice Committee recommended continuation of this trial study for an additional 18-months.

**The role of tranexamic acid in pre-hospital traumatic hemorrhagic shock;  
preliminary outcomes from California Pre-hospital Anti-fibrinolytic Therapy (Cal-  
PAT) trial**

**List of Authors for the Cal-PAT trial:**

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## **ABSTRACT**

**Study Objectives:** The Cal-PAT trial seeks to assess the impact of tranexamic acid (TXA) administration on patient mortality in cases of trauma-induced hemorrhagic shock. In these initial analyses, we hope to provide evidence supporting the pre-hospital administration of TXA by paramedics in trauma patients with signs of hemorrhagic shock within the framework of North American emergency medicine standards and protocols.

**Methods:** This is an ongoing multi-centered, prospective cohort study with a retrospective chart review comparison. The pre-hospital administration of TXA began on March 15<sup>th</sup>, 2015. Trauma patients identified in the pre-hospital setting by paramedics with signs of hemorrhagic shock were administered 1 gram of TXA infused over 10 minutes. Upon arrival to the hospital, patients still meeting inclusion criteria will be administered a second dose of 1 gram of TXA infused over 8 hours. Patients who are administered TXA will make up the interventional group. Control group patients will exhibit similar injury severity scores (ISS), hemodynamic profiles and mechanism of injury as those who have been administered TXA. They will be chosen randomly from the trauma registry at participating trauma centers. The primary outcome is mortality, measured at 24 hours, 48 hours, and 28 days. Additional outcomes to be measured include the total blood product units transfused during resuscitation efforts and during the hospital stay, as well as any known adverse events associated with TXA administration.

**Results:** Preliminary analyses were conducted on the 128 patients included in the interventional group and 125 patients included in the control group. Analyses of primary outcome trends showed that the pre-hospital group had a lower 24 hours mortality rate (3.9% vs 7.2% for intervention and control, respectively,  $p=0.2519$ ), 48 hours mortality rate (6.3% vs 7.2% for intervention and control, respectively,  $p=0.7628$ ), 28 days mortality rate (6.3% vs 10.4% for intervention and control, respectively,  $p=0.2316$ ). Furthermore, it was noted that there was a reduced total blood product requirement following the administration of TXA. There was no significant difference observed in known adverse events associated with TXA administration in the interventional group.

**Conclusions:** Early evidence from the Cal-PAT trial indicates that TXA decreases mortality and utilization of blood products in trauma-induced hemorrhagic shock. Additionally, it has

been demonstrated that it is feasible for paramedics to identify and safely administer TXA to trauma patients in the pre-hospital setting.

## **BACKGROUND:**

Trauma accounts for more than five million deaths worldwide annually, equating to 9% of total mortality.<sup>1</sup> In the United States, traumatic injury is the leading cause of death amongst individuals aged 1 to 44 years old.<sup>2</sup> The direct economic burden as a result of trauma in the United States is substantial. In 2010, costs associated with unintentional traumatic injury exceeded \$113 billion, which included both medical and work-loss associated costs.<sup>3</sup> Trauma patients represent a heterogeneous group that are affected by a myriad of injury mechanisms. Following acute injury, blood loss threatens the body's ability to maintain hemodynamic stability. Nearly 25% of patients arriving to the emergency department present with an acute coagulopathy that often complicates management.<sup>4,5</sup> Up to 40% of mortality due to trauma-related injuries results from hemorrhagic shock.<sup>6,7</sup> Further, hemorrhagic shock represents the largest fraction of deaths, both within the pre-hospital setting and within the first hour of trauma care.<sup>6</sup>

Historically, paramedics have had no medications that specifically assist in the treatment of hemorrhagic shock secondary to trauma.<sup>6,8</sup> Early treatment of acute coagulopathies and hemorrhagic shock can significantly reduce preventable death.<sup>6,9-11</sup>

Tranexamic acid (TXA) is an anti-fibrinolytic agent that inhibits the activation of plasminogen to plasmin.<sup>12</sup> Plasmin, the active form of this enzyme, promotes clot breakdown and possesses pro-inflammatory capabilities.<sup>13-15</sup> TXA was approved by the Food and Drug Administration (FDA) in 1986 and the intravenous and oral forms are currently utilized in the United States for the treatment of hemophilia, heavy menstrual bleeding and during elective orthopedic and cardiac surgeries.<sup>14,16</sup> Known side effects include acute gastrointestinal disturbances, visual disturbances and rarely, vascular occlusive events including deep venous thrombosis (DVT) and pulmonary thromboembolism (PTE).<sup>14</sup> Based on the similarities between hemostatic changes in patients during surgery and trauma, as well as evidence from previous investigations, TXA may have the potential to reduce mortality in cases of trauma-induced hemorrhagic shock in the pre-hospital setting.<sup>8,17-20</sup> The administration of anti-fibrinolytic agents can

potentially reduce clot breakdown in the setting of hyper-fibrinolysis and has been suggested to improve patient outcomes in cases of trauma-induced hemorrhagic shock.<sup>18,21</sup>

The utilization of TXA in cases of traumatic injury has been evaluated in two previous large-scale studies. In 2010, the “Clinical Randomization of an Anti-fibrinolytic in Significant Hemorrhage 2” (CRASH-2) trial, a large, randomized, placebo-controlled trial, was conducted in the civilian setting to assess the effects of early TXA administration on trauma-related death, occlusive events and blood product transfusions. CRASH-2 demonstrated the potential effectiveness of TXA for use in trauma-related injuries with a 1.5% reduction in all-cause mortality at 28 days.<sup>17</sup> TXA was also determined to significantly reduce the risk of death due to bleeding, both immediately after injury and at 28 days.<sup>17</sup> In 2011, a subgroup analysis of the CRASH-2 trial showed early that treatment in the hospital setting with TXA less than one hour from the time of injury resulted in a 2.4% decrease in death due to bleeding.<sup>21</sup> Another CRASH-2 economic subset analysis highlighted the fact that utilization of TXA can be highly cost effective.<sup>22</sup>

In 2012, a retrospective observational study, the “Military Application of TXA in Trauma Emergency Resuscitation” (MATTERS) study, evaluated TXA use in combat related injuries. Results suggested that hospital administration of TXA in cases of combat-related injury reduced all-cause mortality in comparison to those not administered TXA (17.4% vs 23.9%, respectively;  $p = .03$ ).<sup>18</sup> In both studies, the occurrences of DVT and PTE events were assessed. The CRASH-2 trial noted no difference in thromboembolic events between patients allocated TXA versus a placebo treatment.<sup>17</sup> The MATTERS study noted a small increase in the incidence of thromboembolic events in patients administered TXA versus no TXA – PTE (2.7%) and DVT (2.4%) rates in patients receiving TXA.<sup>18</sup> From these two large trials, it appears that TXA may show potential benefit in the pre-hospital setting to treat hemorrhagic shock.

In previous studies, TXA was administered only within the hospital setting.<sup>17,18</sup> Two small studies have demonstrated the feasibility of TXA administration in the pre-hospital setting.<sup>19,20</sup> The goal of the Cal-PAT trial is to provide reliable evidence supporting the pre-hospital administration of TXA by paramedics in trauma patients with signs of hemorrhagic shock within the framework of North American emergency medicine standards and protocols. In addition, Cal-PAT will assess the mortality, total blood product usage and the

known side effect profile of TXA utilization. This report outlines the preliminary results of the ongoing Cal-PAT trial, particularly in regards to the safety and practicality of TXA administration by paramedics in the pre-hospital setting.

## **METHODS:**

**Settings:** The Cal-PAT trial is a multi-centered, prospective cohort study with a retrospective chart review comparison, aimed to determine the effect of early administration of TXA in cases of trauma-related hemorrhagic shock. The hospital administration of TXA began on June 1<sup>st</sup>, 2014 and the pre-hospital administration of TXA began on March 15<sup>th</sup>, 2015. The delayed onset of TXA administration in the pre-hospital group was due to the need for approval by local and state EMS regulatory agencies as well as personnel training for administration in the pre-hospital setting. This trial was first initiated in two Southern California counties – San Bernardino and Riverside County. In early 2016, an additional trauma center located in Alameda County joined the study. Further, more sites within California are scheduled to begin data collection in the near future. This preliminary report only includes data collected in San Bernardino and Riverside County.

**Patients:** All patients  $\geq 18$  years of age who have sustained blunt or penetrating trauma with signs and symptoms of hemorrhagic shock are considered for TXA treatment upon meeting the inclusion criteria (Table 1). Patient selection is determined in the pre-hospital setting by licensed paramedics on ground ambulances and registered nurses on helicopter transport units. Additionally, first responders have access to real-time consultation from physicians at the participating trauma centers to address any concern regarding patient selection or TXA administration.

Patients are currently being enrolled into two groups for this prospective cohort study, with a third group formed through a chart review comparison (Table 2). The interventional group includes patients who received TXA and is divided into the pre-hospital and hospital sub-divisions based upon location of the administration of the first TXA dose. Approximately 200 patients will be enrolled in each sub-division for a total of 400 patients in the interventional group. The control group will enroll patients through a

matched chart review comparison and total approximately 400 patients or a total that matches the interventional group. Control group patients will exhibit similar injury severity scores (ISS), hemodynamic profiles and mechanism of injury as those patients who have been administered TXA. Control group patients were chosen randomly from the trauma registry at participating trauma centers without knowing the mortality, total blood loss and side effect to minimize the bias. Patients included in the control group will be subject to the same inclusion criteria as those in the pre-hospital group.

The primary outcome is mortality, measured at 24 hours, 48 hours, and 28 days. Additional outcomes to be measured include the total blood product units transfused during resuscitation efforts and during the hospital stay, as well as any known adverse events associated with TXA administration. Other characteristics that are also being collected include the mechanism of injury (blunt or penetrating), gender, age and ISS.

TXA is administered in two doses following the protocol utilized in the CRASH-2 study.<sup>17</sup> The first dose is 1 gram of TXA in 100 ml of 0.9% normal saline infused over 10 minutes via intravenous or interosseous access. It is administered as soon as possible by first responders or at participating hospitals. A green colored wristband labeled "TXA" attached to their right wrist and/or TXA written on their chest identifies patients who received TXA. Following arrival at a participating trauma center, patients who received pre-hospital TXA are identified and re-assessed by the trauma team members for signs of hemorrhagic shock. Patients that still meet the inclusion criteria (Table 1) will receive a second dose of 1 gram of TXA in 100 ml of 0.9% normal saline infused over 8 hours via intravenous infusion.<sup>17</sup> Patients who meet the inclusion criteria, but were not given pre-hospital TXA because they arrived to the emergency department (ED) via non-participating EMS agencies or by other means, will be administered both doses of TXA in the hospital (analyses of the outcomes of hospital TXA administration will take place in future reports).

**Statistical Analysis:** All statistical analyses were conducted using the SAS software for Windows version 9.3 (Cary, North Carolina, USA) and R version 3.3.1. Descriptive statistics were presented as means and standard deviations for continuous variable, and frequencies and proportions for categorical variables. Two groups, intervention group (TXA) and control group (no TXA), were compared with regards to the clinical outcomes, including 24

hours, 48 hours, and 28 days mortality (alive or dead), total blood product measured in units, and known adverse events at hospital discharge. These comparisons of clinical outcomes between the intervention and control groups were conducted using Chi-square (or Fisher's exact test if the expected cell count <5) for categorical variables, and independent t-test for the total blood product. A propensity score matching method using R package "MatchIt" was conducted to select patients from the control group to match the counterpart in the intervention group based on ISS and age. In order to reduce bias, the selection of the control group was random and the biostatistician did not know the outcome of interest. All statistical analyses were two-sided. P-value<0.05 was considered to be statistically significant.

The Institutional Review Board at each participating hospital approved the protocols for the Cal-PAT trial. Based on evidence in prior studies, the current massive transfusion protocol utilized by the involved trauma centers has been updated to include TXA as a standard of care for patients identified with signs of hemorrhagic shock secondary to traumatic injury. As such, the administration of TXA in these patients is exempt from informed consent.

## **Results:**

A total of 156 patients were identified in the original pre-hospital intervention group. After the exclusion of 28 patients who were dead on arrival (n=4), non trauma or transferred out of the participating counties (n=19) and patients <18 years of age (n=5), 128 patients were included in the interventional group final analysis (see Figure 1 for sample size flow chart). More than half (59.4%, n=76 of 128) were patients who had experienced a penetrating traumatic injury and the remaining 40.6% (n=52 of 128) were those who had experienced a blunt force traumatic injury.

A total of 333 patients were identified for the original control group and included in the database. Noticing the significantly smaller proportion of penetrating trauma (21.6%, 72 of 333), a sample of 53 (of 261) patients from the blunt trauma group were matched based on ISS and age with the intervention blunt group. As a result, a total of 53 (42.4%) blunt trauma and 72 (57.6%) penetrating trauma were included as the final control group (N=125, see Figure 1 for sample size flow chart).

Table 3 presented the analysis results of comparing patients' characteristics between the control and intervention group. Both groups had similar percentages of penetrating trauma (control: 57.6%; intervention: 59.4%,  $p=0.7745$ ), similar percentages of males (control: 83.2%; intervention: 80.5%,  $p=0.5733$ ), and similar age (control: 39.06; intervention: 38.23,  $p=0.6819$ ). However, there is a statistically significant ISS difference between these two groups (control: 17; intervention: 12.96,  $p=0.0014$ ).

Table 3 also presented the analysis results of comparing clinical outcomes between the control and intervention group. The EMS group had a lower 24 hours mortality rate (control: 7.2%; intervention: 3.9%,  $p=0.2519$ ), 48 hours mortality rate (control: 7.2%; intervention: 6.3%,  $p=0.7628$ ), and 28 days mortality rate (control: 10.4%; intervention: 6.3%,  $p=0.2316$ ). The intervention group received significantly less blood products (in units) than the control group (control: 6.95 units; intervention: 4.09 units;  $p=0.0135$ ). Lastly, there were two patients from each group that experienced DVTs at hospital discharge.

A subgroup analysis of the intervention group was conducted to identify the difference between one dose and two doses of TXA. Table 4 presented the analysis results. There is no difference regarding the mechanism of injury, gender, age and ISS between these two subgroups (all  $p$ -values  $>0.05$ ). Regarding the clinical outcomes, there is no statistically significant difference between the one dose and two dose subgroup regarding 24 hours mortality (one dose: 3.8%; two doses: 4%), 48 hours mortality (one dose: 5.7%; two doses: 6.7%) and 28 days mortality (one dose: 6.7%; two doses: 5.7%). There was no difference regarding the known adverse events at hospital discharge. The two patients with DVTs were in the two doses subgroup. Lastly, the two dose TXA subgroup used more units of blood products (one dose: 2.45 units; two doses: 6.39 units,  $p=0.0079$ ).

## **Discussion:**

Cal-PAT was conceived through a collaborative effort between multiple high-volume, university-affiliated trauma centers located throughout California. The overall goal is to provide reliable evidence supporting the early administration of TXA to patients with signs of hemorrhagic shock following a traumatic injury. Initial analyses focus on the pre-

hospital aspects of TXA administration. Hospital administration of TXA will be addressed in future analyses as the Cal-PAT trial continues.

The preliminary results from the ongoing Cal-PAT trial suggest that early pre-hospital administration of TXA is beneficial in patients showing signs of trauma-related hemorrhagic shock. Initial data shows trends of reduced mortality in these cases, which is consistent with the findings of the CRASH-2 and MATTERS studies and extends the knowledge of TXA administration into the pre-hospital setting.<sup>17,18</sup> These results further demonstrate that TXA may be another valuable tool within the established infrastructure of United States civilian emergency medicine services. To our knowledge, this is the first large-scale study to systematically examine the pre-hospital administration of TXA in the United States. Though initial results do not represent statistically significant values, we anticipate an improvement in statistical outcomes as data collection continues and the sample size increases.

Early analysis of data suggests that TXA reduces mortality at both 24 hours and 48 hours in cases of trauma-induced hemorrhagic shock. Previous studies indicate that TXA exerts its effect through its anti-fibrinolytic properties.<sup>14,23</sup> In patients who have sustained significant blood loss, a state of fibrinolysis and hyper-fibrinolysis can be found in up to two-thirds of patients.<sup>8,17,23,24</sup> This can threaten clot integrity and result in increased blood loss, morbidity and mortality.<sup>23</sup> TXA may act to prevent and reverse coagulopathies and reestablish hemodynamic stability. However, TXA appears to exert effect beyond 24 hours, after the risk of bleeding has decreased.<sup>6</sup> This suggests that another mechanism may be responsible for the decreased mortality observed at greater than 48 hours. Studies have suggested that TXA may decrease plasmin levels, reducing the magnitude of the pro-inflammatory effect exerted by plasmin.<sup>15,25</sup> Although the exact mechanism is not clear, this evidence demonstrates that the therapeutic mechanism may be multifactorial in nature.

Assessment of preliminary results shows a trend of reduced total blood products usage following the administration of TXA. This further suggests that TXA may exert an immediate effect through its anti-fibrinolytic properties. Alternatively, this decreased usage of blood products may be attributed to a difference in overall ISS score between the interventional and control group.

In comparison to previous large-scale TXA trials, CRASH-2 showed no increase in total blood products used, while the MATTERS trial showed an increase in blood products used.<sup>17,18</sup> This difference in usage of blood products could be explained by the fact that TXA is given in the pre-hospital setting for the Cal-PAT trial, as opposed to at the hospital upon patient arrival as seen in the CRASH-2 and MATTERS trials.<sup>17,18</sup> Early administration of TXA in the pre-hospital setting may have allowed more time for a patient to be affected by the therapeutic effects of TXA. An exploratory analysis of CRASH-2 data suggests that early administration of TXA to trauma patients within 1 hour of injury significantly reduces mortality due to hemorrhagic shock in the United Kingdom.<sup>17</sup> The current results of the Cal-PAT trial indicate that the median time for paramedics to administer TXA after arriving on scene is 34 minutes (interquartile range (24, 45)). As such, demonstration of the feasibility of TXA administration by paramedics is essential toward reducing the time to the first dose of TXA in order to maximize the potential effectiveness of treatment.

Regarding known adverse events associated with TXA administration, an equal frequency of these events between the control and interventional group was noted. This may indicate that TXA administration does not significantly increase the risk for thromboembolic events such as a DVT or PTE. These preliminary results are consistent with CRASH-2 trial results, but do not align with MATTERS trial outcomes, which showed a slight increase in thromboembolic events in patients administered TXA.<sup>17,18</sup>

During the 15 months since implementation, a steady increase in the number of appropriate patients enrolled has been observed. Correct identification of TXA candidates was initially an obstacle. Paramedics indicated that a small percentage of patients, roughly 3% of the initial interventional group, lacked adequate identification, were unresponsive to questioning and were judged based on physical appearance to be older than their actual age. These events triggered immediate protocol reviews as well as continued and repeated education for first responders arranged by trauma coordinators in each EMS agency. Further, real-time consultation by senior investigators is available to paramedics to aid in determining if patients meet the inclusion criteria for TXA administration. Investigators also conduct quality control after each case within 24 hours and meetings with all hospitals and EMS agencies involved are held monthly to review cases and update protocols. Besides increased paramedic education, additional hospital sites throughout California have

become involved. This trend is similar to other studies that assessed the implementation of TXA use for trauma-related hemorrhage.<sup>8</sup>

Literature also notes that though TXA is known to reduce blood loss in cardiopulmonary and orthopedic surgeries, however, the exact dosing scheme is unclear, ranging from 2.5 to 100mg/kg and maintenance doses from 0.25mg/kg/hr to 4mg/kg/hr.<sup>26-29</sup> Previous studies have shown no significant difference in mortality benefit between low and high doses of TXA.<sup>30,31</sup> In emergency situations, a fixed 1 gram dose has been deemed most practical followed by a 1 gram maintenance dose.<sup>17</sup> Following initial analysis of the Cal-PAT trial data, over 40% of patients in the interventional group received only the first dose of TXA. This may have occurred when a patient no longer satisfies the inclusion criteria for TXA administration upon arriving at a participating trauma center or due to lack of compliance and adherence to research protocol. Initial analyses suggested that there might be little difference in mortality between those receiving one dose versus two doses of TXA. If sufficient anti-fibrinolytic effect and anti-inflammatory effect occur with only a single dose, this challenges the apparent need for a maintenance dose following an initial loading dose. The exact half-life and duration of maintained therapeutic level of TXA is unclear in present literature; however, reports have indicated 2-3 hours and approximately 8 hours respectively depending on the dosages.<sup>32-34</sup> We anticipate that a further examination of Cal-PAT trial data overtime and continuous data collection may further clarify the optimal dosing protocol for TXA in cases of trauma-related hemorrhagic shock.

There are some limitations to this study. It may be difficult to accurately recognize and diagnose all cases of trauma-related hemorrhage associated with traumatic injury in the field. As such, patients that would have qualified for this study may not have received TXA, while others who did not qualify may have received TXA. Future incidences will be reduced through active troubleshooting, quality control and paramedic education.

## **Conclusion:**

Early evidence from the Cal-PAT trial indicates that TXA administration decreases mortality and utilization of blood products in cases of trauma-induced hemorrhagic shock. Additionally, the feasibility of pre-hospital identification and administration of TXA by paramedics

has been demonstrated. TXA was able to be administered safely and effectively by paramedics on scene and while en route to the hospital. Future continuation of data collection will enable us to explore the necessity for a second dose of TXA administered upon arrival to the hospital.

At present, the current study indicates that TXA is a viable option to reduce mortality in civilian pre-hospital trauma care. With the completion of the Cal-PAT trial, we hope to further develop TXA pre-hospital administration protocol and support widespread implementation of TXA in the pre-hospital setting.

**Funding:** None

**Conflicts of interest:** None

Table 1: Inclusion and exclusion criteria

Inclusion Criteria	Exclusion Criteria
<p>The hospital and prehospital use of TXA should be considered for all trauma patients that meet <b>any</b> of the following criteria:</p> <ul style="list-style-type: none"> <li>• Blunt or penetrating trauma with signs and symptoms of hemorrhagic shock.</li> <li>• Systolic blood pressure of less than 90 mmHg at scene of injury, during air or/and ground medical transport, or on arrival to designated trauma centers</li> <li>• Any Sustained Blunt or Penetrating injury within 3 hours</li> <li>• Patients who are considered to be high risk for significant hemorrhage               <ul style="list-style-type: none"> <li>○ Estimated blood loss of 500 milliliters in the field accompanied with HR &gt;120.</li> <li>○ Bleeding not controlled by direct pressure or tourniquet.</li> </ul> </li> <li>• Major amputation of any extremity above the wrists and above the ankles.</li> </ul>	<ul style="list-style-type: none"> <li>• Any patient under 18 years of age.</li> <li>• Any patient with an active thromboembolic event (within the last 24 hours) – i.e. active stroke, myocardial infarction or pulmonary embolism.</li> <li>• Any patient with a hypersensitivity or anaphylactic reaction to TXA.</li> <li>• Any patient more than three-hour post injury.</li> <li>• Traumatic arrest with &gt; 5 minutes CPR without return of vital signs</li> <li>• Penetrating cranial injury</li> <li>• Traumatic brain injury with brain matter exposed</li> <li>• Isolated drowning or hanging victims</li> <li>• Documented cervical cord injury with motor deficit</li> </ul>

Table 2: Classification of enrolled patients

<b>Interventional Group</b>		<b>Control Group</b>
<b>Pre-Hospital Sub-division</b>	<b>Hospital Sub-division</b>	
Patients received their first dose of TXA in the pre-hospital setting and the second dose of TXA upon arrival to the trauma center	Patients received both doses of TXA upon arrival to the trauma center	Patients chosen randomly through a chart review comparison using trauma registry with similar ISS, hemodynamic profiles and mechanism of injury to patients receiving TXA

Figure 1: Patient Sample Size Flow Chart

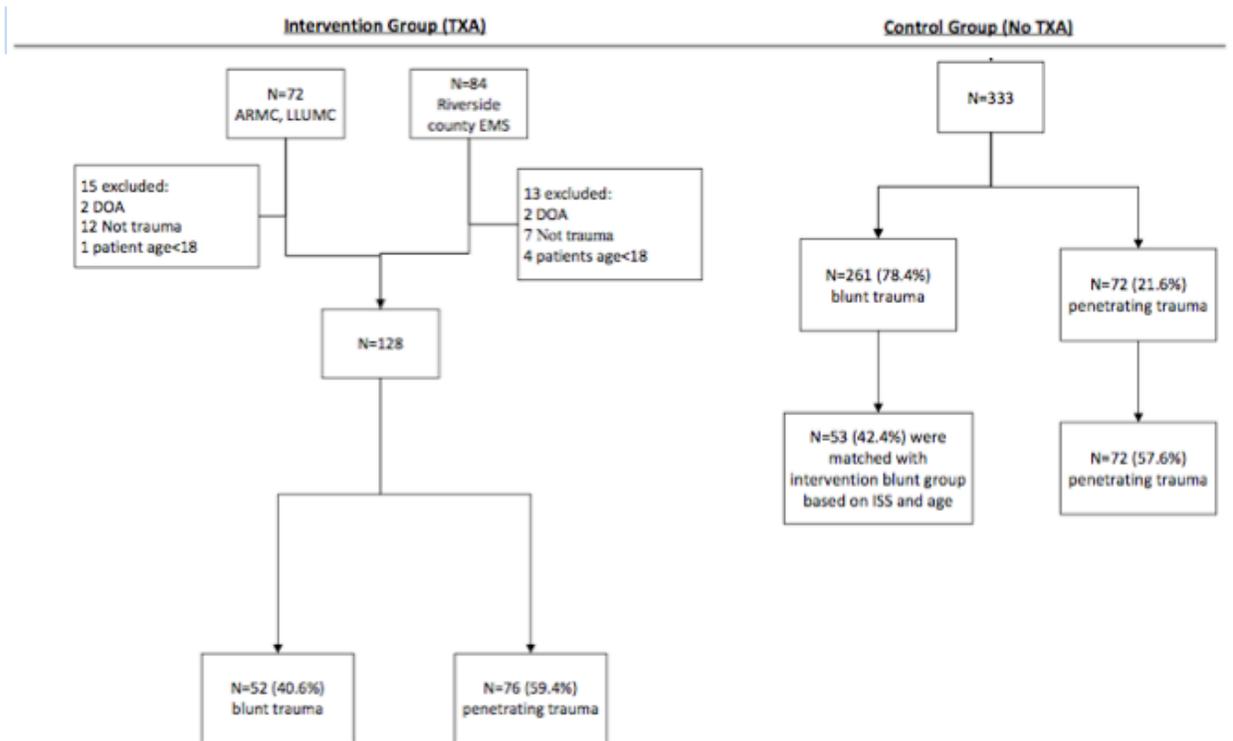


Table 3: Patient outcome by the control and intervention group

	<b>Control Group (No TXA) (n=125)</b>	<b>Intervention group (TXA) (n=128)</b>	P-value
Mortality at 24 hours			0.2519
Alive	116 (92.8%)	123 (96.1%)	
Dead	9 (7.2%)	5 (3.9%)	
Mortality at 48 hours			0.7628
Alive	116 (92.8%)	120 (93.8%)	
Dead	9 (7.2%)	8 (6.3%)	
Mortality at 28 days			0.2316
Alive	112 (89.6%)	120 (93.8%)	
Dead	13 (10.4%)	8 (6.3%)	
Total blood products used (in units), mean $\pm$ SD	6.95 $\pm$ 9.93	4.09 $\pm$ 8.33	0.0135
Adverse events at Hospital discharge**			0.6839
DVT	2 (1.6%)	2 (1.6%)	
None	123 (98.4%)	126 (98.4%)	
Mechanism of Injury			0.7745
Blunt	53 (42.4%)	52 (40.6%)	
Penetrating	72 (57.6%)	76 (59.4%)	
Gender			0.5733
Female	21 (16.8%)	25 (19.5%)	
Male	104 (83.2%)	103 (80.5%)	
Age, years, mean $\pm$ SD	39.06 $\pm$ 16.66	38.23 $\pm$ 15.48	0.6819
ISS, mean $\pm$ SD	17 $\pm$ 10.74	12.96 $\pm$ 9.03	0.0014

\* all percentages were column percentages. In other words, the percentages added up to 100% by column for each variable.

\*\*the calculation of p-values for adverse event at hospital discharge was based Fisher's exact test.

Table 4: Subgroup analysis of the intervention group

	<b>Prehospital 1 Dose of TXA (1 dose group) (n=75)</b>	<b>1 Prehospital + 1 hospital dose of TXA (2 doses group) (n=53)</b>	P-value
Mortality 24 hours			0.9481
Alive	72 (96%)	51 (96.2%)	
Dead	3 (4%)	2 (3.8%)	
Mortality 48 hours			0.8168
Alive	70 (93.3%)	50 (94.3%)	
Dead	5 (6.7%)	3 (5.7%)	
Mortality 28 days			0.8168
Alive	70 (93.3%)	50 (94.3%)	
Dead	5 (6.7%)	3 (5.7%)	
Total blood product (in units), mean ± SD	2.45 ± 6.38	6.39 ± 10.12	0.0079
Adverse event at Hospital discharge**			0.1695
DVT	0	2 (3.8%)	
None	75 (100%)	51 (96.2%)	
Mechanism of Injury			0.8461
Blunt	31 (41.3%)	21 (39.6%)	
Penetrating	44 (58.7%)	32 (60.4%)	
Gender			0.5407
Female	16 (21.3%)	9 (17%)	
Male	59 (78.7%)	44 (83%)	
Age, years, mean ± SD	38.19 ± 16.84	38.3 ± 13.49	0.9671
ISS, mean ± SD	11.85 ± 8.43	14.53 ± 9.67	0.0989

\*\*the calculation of p-values for adverse event at hospital discharge was based Fisher's exact test.

## Resources

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**EMERGENCY MEDICAL SERVICES AUTHORITY**

10901 GOLD CENTER DR., SUITE 400  
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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Priscilla Rivera, Manager  
Personnel Standards Unit

**SUBJECT:** Community Paramedicine Pilot Project

**RECOMMENDED ACTION:**

Receive information regarding the Community Paramedicine Pilot.

**FISCAL IMPACT:**

The Community Paramedicine Project Manager and the Evaluator are funded by the California HealthCare Foundation. Local pilot site providers participate with in-kind contributions.

**DISCUSSION:**

Strong progress continues with all of the Community Paramedicine Projects. The early data shows that most of these projects have improved patient care as well as having reduced Hospital Re-Admissions.

**Data Submission:**

All Pilot Project site partners have submitted 2<sup>nd</sup> Quarter Phase III Implementation Data to the Philip R. Lee Institute for Health Policy Studies UCSF evaluation team. UCSF in turn has submitted their initial analysis of the early data to OSHPD for their review and comment which reveals the following:

**Decreases in:**

1. 30-day readmission rates for patients enrolled in post-discharge projects
2. Transport of hospice patients and behavioral health patients to ED's
3. ED visits among frequent 911 callers

Increase in:

1. Patient knowledge of how to manage chronic illness
2. Access to medical and social services
3. Number of TB patients receiving timely DOT

OSHPD Continuing Approval Request:

On November 14, 2014 the Office of State Health Planning and Development (OSHPD) approved a one year Health Workforce Pilot Project sponsored by the California Emergency Medical Services Authority (EMSA) pursuant to Health and Safety Code Section 128125 to pilot the concept of Community Paramedicine using 12 Pilot Sites located throughout California.

Additionally on September 8, 2015, EMSA filed for and the OSHPD Director approved a Continuing Approval Request of HWPP #173 Community Paramedicine Pilot Project, as provided within Section 92604 of the California Code of Regulations through November 14, 2016.

EMSA's filed for an additional one year extension of HWPP #173 Community Paramedicine Pilot Project on September 14, 2016, as provided within Section 92604 of the California Code of Regulations, with the inclusion of a request to add the San Francisco City and County Alternate Destination Sobering Center project to HWPP #173. This Continuing Approval request, including the addition of the San Francisco project, was approved through November 13, 2017 by the Director of OSHPD, and will allow EMSA and UCSF further time to gather additional data and allow for further analysis of the efficacy of the individual concepts.

CP 014 San Francisco City and County Alternate Destination Sobering Center Status:

OSHPD's authorization to add CP 014 City and County of San Francisco's Alternate Destination Sober Center Pilot Project to HWPP #173 is contingent upon the City and County of San Francisco successfully meeting all the requirements for implementation inclusive of an approved Institutional Review Board (IRB) and receiving final approval for implementation from EMSA and OSHPD.

In view of the above, CP 014 has filed for an IRB and is in the process of setting up its required Community Paramedicine Training Program.

Community Paramedicine Symposium – San Diego:

EMSA, with the support of the California HealthCare Foundation, held a Community Paramedicine Symposium on September 22, 2016 at the Holiday Inn Bayside Hotel in San Diego, which had approximately 200 attendees representing all stakeholder groups; successes and lessons learned were discussed by the Pilot Project participants.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Corrine Fishman, Policy and Program Analyst

**SUBJECT:** EMT Regulation Revisions

**RECOMMENDED ACTION:**

Receive information regarding revisions to the EMT Regulations.

**FISCAL IMPACT:**

The proposed regulations would require EMT training programs to increase their hours of training from the current minimum of 160 hours to the proposed minimum of 170 hours to include additional training in the administration of Naloxone, epinephrine, the use of glucometer (measures blood sugar level) and tactical casualty care principles.

The initial costs to obtain these training materials are estimated at \$1,500 - \$2,000. The total increased cost per EMT training program is estimated to be \$3,182.

**DISCUSSION:****Background:**

SB 1438 (Pavley, Chapter 491, 2014) requires all EMS personnel, including EMTs, to be trained in the administration of naloxone hydrochloride by July 1, 2016. This is currently an EMT optional skill; advanced EMTs and paramedics are currently trained in the administration of naloxone. The EMS Authority (EMSA) is also proposing to add training in the administration of epinephrine by auto-injector as a result of SB 669 (Huff, Chapter 725, Statutes of 2013), which required EMSA to develop lay rescuer epinephrine regulations. Further, EMSA has revised the public safety regulations to allow public safety personnel to administer epinephrine as an optional skill. Tactical casualty care was added to include the statutory elements found in AB 1598 (Rodriguez, Chapter 668, Statutes of 2014) that provide for additional requirements regarding coordination between law enforcement and emergency medical services personnel during terrorism incidents or active shooter events.

Proposed revisions:

With this rulemaking, the EMS Authority is proposing to:

1. Amend existing EMT regulations by removing naloxone hydrochloride administration as an EMT *optional skill* and include the administration of naloxone hydrochloride as a mandatory training item. The administration of naloxone will still require local EMS agency (LEMSA) approval.
2. Add training in the administration of epinephrine by auto-injector and the use of a glucometer. The use of a glucometer and an epinephrine auto-injector will require LEMSA approval.
3. The use of an epinephrine auto-injector will be removed from the EMT Optional Skills section and moved to basic scope, and it will be replaced as an optional skill with drawing up epinephrine for administration for anaphylaxis, requiring LEMSA approval.
4. Add tactical casualty care principles to required course content.
5. Remove the skills-based competency verification form and replace it with 6 hours of skills-based continuing education for recertification.
6. Increase the minimum required course hours from 160 to 170 to include naloxone, epinephrine, glucometer training and tactical casualty care principles.
7. Move the monitoring of preexisting vascular access devices and intravenous lines delivering fluids with additional medications from a basic skill to an optional skill to clarify this is a local optional request.
8. Provide clarity and consistency with the NREMT registration requirements.
9. Provide clarification of the initial certification pathways.

Public comment suggestions under consideration:

1. Removing the skills-based competency verification form and replacing it with 6 hours of skills-based continuing education.
2. Waiving the test for EMT reinstatement (lapsed certification 12 months or more) if the person has an AEMT certification or paramedic license.
3. 2 year certification cycle periods for all EMT certifications.
4. Require BLS providers to submit an electronic patient care report for consistency with AB 1129.

Implementation steps and timeline:

EMT Regulation Revisions

December 14, 2016

Page 3

July 26, 2016	Rulemaking file opened with Office of Administrative law; regulations must be approved within one year.
August 5, 2016	The proposed regulations were released for 45-day public comment August 5, 2016 through September 27, 2016. A public hearing was held at EMSA on September 27, 2016.
November 2016	Proposed regulations released for 15-day public comment periods as needed.
March 2017	Proposed regulations submitted to Commission on EMS for approval
April 1, 2017	Regulations submitted to OAL for approval.
July 1, 2016	Regulations become effective.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Tom McGinnis, EMT-P  
Chief, EMS Systems Division

**SUBJECT:** EMS Plan Appeal Update

**RECOMMENDED ACTION:**

Receive information on the status of the EMS Plan Appeal Regulations.

**FISCAL IMPACT:**

Unknown specific costs to the EMS Authority and local EMS agencies who request the ability to exercise their right to appeal an EMS plan determination made by the EMS Authority.

**DISCUSSION:**

There are currently two local EMS agencies (LEMSA) that have filed appeals to EMS Plan determinations.

The first EMS Plan Appeal hearing will take place March 22-24, 2017 for determinations made related to Kern County's EMS Plan. Scheduling for an appeal hearing for El Dorado County is currently in process.

The Commission will be updated on the status of appeal hearings at future Commission meetings.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Kathy Bissell  
Transportation Coordinator

**SUBJECT:** Ambulance Patient Offload Time (APOT) Methodology Guidelines

**RECOMMENDED ACTION:**

Approve APOT Methodology and Reporting Guidance and APOT 1 and APOT 2 Specifications

**FISCAL IMPACT:**

Unknown cost to the EMS Authority and local areas to collect, report, and display the APOT data.

**DISCUSSION:**

AB 1223 went into effect on January 1, 2016 and mandated that the EMS Authority (EMSA) develop a statewide methodology for calculating and reporting ambulance patient offload times by a local EMS agency (LEMSA). This statewide, standard methodology will be based on input received from stakeholders, including but not limited to: hospitals, LEMSAs, public and private EMS providers and must be approved by the Commission on EMS.

On August 30<sup>th</sup> EMSA re-convened the working group, to further discuss amendments to the matrix along with the Standardized Methods for Data Collection and Reporting document that will accompany the matrix.

The APOT Methodology and Reporting Guidance document is before the Commission for the first time and the APOT 1 and APOT 2 documents are presented with additional input since the last Commission review. The EMS Authority is requesting approval of these documents so that they can be implemented.

***APOT–1: Ambulance Patient Offload Time for Emergency Patients?***

- Report aggregate values by:
  - 1) LEMSA
  - 2) Individual hospital
- Report the 90 percentile time calculated and the denominator (number of 911 transports to emergency department with time stamp data available)
- Report Quarterly

***APOT–2: Duration of Ambulance Patient Offload Time for Patients transported to the Emergency Department by 911 response emergency ambulance.***

- 2.1: What percentage of patients transported by EMS personnel experience a transfer of care within 20 minutes of arrival at the Hospital Emergency Department?
- 2.2: What percentage of patients transported by EMS personnel experience a transfer of care between 21 - 60 minutes of arrival at the Hospital Emergency Department?
- 2.3: What percentage of patients transported by EMS personnel experience a transfer of care between 61 - 120 minutes after arrival at the Hospital Emergency Department?
- 2.4: What percentage of patients transported by EMS personnel experience a transfer of care between 121 - 180 minutes after arrival at the Hospital Emergency Department?
- 2.5: What percentage of patients transported by EMS personnel experience a transfer of care more than 180 minutes after arrival in the Hospital Emergency Department?

- Report aggregate values by:
  - 3) LEMSA
  - 4) Individual hospital
- Report the % calculated and the denominator used to calculate (911 transports to emergency department)
- Report Quarterly, within 2 months of the end of the quarter

The APOT Methodology and Reporting Guidance document is before the Commission for the first time and the APOT-1 and APOT-2 documents are presented with additional input since the last Commission review. The EMS Authority is requesting approval of these documents so that they can be implemented.

# Ambulance Patient Offload Time (APOT) Standardized Methods for Data Collection and Reporting

Draft For EMS Commission Approval Version 11-21-2016

## Purpose

To provide recommendations/guidelines to Local EMS Agencies (LEMSAs) for implementing standardized methodologies for Ambulance Patient Offload Time (APOT) data collection and reporting to the EMS Authority (EMSA) in accordance with AB 1223 (O'Donnell, 2015. See appendix A for entire text of bill.)

## Background

Health and Safety Code 1797.120 now requires EMSA to develop a standard methodology for calculation of, and reporting by, a LEMSA of ambulance patient offload time.

Health and Safety Code 1797.225 establishes that a LEMSA may adopt policies and procedures for calculating and reporting ambulance offload time. Those policies and procedures must be based on the statewide standard methodology developed pursuant to 1797.120. LEMSAs that adopt patient off-loading policies and procedures must also establish criteria for reporting and quality assurance follow-up for a patient off load time that exceeds the standard.

## 1. Definitions

**Ambulance arrival at the Emergency Department (ED)** - the time ambulance stops at the location outside the hospital ED where the patient will be unloaded from the ambulance.

**Ambulance Patient Offload Time (APOT)** - the time interval between the arrival of an ambulance patient at an ED and the time the patient is transferred to the ED gurney, bed, chair or other acceptable location and the emergency department assumes the responsibility for care of the patient.<sup>1</sup>

**Ambulance Patient Offload Time (APOT) Standard** – the time interval standard established by the LEMSA within which an ambulance patient that has arrived in an ED should be transferred to an ED gurney, bed, chair or other acceptable location and the ED assumes the responsibility for care of the patient.

**Non-Standard Patient Offload Time** – the ambulance patient offload time for a patient exceeds the standard period of time designated by the LEMSA.<sup>2</sup> (See *Standards* below.)

**Ambulance transport** – the 911 response emergency ambulance transport of a patient from the prehospital EMS system to an approved EMS receiving hospital.<sup>3</sup>

**APOT 1** - an ambulance patient offload time interval measure. This metric is a continuous variable measured in minutes and seconds then aggregated and reported at the 90<sup>th</sup> percentile.

**APOT 2** - an ambulance patient offload time interval process measure. This metric demonstrates the incidence of ambulance patient offload times expressed as a percentage of total EMS patient transports within a twenty (20) minute target and exceeding that time in reference to 60, 120 and 180 minute time intervals,.

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<sup>1</sup> Health and Safety Code Division 2.5, Chapter 3, Article 1, Section 1797.120 (b).

<sup>2</sup> Health and Safety Code Division 2.5, Chapter 4, Article 1, Section 1797.225(c)(1).

<sup>3</sup> For the first year of reporting to EMSA, this will be limited to 911 response; however, LEMSAs may choose to also track APOT for all Inter-facility transports, 7-digit response, and other patient transports to the ED.

**Ambulance Patient Offload Delay (APOD)** - the occurrence of a patient remaining on the ambulance gurney and/or the emergency department has not assumed responsibility for patient care beyond the LEMSA approved APOT standard. (Synonymous with non-standard patient offload time)

**AVL/GPS** - Automated Vehicle Location/Global Position System

**CEMSIS** - California Emergency Medical Services Information System

**CAD** - Computer Aided Dispatch

**Clock Start** – the timestamp that captures when APOT begins. This is captured in the NEMSIS 3.4 data set as the time the patient/ambulance arrives at destination/receiving hospital at the location outside the hospital ED where the patient will be unloaded from the ambulance (eTimes.11).

**Clock Stop** – the timestamp that captures when APOT ends. This is captured in the NEMSIS 3.4 data set as destination patient transfer of care date/time (eTimes.12).

**ePCR** – Electronic Patient Care Report

**Emergency Department (ED) Medical Personnel** – an ED physician, mid-level practitioner (e.g. Physician Assistant, Nurse Practitioner) or Registered Nurse (RN).

**EMS Personnel** – Public Safety First Responders, EMTs, AEMTs, EMT-II and/or paramedics responsible for out of hospital patient care and transport consistent with the scope of practice as authorized by their level of credentialing.

**NEMSIS** – National Emergency Medical Services Information System

**MDC** – Mobile Data Computer

**Timestamp** - a continuous variable that captures a date and time on a twenty-four (24) hour clock.

**Transfer of Patient Care** - the transition of patient care responsibility from EMS personnel to receiving hospital ED medical personnel. (See criteria below in Measurement Methods.)

**Verbal Patient Report** - The face to face verbal exchange of key patient information between EMS personnel and ED medical personnel provided that is presumed to indicate transfer of patient care.

**Written EMS Report** - The written report supplied to ED medical personnel that details patient assessment and care that was provided by EMS personnel. Electronic report (ePCR) is now required by Health and Safety Code 1797.227.

## 2. LEMSA Standards

In adopting policies and procedures for calculating and reporting APOT, a LEMSA must do the following<sup>4</sup>:

- a. Use the statewide standard methodology for calculating and reporting APOT developed by the EMSA.
- b. Establish criteria for the reporting of, and quality assurance follow-up for a non-standard patient offload time

### **Standard Offload Time**

For purposes of local policy and quality improvement activities, each LEMSA may determine its own local system standard for comparison against APOT-1 (90<sup>th</sup> percentile of APOT time intervals). A survey of LEMSAs in 2015 indicated that LEMSAs measuring at that time had standard times that varied from predominantly between fifteen (15) and thirty (30) minutes with a range of ten (10) to forty-five (45) minutes. LEMSAs may develop the standard time using statistical techniques based on current or initial measures and in collaboration with health care partners.

### **Non-Standard Offload Time**

“Non-standard patient offload time” is a time interval that is poorly defined in statute. For the purposes of statute implementation, it will be interpreted to mean any time interval that exceeds the APOT standard established by the LEMSA. Many LEMSAs currently define this as Ambulance Patient Offload Delay (APOD) consistent with the metrics and definitions contained in The Ambulance Patient Offload Toolkit<sup>5</sup>.

**Best Practice Example/Recommendation:** LEMSAs should adopt the definition of non-standard patient offload time as synonymous with APOD. The associated quality improvement activity required in the statute<sup>6</sup> may be a graduated response that includes but would not be limited to measurement, monitoring, and a process consistent with the Toolkit. Refer to Section 6 below for recommendation of an APOT that would be considered a threshold event.

## 3. Measurement Methods

APOT is defined in statute as a time interval, therefore process controls must be established for collecting the beginning and ending timestamps to be utilized for the calculation of the time interval.

### **Clock Start (eTimes.11, “Patient Arrived at Destination Date/Time”)**

The clock start timestamp is straightforward and most commonly defined as the time the ambulance arrives at the ED and stops at the location outside the hospital ED where the

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<sup>4</sup> Health and Safety Code Division 2.5, Chapter 4, Article 1, Section 1797.225(b)(1) and (2).

<sup>5</sup> Toolkit to Reduce Ambulance Patient Offload Delays in the Emergency Department: Building Strategies for California Hospital and Local Emergency Services Agencies, 2014  
<http://www.emsa.ca.gov/Media/Default/PDF/Toolkit-Reduce-Amb-Patient.pdf>

<sup>6</sup> Health and Safety Code Division 2.5, Chapter 4, Article 1, Section 1797.225(b)(2)

patient will be unloaded from the ambulance. LEMSAs currently collect this timestamp in several ways:

- Ambulance provider Computer Aided Dispatch (CAD) systems with two-way radio voice communication or Mobile Digital Communicator (MDC);
- Systems with Automated vehicle location/Global positioning systems (AVL/GPS) capability;
- ePCR or other commercial data collection system (e.g. FirstWatch, ReddiNet, EMSsystems).

It is advantageous to have an ePCR system that is integrated with the provider agency CAD and/or other data collection systems for single point data retrieval.

### **Clock Stop (eTimes.12. “Destination Patient Transfer of Care Date/Time”)**

Capturing a timestamp for clock stop is more complex since the statute establishes two processes as the end point of APOT: *when the patient is transferred to the emergency department gurney, bed, chair or other acceptable location **and** the emergency department has assumed the responsibility for care of the patient.* This means that LEMSAs must establish a process control(s) with an associated data collection tool that can capture the completion of both under a single timestamp (clock stop). This needs to be defined as an event, not a process, for the purpose of collecting an accurate timestamp as to when transfer of care occurred.

Transfer of care criteria should include the following:

- Verbal patient report is given by transporting EMS personnel and acknowledged by ED medical personnel<sup>7</sup>
- The patient is moved off of the EMS gurney
- Clock stop is documented through a timestamp that is captured as eTimes.12 “Destination Patient Transfer of Care Date/Time” in NEMSIS 3.

Completion of the ePCR is not a requirement for Clock Stop.

In accordance with Health and Safety Code 1798.0, this is the responsibility of the local EMS agency Medical Director, because it determines when EMS medical direction terminates and EMS personnel may legally and ethically leave the patient.<sup>8</sup>

To avoid disagreement on time interval validity, it is recommended that LEMSAs, with hospital input, agree on the procedural implementation of these criteria for transfer of patient care that is synonymous with “acceptance of patient care responsibility” by hospital ED medical personnel.

**Best Practice Example/Recommendation:** Process controls that provide for the alignment of these two events, transfer of care and removal of the patient from the ambulance gurney, allow for the collection of a single timestamp. Optimally, documenting the completion of these two events should be accomplished with the signature of ED medical personnel on the

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<sup>7</sup> Verbal report must include a structured and complete report with the following information:

Chief complaint; initial vital signs; pertinent history and exam findings; laboratory tests (e.g., glucose) and copy of ECG; interventions and treatment provided in the field; current vital signs and status.

<sup>8</sup> HSC 1798.0 (Medical Director Responsibilities)

(a) The medical direction and management of an emergency medical services system shall be under the medical control of the medical director of the local EMS agency. This medical control shall be maintained in accordance with standards for medical control established by the authority.

ePCR and a validation or closed call rule within the ePCR program for the associated timestamp.

#### 4. Data Collection and Documentation Options

An electronic patient care report (ePCR) or reporting system is a critical element of APOT data collection and required for an EMS provider to report data to the LEMSA. It is presumed that a LEMSA will adopt policies and procedures for the collection and reporting of APOT data collected from EMS providers that are using an ePCR in compliance with State law<sup>9</sup>. Data elements defined in APOT-1 and APOT-2 are consistent with NEMSIS version 3 and CEMSIS (California Data Dictionary).

The CAD systems are utilized to record two-way radio communications or information transmitted via MDC between the field and dispatch centers. CAD is utilized by most EMS providers to capture dispatch data and provide, critical information related to EMS operations. CAD data has historically provided much of the information needed to determine APOT. Accurate capture of data for statewide APOT reporting requires standardized CAD, data elements and definitions compliant with the NEMSIS 3.4 data standards. Newer systems combined with the updated NEMSIS data set for CAD provide integration with ePCR systems utilizing data elements defined in NEMSIS 3.4 and CEMSIS.

Examples of data collection and documentation tools currently in use include:

- A wide variety of CAD platforms
- ePCR without CAD integration
- ePCR with CAD integration
- First Watch – Transfer of Care (TOC) Module
- ReddiNet
- EMSsystems

**Best Practice Example/Recommendation:** LEMSA's encourage/require all EMS providers to implement digital CAD data migration into ePCR platforms during transition to NEMSIS 3.4. This will provide for data analysis from a single source.

#### 5. Data Validation, Local EMS System Reporting, and Data Analysis

Data collection systems, processes, analysis, reporting should be developed as a collaborative effort between the LEMSA, EMS provider(s) and hospitals. Local EMS systems that have identified negative system impacts due to APOD should utilize common language and metrics established by this document to define and measure APOT in the development of action plans to decrease or eliminate APOD. During discussions with the statewide ambulance patient offload coalition in 2012 and in subsequent surveys, some agencies did not recognize that they had a problem or realize the extent of the problem until they initiated measurement.

Measurement and data analysis should be followed by action planning, if indicated. Systems that demonstrate improvement in ambulance patient offload delay (APOD) have

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<sup>9</sup> Health and Safety Code Division 2.5, Chapter 4, Article 1, Section 1797.227

consistently had high degree of collaboration between hospital and local EMS providers, and successful implementation of process improvement activities.

Examples currently utilized by LEMSAs include:

- Formation of ad-hoc or standing committees and workgroups
- Standardized definitions and nomenclature for APOT
- Collaborative development and review of performance reports by hospital and system
- Collaborative analytical and process control methodology (e.g. Six Sigma)
- Inclusion of APOT indicators in the LEMSA EMS Quality Improvement Plan

There is no requirement for a LEMSA to collect and report APOT. A LEMSA that *“adopts policies and procedures for calculating and reporting ambulance patient offload time shall”*:

- Use the standard methodology,
- Establish criteria for providers to report the data,
- Utilize the data by establishing criteria for quality assurance follow-up for their local definition of a nonstandard patient offload time, and
- Report the data to EMSA.

Since EMS providers are obligated by a different statute to report patient data in electronic format to the LEMSA, local reporting is not an issue. The LEMSA may choose to display the data in a format of their choice.

**Best Practice Example/Recommendation:** LEMSAs should generate standardized monthly APOT reports utilizing the APOT-1 and APOT-2 methodology. Although initial state reporting requirements will be limited to emergency ambulance transports resulting from 911 response, LEMSAs may choose to include all ambulance transports, including 7-digit and interfacility transfers. Monthly or quarterly reports should be sent to EMS system stakeholders followed by periodic working meetings utilizing contemporary statistical process control analytics (e.g., Six Sigma) for data validation, CQI drill-down and action planning.

## 6. Criteria for Quality Assurance Follow-up

LEMSAs that adopt policies and procedures related to APOT must also establish criteria for the reporting and quality assurance follow-up for non-standard patient offload time.<sup>10</sup> It is recommended that the LEMSA adopt definitions for events with triggers linked to the LEMSA EMS Quality Improvement Program (EQIP).

Triggers for specific quality assurance or quality improvement actions could include but are not be limited to:<sup>11</sup>

- Occurrence of extended APOD, for example, more than one hour (APOT-2)

<sup>10</sup> Health and Safety Code Division 2.5, Chapter 4, Article 1, Section 1797.225(b)(2)

<sup>11</sup> Toolkit to Reduce Ambulance Patient Offload Delays in the Emergency Department: Building Strategies for California Hospital and Local Emergency Services Agencies, 2014  
<http://www.emsa.ca.gov/Media/Default/PDF/Toolkit-Reduce-Amb-Patient.pdf>

- Occurrence of APOD with the patient decompensating or worsening in condition
- Occurrence of APOD with an associated patient complain
- Occurrence of APOD with associated delayed ambulance response(s) to other calls in the community
- Facility or system performance below established fractile (e.g. 90%) for compliance to the LEMSA's APOT standard

**Best Practice Example/Recommendation:** LEMSAs may establish an APOT that exceeds sixty (60) minutes as a threshold event that would trigger a response that may include engaging an EMS supervisor and hospital executive, the immediate transfer care and removal of the patient from the ambulance gurney, reporting to the effected entities, and quality assurance follow-up by the ambulance provider agency, the hospital and the LEMSA. As with the definition of Standard time, each LEMSA may determine its own threshold triggers.

## 7. Reporting to EMSA

EMSA has developed two (2) Indicator Specification Sheets (ISS) similar to the Core Measures specifications to provide guidance to LEMSAs on how to voluntarily submit the APOT data with the Core Measures. LEMSAs collecting ambulance patient offload times shall use the standard methodology when collecting the appropriate data to measures APOT. The two new ISS forms are included with this guidance and serve as the statewide standard methodology to extract and report APOT data and the reporting format.

In summary, these are:

- Aggregate data, but include the denominator (number of runs) for each data value
  - Total by LEMSA for the reporting period
  - Stratify by hospital--denominators are needed to provide context for hospital results.
  - Report quarterly on specified dates
- a. APOT-1: The number reported is the APOT in minutes for transfer of care of 90% of ambulance patients and the number of ambulance runs included in the report.
  - b. APOT-2: The number reported is the percentage of ambulance patients transported by EMS personnel with an offload time within twenty (20) minutes and those transports with an ambulance patient offload delay beyond 20 minutes. APOD is further stratified by sixty (60) minute intervals up to one hundred eighty (180) minutes then any APOT exceeding one hundred eighty (180) minutes. Twenty minutes has been selected as the target standard for statewide reporting consistency based on precedence from other systems outside of California, as well as experience of some of the California LEMSAs. Nothing in this measure limits the LEMSA from selecting their preferred standard and non-standard time for local discussion and performance improvement processes.

## Appendix A: Language of AB 1223 (O'Donnell, 2015)

**SECTION 1.** Section 1797.120 is added to the *Health and Safety Code*, to read:

### **1797.120.**

- (a) The authority shall develop, using input from stakeholders, including, but not limited to, hospitals, local EMS agencies, and public and private EMS providers, and, after approval by the commission pursuant to Section 1799.50, adopt a statewide standard methodology for the calculation and reporting by a local EMS agency of ambulance patient offload time.
- (b) For the purposes of this section, “ambulance patient offload time” is defined as the interval between the arrival of an ambulance patient at an emergency department and the time that the patient is transferred to an emergency department gurney, bed, chair, or other acceptable location and the emergency department assumes responsibility for care of the patient.

**SEC 2.** Section 1797.225 is added to the *Health and Safety Code*, to read:

### **1797.225.**

- (a) A local EMS agency may adopt policies and procedures for calculating and reporting ambulance patient offload time, as defined in subdivision (b) of Section 1797.120.
- (b) A local EMS agency that adopts policies and procedures for calculating and reporting ambulance patient offload time pursuant to subdivision (a) shall do all of the following:
  - (1) Use the statewide standard methodology for calculating and reporting ambulance patient offload time developed by the authority pursuant to Section 1797.120.
  - (2) Establish criteria for the reporting of, and quality assurance followup for, a nonstandard patient offload time, as defined in subdivision (c).
- (c) (1) For the purposes of this section, a “nonstandard patient offload time” means that the ambulance patient offload time for a patient exceeds a period of time designated in the criteria established by the local EMS agency pursuant to paragraph (2) of subdivision (b).
- (2) “Nonstandard patient offload time” does not include instances in which the ambulance patient offload time exceeds the period set by the local EMS agency due to acts of God, natural disasters, or manmade disasters.

## AMBULANCE PATIENT OFFLOAD TIME

<b>MEASURE SET</b>	Ambulance Patient Offload Time	
<b>SET MEASURE ID #</b>	APOT-1	
<b>PERFORMANCE MEASURE NAME</b>	Ambulance Patient Offload Time for Emergency Patients	
<b>Description</b>	What is the 90 <sup>th</sup> percentile for Ambulance Patient Offload Time at the Hospital Emergency Department?	
<b>Type of Measure</b>	Process	
<b>Reporting Value and Units</b>	Time (Minutes and Seconds)	
<b>Continuous Variable Statement (Population)</b>	Time (in minutes) from time ambulance arrives at the hospital until the patient is transferred to hospital emergency department care. All 911 emergency ambulance transports to the ED with eTimes available are included.	
<b>Inclusion Criteria</b>	<b><u>Criteria in NEMESIS 3.4</u></b>	<b><u>Data Elements--NEMESIS 3.4</u></b>
	<ul style="list-style-type: none"> <li>• All events for which eResponse.05 “type of service requested” has value recorded of 911 Response (Scene)<sup>1</sup></li> </ul> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>• All events in eDisposition.21 “Type of Destination” with the value of 4221003, “Hospital-Emergency Department”;</li> </ul> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>• eTimes.11 “Patient Arrived at Destination Date/Time” values are logical and present</li> </ul> <p style="text-align: center;">AND</p> <ul style="list-style-type: none"> <li>• eTimes.12 “Destination Patient Transfer of Care Date/Time” values are logical and present<sup>2</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Type of Service Requested (eResponse.05)</li> <li>• Type of Destination (eDisposition.21)</li> <li>• Patient Arrived at Destination Date/Time (eTimes.11)</li> <li>• Destination Patient Transfer of Care Date/Time (eTimes.12)</li> </ul> <p>(See APOT 2 and Guidance for criteria for eTimes.12)</p>

<sup>1</sup> Initial year of reporting to EMSA will include only 911, but LEMSA may choose to also monitor APOT for IFT, 7-digit and other transports to the ED

<sup>2</sup> It is recommended to configure eTimes.12 “Destination Patient Transfer of Care Date/Time” in NEMESIS 3.4 with a signature block. If a system does not accommodate a signature block or a signature is not obtained for operational reasons, a time stamp on the ePCR based verbal acknowledgement of EMS patient report by ED medical personnel is sufficient.

<b>Exclusion Criteria</b>	<b><u>Criteria</u></b>	<b><u>Data Elements</u></b>
	None	
<b>Indicator Formula Numeric Expression</b>	The formula is the 90 <sup>th</sup> Percentile of the given numbers or distribution in their ascending order.	
<b>Example of Final Reporting Value (number and units)</b>	19 minutes, 34 seconds (19:34)	
<b>Sampling</b>	No	
<b>Aggregation</b>	Yes	
<b>Minimum Data Values</b>	Not Applicable	
<b>Data Collection Approach</b>	Retrospective data sources for required data elements include administrative data and pre-hospital care records. Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.	
<b>Suggested Display Format &amp; Frequency</b>	Process control or run chart by month	
<b>Suggested Statistical Measures</b>	90 <sup>th</sup> Percentile Measurement. Aggregate measure of central tendency and quantile (fractile) measurement to determine the span of frequency distributions.	
<b>Trending Analysis</b>	Yes	
<b>Benchmark Analysis</b>	(TBD)	
<b>Reporting Notes</b>	<p>Report aggregate values by:</p> <ol style="list-style-type: none"> <li>1) LEMSA</li> <li>2) Individual hospital</li> </ol> <p>Report the 90 percentile time calculated and the denominator (number of 911 transports to emergency department with time stamp data available)</p> <p>Report Quarterly, within 2 months of the end of the quarter:</p> <ul style="list-style-type: none"> <li>• June 1 for period of January 1 through March 31;</li> <li>• September 1 for period of April 1 through June 30;</li> <li>• December 1 for period of July 1 through September 30;</li> <li>• March 1 for period of October 1 through December 31</li> </ul>	

**AMBULANCE PATIENT OFFLOAD TIME—EXTENDED DELAY**

<b>MEASURE SET</b>	Extended Ambulance Patient Offload Time	
<b>SET MEASURE ID #</b>	APOT-2	
<b>PERFORMANCE MEASURE NAME</b>	Duration of Ambulance Patient Offload Time for Patients transported to the Emergency Department by 911 response emergency ambulance <sup>1</sup>	
<b>Description</b>	<p>2.1: What percentage of patients transported by EMS personnel experience a transfer of care within 20 minutes of arrival at the Hospital Emergency Department?</p> <p>2.2: What percentage of patients transported by EMS personnel experience a transfer of care between 21 - 60 minutes of arrival at the Hospital Emergency Department?</p> <p>2.3: What percentage of patients transported by EMS personnel experience a transfer of care between 61 - 120 minutes after arrival at the Hospital Emergency Department?</p> <p>2.4: What percentage of patients transported by EMS personnel experience a transfer of care between 121 - 180 minutes after arrival at the Hospital Emergency Department?</p> <p>2.5: What percent of patients transported by EMS personnel experience a transfer of care greater than 180 minutes after arrival at the Hospital Emergency Department?</p>	
<b>Type of Measure</b>	Process	
<b>Reporting Value and Units</b>	(%) Percentage	
<b>Denominator Statement (population)</b>	Number of patients who were transported to a hospital emergency department by EMS Personnel. Include only 911 response transports with eTimes.11 and eTimes.12 available.	
<b>Denominator Inclusion Criteria</b>	<b><u>Criteria in NEMESIS 3.4</u></b>	<b><u>Data Elements--NEMESIS 3.4</u></b>
	<p>All events for which eResponse.05 "Type of Service Requested" has value recorded of 911 Response (Scene);</p> <p><u>AND</u></p> <p>eDisposition.21 "Type of Destination" has value of 4221003, "Hospital-Emergency Department";</p>	<ul style="list-style-type: none"> <li>• Type of Service Requested (eResponse.05)</li> <li>• Type of Destination (eDisposition.21)</li> <li>• Patient Arrived at Destination Date/Time (eTimes.11)</li> <li>• Destination Patient Transfer of</li> </ul>

<sup>1</sup> The first year of reporting to EMSA will focus on 911 response units; however, LEMSAs may choose to also monitor IFT, 7-digit and other transports to the ED.

	<p><u>AND</u></p> <p>eTimes.11 “Patient Arrived at Destination Date/Time” values are logical and present</p> <p><u>AND</u></p> <p>Destination Patient Transfer of Care Date/Time (eTimes.12) values are logical and present<sup>2</sup></p>	Care Date/Time (eTimes.12)
<b>Exclusion Criteria</b>	None	
	<b><u>Criteria</u></b> <sup>3</sup>	<b><u>Data Elements</u></b>
<b>Numerator Statement (sub-population)</b>	<p>2.1: What percentage of patients transported by EMS personnel experience a transfer of care within 20 minutes of arrival at the Hospital Emergency Department?</p> <p>2.2: Number of patients who were transported to a hospital emergency department by EMS Personnel and had their care transferred within 20 - 60 minutes after their arrival to the Emergency Department.</p> <p>2.3: Number of patients who were transported to a hospital emergency department by EMS Personnel and had their care transferred 61-120 minutes after their arrival to the Emergency Department.</p> <p>2.4: Number of patients who were</p>	<ul style="list-style-type: none"> <li>• Type of Service Requested (eResponse.05)</li> <li>• Type of Destination (eDisposition.21)</li> <li>• Patient Arrived at Destination Date/Time (eTimes.11)</li> <li>• Destination Patient Transfer of Care Date/Time (eTimes.12)</li> </ul>

<sup>2</sup> It is recommended to configure ePCR programs so that the signature block timestamp is collected as eTimes.12 “Destination Patient Transfer of Care Date/Time” in NEMSIS 3.4. If a system does not accommodate a signature block or a signature is not obtained for operational reasons, a time stamp on the ePCR based verbal acknowledgement of EMS patient report by ED medical personnel is sufficient.

<sup>3</sup> Transfer to hospital care and end of APOT interval should include the following:

- Verbal patient report is given by transporting EMS personnel and acknowledged by ED medical personnel
- Patient is transferred off the EMS gurney
- Clock stop is documented through a timestamp that is captured as eTimes.12 in within NEMSIS 3

	<p>transported to a hospital emergency department by EMS Personnel and had their care transferred 121 - 180 minutes after their arrival to the Emergency Department.</p> <p>2.5: Number of patients transported by EMS personnel that experience a transfer of care greater than 180 minutes after arrival at the Hospital Emergency Department.</p>	
<b>Numerator Inclusion Criteria</b>	<b><u>Criteria</u></b>	<b><u>Data Elements</u></b>
	<p>All events for which eResponse.05 “type of service requested” has value recorded of “911 response (Scene)”;</p> <p><u>AND</u></p> <p>eTimes.12 “Destination Patient Transfer of Care Date/Time” values are logical and present</p>	<ul style="list-style-type: none"> <li>• Type of Service Requested (eResponse.05)</li> <li>• Type of Destination (eDisposition.21)</li> <li>• Patient Arrived at Destination Date/Time (eTimes.11)</li> <li>• Destination Patient Transfer of Care Date/Time (eTimes.12)</li> </ul>
<b>Exclusion Criteria</b>	<b><u>Criteria</u></b>	<b><u>Data Elements</u></b>
	None	
<b>Indicator Formula Numeric Expression</b>	<p>The formula is to divide (/) the numerator (N) by the denominator (D) and then multiply (x) by 100 to obtain the (%) value the indicator is to report. Therefore the indicator expressed numerically is <math>N/D = \%</math></p>	
<b>Example of Final Reporting Value</b>	15%	

<b>(number and units)</b>		
<b>Sampling</b>	No	
<b>Aggregation</b>	Yes	
<b>Minimum Data Values</b>	Not Applicable	
<b>Data Collection Approach</b>	<ul style="list-style-type: none"> <li>• Retrospective data sources for required data elements include administrative data and pre-hospital care records.</li> <li>• Variation may exist in the assignment of coding; therefore, coding practices may require evaluation to ensure consistency.</li> </ul>	
<b>Suggested Display Format &amp; Frequency</b>	Process control or run chart by month	
<b>Suggested Statistical Measures</b>	Mean (x); Mode (m)	
<b>Trending Analysis</b>	Yes	
<b>Reporting Notes</b>	<p>Report aggregate values by:</p> <ol style="list-style-type: none"> <li>1) LEMSA</li> <li>2) Individual hospital</li> </ol> <p>Report the % calculated and the denominator used to calculate (number of 911 transports with time stamp data available)</p> <p>Report Quarterly, within 2 months of the end of the quarter:</p> <ul style="list-style-type: none"> <li>• June 1 for period of January 1 through March 31;</li> <li>• September 1 for period of April 1 through June 30;</li> <li>• December 1 for period of July 1 through September 30;</li> <li>• March 1 for period of October 1 through December 31</li> </ul>	

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Adam Davis  
Quality Improvement Program Coordinator

**SUBJECT:** Local Governmental Quality Assurance Committee

**RECOMMENDED ACTION:**

Receive information regarding local governmental quality assurance committees.

**FISCAL IMPACT:**

None

**DISCUSSION:**

The EMS Authority received inquiries from LEMSA representatives at previous meetings regarding evidence codes 1157, 1157.5 and 1157.7 as they pertain to the protection of Local EMS Agencies in the quality improvement (QI) discovery process to identify and address patient quality of care issues. In consulting with legal counsel, EMSA believes Section 1157.7 makes clear that a local governmental EMS entity (i.e, a LEMSA) has protections for QI activities when the QI issues are specifically in conjunction with a hospital, and also cover other EMS QI entities. Based upon the prior two evidence codes (1157 and 1157.5), and relevant court cases (for example, *Willits v. Superior Court* (1993), 20 Cal. App. 4th 90), there is a broad policy in favor of protecting the documents and processes of “self-critical” QI entities. Essentially, the public policy of allowing those local quality assurance committees to improve the system, improve patient outcomes, and protect that process is more important than an individual’s need for discovery of those QI materials.

EMSA has provided the above position to the LEMSA Medical Directors, which will also be shared with the LEMSA Administrators to support their efforts.

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Adrienne Kim  
CEMSIS Program Coordinator

**SUBJECT:** State Support of EMS Systems for Data

**RECOMMENDED ACTION:**

Receive information regarding state support to local EMS agencies and providers to assist in meeting statutory requirements.

**FISCAL IMPACT:**

None

**DISCUSSION:**

EMSA is continuing our preparations to adopt NEMSIS Version 3.4 consistent with the requirements of AB 1129 (Health and Safety Code 1797.227) that went into effect January 1, 2016, and requires providers to use an electronic mobile health record in submitting data to local EMS agencies. EMSA will transition to NEMSIS Version 3.4 effective January 1, 2017. There were two educational data webinars for local EMS agencies, providers, and software vendors related to the transition to version 3.4, and EMSA held two in-person sessions on September 27<sup>th</sup> in Rancho Cordova and September 29<sup>th</sup> in Garden Grove. EMSA has been providing technical assistance to providers and software vendors who have had questions related to the use of NEMSIS Version 3.4.

EMSA received a grant from the California Office of Traffic Safety (OTS) for \$1.2 million that will further support data collection and reporting for California's emergency medical services through the purchase of electronic devices. EMSA has been working with federal and state partners for some time to make funding available to assist provider agencies who have difficulties obtaining the necessary hardware to operationalize electronic patient care records (ePCR). The grant funds will be used to provide local EMS agencies with a local assistance grant that will assist providers to purchase hardware and software, specifically designed for the collection of ePCR data. Funds will be prioritized to EMS providers in California that still employ physical hardcopy methods or use desktop applications to collect patient care data. The local assistance grant opportunity document will outline the specifics of how the funding

will be prioritized and the process for a local EMS agency to request funds. Funding by OTS using National Highway Traffic Safety Administration monies is on a very short timeline, and funds must be spent within the fiscal year. It is our intent to publish the local assistance grant opportunity by the end of the month.

Also, EMSA entered into agreements as part of the Office of National Coordinator project grant to builder SAFR functionality in Orange County, San Diego/Imperial County, and ICEMA. The +EMS project grant demonstrates the SAFR functionality (Search, Alert, File and Reconcile) and runs through July 2017.

On February 29, 2016, The Center for Medicaid and Medicare Services (CMS) released a Medicaid Directors' Advisory Letter that now allows EMS to be considered one of the entities that can now receive Medicaid funding (Medi-Cal). The funding opportunity would allow for a 90/10 match program for EMS purposes. EMSA met with the Department of Health Care Services, CMS and the Office of the National Coordinator to further discuss moving forward on the 90/10 match program.

The Commission will be kept informed on the progress of the OTS local assistance funding opportunity as we move forward through the process of making the funds available, as well as with the statewide data program, the progress on the ONC project grant, and the Medicaid 90/10 match program.

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Tom McGinnis, EMT-P  
Chief, EMS Systems Division

**SUBJECT:** Wireless 9-1-1 Routing

**RECOMMENDED ACTION:**

Receive information on Wireless 9-1-1 Routing

**FISCAL IMPACT:**

Unknown

**DISCUSSION:**

The EMS Authority continues to monitor wireless 9-1-1 system issues. There have been issues noted with wireless 9-1-1 call routing, including delays in timely emergency medical response due to inaccurate wireless call locations and limitations in wireless 9-1-1 call transfer capabilities. The issues have caused and continue to pose a risk to patient care by delaying response of EMS system resources to wireless 9-1-1 callers.

The Office of Emergency Services (OES) advises us that they are working on long term solutions to ensure appropriate routing of wireless 9-1-1 calls. There are projects at the national level that will enhance the 9-1-1 system in the future. Next Generation 9-1-1 (NG9-1-1) is considered to be the single most important enhancement to the 9-1-1 system. NG9-1-1 will, among other things, locate location of the wireless 9-1-1 caller with the global positioning system (GPS). This will allow the caller to be routed to the most appropriate agency for response to any given incident with increased efficiency.

Wireless 9-1-1 routing issues are significant in many states, especially those with large rural or wilderness type areas with limited cellular tower coverage.

In September 2016, EMSA staff attended a National State EMS Officials Meeting in New Mexico. During that meeting, there were two presentations on the progress of the NG9-1-1 system. While the process seems to be doing well in general, the major hurdle is funding in many places in the country. Enhancements will not be easy to implement without additional funding for the startup of NG9-1-1.

The Commission will be kept informed on the progress of Wireless 9-1-1 communications issues.

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Craig Johnson  
Chief, Disaster Medical Services Division

**SUBJECT:** Mobile Medical Shelter Regional Modules

**RECOMMENDED ACTION:**

Receive updated information regarding the EMS Authority's Mobile Medical Shelter Regional Modules.

**FISCAL IMPACT:**

None

**DISCUSSION:****Mobile Medical Shelter Regional Modules:**

The EMS Authority has transitioned, using existing funds, the unsustainable Mobile Field Hospital (MFH) program into the California Mobile Medical Shelter program. The purpose for the transition is to capitalize on the viable MFH structures and durable equipment for use as medical shelters to support a local response to disasters and emergencies.

A key component of the Mobile Medical Shelter Program is the flexible 30 bed regional module concept. The EMS Authority is working with local EMS Agencies and the Regional Disaster Medical Health Coordination program to determine the feasibility of placing one Mobile Medical Shelter Module in each Cal OES Mutual Aid Region. The modules will include the shelters, infrastructure equipment, and durable equipment, but will **not** include biomedical equipment and medical supplies. This redistribution of the MFH would allow local partners to rapidly deploy this resource. Potential uses include: field sites for Local/Regional incidents, triage/treatment during flu season surge, medical clinic, medical shelter, emergency operations center, staff quarters, disaster exercise, and any other use that requires a field facility. Deployment would be at the discretion of the locals without requiring a state resource request.

Currently, the EMS Authority is putting together a list of interested partners. The next steps are as follows:

- Determine most suitable locations to strategically place the Mobile Medical Shelter Modules. The decision will be made in collaboration with the Local EMS Agencies, Health Departments, and the Regional Disaster Medical Health Coordination Program.
- Discuss the draft Memorandum of Understanding (MOU) with potential partners designated to receive a module.
- Finalize the Mobile Medical Shelter Module placement plan and MOU.
- Coordinate shipment of modules to receiving storage facilities.
- Schedule module familiarization training with receiving partners.

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Craig Johnson  
Chief, Disaster Medical Services Division

**SUBJECT:** Hospital Incident Command System (HICS)

**RECOMMENDED ACTION:**

Receive updated information regarding the Hospital Incident Command System.

**FISCAL IMPACT:**

None

**DISCUSSION:****Hospital Incident Command System (HICS):**

The Hospital Incident Command System (HICS) is an incident management system that applies the principles of the Incident Command System to hospitals. The Orange County Emergency Medical Services (EMS) Agency in partnership with the Emergency Medical Services Authority developed the first version of HICS in 1991. The EMS Authority sponsored subsequent versions in 1993, 1998, and 2006 and released the Fifth Edition of HICS in May 2014. The EMS Authority is the copyright holder of the HICS Guidebook and adjunct materials including Incident Planning Guides, (IPGs), and Incident Response Guides, (IRGs).

Most of the nation's hospitals use a version of HICS for emergency planning and response according to the American Hospital Association (AHA). AHA provided Ex Officio membership for the National Workgroup convened by the EMS Authority for the Fourth and Fifth Editions of HICS, as did the United States Department of Health and Human Services, the Joint Commission, the United States Department of Homeland Security's Federal Emergency Management Agency, and the United States Department of Veterans' Affairs, Veterans Health Administration.

HICS has also been adopted internationally. Other countries that have adopted HICS include Taiwan, Columbia, Kenya, and Iran. With the increase of international use, the EMS Authority made a policy decision in 2014 to issue International Standard Book Numbers (ISBN) for

foreign translations of HICS. Translations currently being undertaken for the Fifth Edition include Japanese, Farsi, Mandarin, Spanish, and Korean. The first ISBN issued for a translation was for the Japanese translation.

The EMS Authority encourages the sharing of information pertaining to the implementation and use of HICS. A request for copies of After Action Reports (AAR) and presentations on the use of the Fifth Edition is posted on the EMS Authority web site in order to aid future revisions. These informative documents, comments, and suggestions may be sent to the HICS Coordinator via email at [HICS@EMSA.CA.GOV](mailto:HICS@EMSA.CA.GOV).

Although the HICS project has come a long way with tremendous success, there is still more that needs to be done. Since the 2014 HICS revision, the EMS Authority has been able to maintain a steady state, but has not done much to further the project due to funding limitations.

#### Current Steady State Activities:

- Upkeep and maintenance of the HICS mailbox, a conduit for suggestions and inquiries received by the EMS Authority regarding HICS.
- Maintenance of the HICS webpage on the EMS Authority website.
- Collection and filing of potential next revision items/suggestions/observations.

#### Future Project Priorities:

- Preparation and execution of a series of surveys to identify trends, collect data, and determine priority updates and additions to HICS.
- Development and production of HICS Train-the-Trainer educational materials and a presentation course, leading to the EMS Authority's certification as a HICS trainer.
- Solidify funding to support the EMS Authority's continuation of the HICS project and the next revision.
- Development of a (pilot) certification system, to include standards, policies and procedures for teaching HICS.
- Reconvene the Disaster Interest Group (DIG) to volunteer as expert advisors, evaluators, developers, and reviewers of several topics related to HICS.
- Development of a national stakeholders' group for HICS.
- Develop a method/tool to measure the success of healthcare systems utilizing HICS after a real world event occurs.

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Sean Trask, Chief  
EMS Personnel Division

**SUBJECT:** Nomination of Officers for March 2017 – March 2018

**RECOMMENDED ACTION:**

Open nominations for Commission Officers for 2017 - 2018.

**FISCAL IMPACT:**

No fiscal impact.

**DISCUSSION:**

Nominations for Commission Officers are opened at the last Commission meeting of the year, and the election is held at the first meeting of the following year.

Per the Commission on EMS By-Laws, all Commission Officers are eligible for re-election except the immediate past chair who is automatically a member of the Administrative Committee.

**Current Commission Officers:**

Chair	Dan Burch
Vice Chair	Steve Drewniany
Administrative Committee	Jaison Chand
	Daniel Margulies, M.D.
	Lewis Stone (Past Chair)

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**DATE:** December 14, 2016

**TO:** Commission on EMS

**FROM:** Howard Backer, MD, MPH, FACEP  
Director

**PREPARED BY:** Sean Trask, Chief  
EMS Personnel Division

**SUBJECT:** Approval of 2018 Meeting Dates

**RECOMMENDED ACTION:**

Review the approved meeting dates for Calendar Year 2017, and review the proposed meeting dates for Calendar Year 2018 and approve the September 2018 meeting date.

**FISCAL IMPACT:**

The cost of four meetings per year is approximately \$55,000 for a total of approximately \$110,000 for two years.

**DISCUSSION:**

At the December 6, 2006 Commission on EMS Meeting, the Commission approved scheduling the meetings two years in advance.

The following meeting dates and locations were approved on December 2, 2015 for calendar year 2017.

**Calendar Year 2017:**

March 15, 2017 in Garden Grove  
June 21, 2017 in Sacramento  
September 13, 2017 in San Diego  
December 6, 2017 in San Francisco

The proposed meeting dates and locations for Calendar Year 2018 are:

**Calendar Year 2018:**

March 21, 2018 in Garden Grove  
June 20, 2018 in Sacramento  
September TBD in San Diego  
December 5, 2018 in San Francisco

Ordinarily the Commission on EMS meetings are held on the third Wednesday of the month which would place the September 2018 meeting on the 19<sup>th</sup>. There are potential conflicts with holding the Commission meeting on two of the four Wednesdays in September. Rosh Hashanah, starts on the evening of Sunday, September 9<sup>th</sup> and ends on the evening of Tuesday, September 11<sup>th</sup>. Yom Kippur starts on the evening of Tuesday, September 18<sup>th</sup> and ends on the evening of Wednesday, September 19<sup>th</sup>. These holidays may impact individuals attending the Commission meeting if it is held on September 12<sup>th</sup> or 19<sup>th</sup> 2018.

The Emergency Medical Services Medical Directors Association of California (EMDAC) and the Emergency Medical Services Administrators Association of California (EMSAAC) hold their meetings the day before the Commission meetings. The Rosh Hashanah and Yom Kippur Holidays could impact attendance at these meetings as well.

Since the EMS Authority has not contracted for meeting rooms for the 2018 Commission meetings yet, we would like to see if the Commission is interested in rescheduling the September 19, 2018 meeting.

Because September 2018 may contain other potential conflicts with personal and meeting schedules, the EMS Authority has listed the options, along with the advantages and disadvantages in keeping with a Wednesday meeting schedule:

1. September 5, 2018  
Advantage – eleven weeks from the June 20, 2018 Commission meeting.  
Disadvantage – Only two days after the September 3, 2018 Labor Day Holiday.
2. September 12, 2018  
Advantage – Twelve weeks from the June 20, 2018 meeting.  
Disadvantage – Rosh Hashanah ends the evening of September 11<sup>th</sup> which may impact attendance at the EMDAC, EMSAAC, and Commission meetings.
3. September 19, 2018  
Advantage – 13 weeks from the June 20, 2018 Commission meeting.  
Disadvantage – Yom Kippur begins the evening of September 19<sup>th</sup> and ends on the evening of September 20<sup>th</sup> which may impact attendance at the Commission, EMDAC and EMSAAC meetings.
4. September 26, 2018  
Advantage – 14 weeks from the June 20, 2018 Commission meeting.  
Disadvantage – Only 9 weeks until the December 5, 2018 Commission meeting.