EMERGENCY MEDICAL CARE COMMITTEE (EMCC)

Thursday, August 15, 2019
2:00 pm – 4:00 pm

Valley Specialty Center, Room BQ160,
751 South Bascom Avenue, San Jose, CA 95128

All reports and supporting material are available for review on the Santa Clara County EMS Agency website at www.sccemsagency.org and in the EMS Agency’s offices at least one week prior to the meeting. ( Indicates supporting documentation attached. ➔ Indicates committee action required).

Purpose of the Emergency Medical Care Committee (EMCC)

The purpose of the Emergency Medical Care Committee (EMCC) as specified in the California Health and Safety Code Section 1797.274 and 1797.276 is to review the operations of each of the following at least annually:

1. Ambulance services operating within the county.

2. Emergency medical care offered within the county, including programs for training large numbers of people in cardiopulmonary resuscitation and lifesaving first aid techniques.

3. First aid practices in the county.

The EMCC shall convene to provide the Santa Clara County EMS Agency with its observations and recommendations relative to its review of the items above in addition to providing feedback related to the EMS System Strategic Plan, policy, education and training, quality improvement, public access, and EMS system operations.

The EMCC will also make recommendations related to the use of EMS Trust Fund for the funding of Category C: Stakeholder Projects consistent with Santa Clara County Prehospital Care Policy EMS Reference #812Trust Fund Guide and Application.

Recommendations made by the EMCC, in the form of meeting minutes, will be provided to the Health Advisory Commission by the Chair and will be published to the EMS Agency website, and available for public review.
AGENDA

1. **Call to Order / Roll Call of Voting Members**
   Kenneth Horowitz, Chair and Health Advisory Commissioner

2. **Introductions and Announcements**
   Kenneth Horowitz, Chair and Health Advisory Commissioner

3. **Public Comment**
   Kenneth Horowitz, Chair and Health Advisory Commissioner

   This portion of the meeting is reserved for persons desiring to address the EMS Committee on a Committee-related matter not on the agenda. Speakers are limited to two (2) minutes. The law does not permit Committee action or extended discussion on any items not on the agenda except under special circumstances. Statements that require a response may be placed on the agenda for the next regular meeting of the Committee.

**Consent Items**

Introduction of Items Scheduled for Consent
Patricia Natividad, Sr. Management Analyst

Items 4 - 9 may be accepted as one motion. Item 4 – 9 is for informational purposes.

4. **Approval of May 16, 2019 Meeting Minutes** (Page 5)

5. **Items Approved by the Board of Supervisors and/or Board Committees**
   (No agenda items to report)
   Copies of Board and Board Committee approved reports are provided for reference and information purposes.

6. **EMS Trust Fund Status Report** (Page 13)
   Accept written report on the financial status of the EMS Trust Fund

7. **Santa Clara County Exclusive Operating Area Report** (Page 14)

8. **Non-911 Ambulance Services Report** (Page 18)

9. **HHS Facilities Report** (Page 19)
Regular Items

10. **Health Advisory Commission and Items Referred by the Commission to the EMCC**

   Receive verbal report from Kenneth Horowitz, Chair and Health Advisory Commissioner

11. **EMS System Initiatives: Personnel**

   A. No report available at this time - EMT Certification, Paramedic Accreditation, and Credentialing
      Daniel Peck, EMS Specialist

   B. Receive report on EMS Investigations and Enforcement (Page 20)
      Daniel Peck, EMS Specialist

   C. Receive report on Medical Volunteers for Disaster Response Program (Page 21)
      Michael Cabano, EMS Specialist

12. **EMS System Initiatives: Equipment and Supplies**

   A. Receive report (Page 24)
      Jason Weed, EMS Specialist

13. **EMS System Initiatives: Data Systems**

   A. Receive report (Page 25)
      Michael Clark, EMS Specialist

14. **EMS System Initiatives: Clinical Care and Patient Outcome**

   A. Receive report from EMS Agency Medical Director (Page 27)
      Dr. Ken Miller, EMS Medical Director

   B. Receive report on Specialty Center Quality Improvement (Page 27)
      Dr. Ken Miller, EMS Medical Director

   C. Receive report on Prehospital Patient Care Quality Improvement (Page 28)
      John Sampson, EMS Specialist

   D. Receive report on Prehospital Care Policy Revision Activities (Page 30)
      David Sullivan, EMS Specialist
15. **EMS System Initiatives: Transportation/Facilities**

   A. Receive report on Palo Alto Exclusive Operating Area (Page 31)
      *Kevin McNally, Deputy Chief, Palo Alto Fire Department*

   B. Receive report on Bypass (Page 39)
      *Jackie Lowther, EMS Director*

   C. Receive report on State Regulation Changes
      *Jackie Lowther, EMS Director*
      
      a. Chapter 7.1: ST-Elevation Myocardial Infarction Critical Care System (Page 42)
      b. Chapter 7.2: Stroke Critical Care System (Page 53)
      c. Chapter 14: Emergency Medical Services for Children (Page 69)

16. **EMS System Initiatives: Preparedness**

   A. Receive report on Disaster and Significant events (Page 86)
      *Michael Cabano, EMS Specialist*

17. **Trust Fund Advisory Group Selection**
   *Jackie Lowther, EMS Director*

18. **EMCC Member Requests for Future Agenda Items / Announcements**
    *Kenneth Horowitz, Chair and Health Advisory Commissioner*

   Voting and non-voting members may request items for inclusion in future agendas or present announcements not requiring EMCC action.

19. **EMS Stakeholder Requests for Future Agenda Items / Announcements**
    *Kenneth Horowitz, Chair and Health Advisory Commissioner*

   Members of the public or EMS System may request items for inclusion in future agenda or present announcements not requiring EMCC action.

20. **Next Meeting and Adjourn**
    *Kenneth Horowitz, Chair and Health Advisory Commissioner*

    November 14, 2019 from 2:00-4:00 pm at Valley Specialty Center, Room BQ160, 751 South Bascom Avenue, San Jose, CA 95128
<table>
<thead>
<tr>
<th>Item</th>
<th>Discussion</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Call to Order/Roll Call</td>
<td>Jackie Lowther called the meeting to order at 2:05 p.m. A quorum was present.</td>
<td>Meeting called to order</td>
</tr>
<tr>
<td>2. Introductions and Announcements</td>
<td>None were made.</td>
<td></td>
</tr>
<tr>
<td>3. Public Comment</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Consent Items</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Approval of November 15, 2018 Meeting Minutes</td>
<td>Correction to be made: Page 7 item #12, Train-The-Trainer is scheduled for October 1st.</td>
<td>Consent items approved by: Heather Tannehill-Plamondon / Joshua Markowitz</td>
</tr>
<tr>
<td>5. Summary of Items Present to BOS and HHC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. EMS Trust Fund</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Santa Clara County Exclusive Operating Area</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Non-911 Ambulance Service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. HHS Facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Health Advisory Commission Updates</td>
<td>HAC was not present.</td>
<td></td>
</tr>
<tr>
<td>11. EMS System Initiates: Personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. EMT Certification, Paramedic Accreditation, and Credentialing (Daniel Peck)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Daniel Peck stated that starting 24 months after the effective date of this subsection, an EMT renewing his or her certification for the first time shall submit documentation of successful completion of the following training by an approved EMT training program or approved CE provider: (A) The use and administration of naloxone or other opioid antagonist that meets the standards and requirements of section 100075, subsection (c).</td>
<td>The effective date of the subsection was July 1, 2017, therefore after 24 months would be a July 1, 2019 implementation.</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Discussion</td>
<td>Action</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>B. EMS Investigations and Enforcement (Daniel Peck)</td>
<td>(B) The use and administration of epinephrine by auto-injector that meets the standards and requirements of section 100075, subsection (d).</td>
<td>Current active MVDR’s have until May 30th to respond to the letter of interest. MVDR list will be finalized by July 1st.</td>
</tr>
<tr>
<td>C. Medical Volunteers for Disaster Response Program (Michael Cabano)</td>
<td>(C) The use of a glucometer that meets the standards and requirements of section 100075, subsection (e). (D) If an individual possesses a current California-issued paramedic license or California Advanced EMT certificate, then the individual need not comply with subsections (A)-(C), above.</td>
<td></td>
</tr>
<tr>
<td>12. EMS System Initiatives: Equipment and Supplies (Jason Weed)</td>
<td>(D) If an individual possesses a current California-issued paramedic license or California Advanced EMT certificate, then the individual need not comply with subsections (A)-(C), above.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jason announced that all hospital radios have been distributed. A big thank you to County Communications Agency.</td>
<td></td>
</tr>
<tr>
<td>Item</td>
<td>Discussion</td>
<td>Action</td>
</tr>
<tr>
<td>------</td>
<td>------------</td>
<td>--------</td>
</tr>
</tbody>
</table>
| **13. EMS System Initiatives: Data Systems** (Michael Clark) | Michael Clark key points:  
- Continues to work on multiple Data Systems.  
- Making the tools better and staying in front of EMSA when it comes to implementing.  
- Moving towards the Electronic Health Record implementation, next steps and benefits:  
  • Better documentation  
  • Update policies  
  • Update our tools  
  • Enhance real time data  
- Our Data entry is 83% compliant in the CEMSIS system.  
- HIE Project discussion took place. We were granted $2.5 million project that will be developed in the next three (3) years.  
- M. Clark and Chris Duncan have been working on fixing the tools in order to reduce time on task and time stamp.  
| Our goal is for our data to be 95% compliant and accepted in CEMSIS. |
| **14. EMS System Initiatives: Clinical Care and Patient Outcomes.** | A. Dr. Miller and John Sampson presented a PowerPoint with data regarding the Community Paramedicine. Some key points:  
- As of today, 234 patients have been assessed.  
- As of today, 151 patients have been enrolled.  
- 65% of patients were medically cleared to go directly to EPS, saving valuable ED resources for higher acuity patients. 35% of patients had either an injury, abnormal vital sign, ingested a toxin or had a new onset of psychosis requiring medical treatment.  
<p>| PowerPoint presentation will be shared with those whom request it. |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>Discussion</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>C. Specialty Center Quality Improvement, EMS Agency Medical Director (Dr. Miller)</td>
<td>and/or clearance before behavioral health treatment. American College of Surgeons review took place in April and both VMC and Stanford were reverified.</td>
<td></td>
</tr>
<tr>
<td>D. Prehospital Care Policy Revision Activities (John Sampson)</td>
<td>John Sampson spoke on the Policy Development Review and the report is on Page 52.</td>
<td></td>
</tr>
</tbody>
</table>
| 15. EMS System Initiative: Skills Maintenance/Competency (Daniel Franklin) | Some key points that Daniel spoke on:  
- To date for 2019 we have had 310 individuals attempt the EMS exam. Of those tested we had 260 EMT’s and 50 Paramedics. 127 EMT’s passed the exam on their first attempt with 133 failing the exam. Of the 133 EMT’s that failed, 120 tested a second time with 110 passing. 33 Paramedics passed the exam on their first attempt with 17 failing. Of the 17 that failed, 14 retested and passed on their second attempt. We have found that the paramedics are typically better prepared to take the exam as they have experience working in the system as an EMT and have a better understanding of what to study.  
- The EMS Agency is conducting audits of the 19 continuing education providers in our system. Last year these providers offered over 1,500 classes. So far over 160 classes have been audited. The goal of the audit is to ensure prehospital training and education is being provided to the standards outlined in local policy as State Regulations. |        |
<table>
<thead>
<tr>
<th>Item</th>
<th>Discussion</th>
<th>Action</th>
</tr>
</thead>
</table>
| **16. EMS System Initiatives: Public Education (Daniel Franklin)**  | Community Education for the last quarter consisted of the following:  
- March – Hands-Only CPR  
- April – Pool Safety  
- May – Stoke Awareness  
Community Education for the upcoming quarter consist of the following:  
- June - Pool Safety and Snake Bites  
- July – Heat related illness  
- August – Fall Prevention | Daniel is beginning work on a public safety campaign on distracted driving. We are reaching out to the Santa Clara County Public Health Department to develop a joint message. |
| **17. EMS System Initiatives: Transportation/Facilities**           | **A. Receive report on Palo Alto exclusive Operating Area (Kevin McNally)**  
**B. Receive report on Bypass (Jackie Lowther)**  
A. Kevin McNally was not present; report is available on Page 53.  
B. Jackie Lowther presented the Bypass report which can be found on Page 65.  
- Policy 603 has been updated and comments closed yesterday. |                                                                                                                                                                                                       |
<table>
<thead>
<tr>
<th>Item</th>
<th>Discussion</th>
<th>Action</th>
</tr>
</thead>
</table>
| **18. EMS System Initiatives: Preparedness** *(Michael Cabano)* | Some key points that Michael spoke on: Law Enforcement Liaison Activities  
- 100% of Law Enforcement Agencies Countywide now have Narcan Programs  
- Palo Alto PD and San Jose PD newest additions  
- Since initiation of program total of 9 administrations by Law Enforcement (Mtn. View PD, Campbell PD, Sheriff’s Office, Gilroy PD, Sunnyvale DPS)  
Recent Events/Incidents  
- Discussed Command and Control Review of Suspected Active Shooter at Good Samaritan Hospital  
- Discussed Command And Control Review of Sheriff’s Inmate Transportation Bus Accident  
Upcoming Events  
- Working with Chief Cole to prep for Audiotistic EDM Music Fest in July at Shoreline Amphitheatre  
- 42 other scheduled concerts at Shoreline Amphitheatre  
- Variety of other large-scale concerts at Levi Stadium working with Dan Bobier on prep | |
<p>| <strong>19. EMCC Member Request for Future Agenda Items</strong> | None | |
| <strong>20. EMS Stakeholder Request for Future Agenda Items</strong> | Daniel Peck proposed for EMCC meetings to be scheduled Bi-Annually. | Will placed on Agenda for the August 15, 2019 meeting, voting member will discuss. |</p>
<table>
<thead>
<tr>
<th>Item</th>
<th>Discussion</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>21. Next Meeting</td>
<td>August 15, 2019 from 2:00pm-4:00pm at Valley Specialty Center, Room BQ160, 751 S. Bascom Ave, San Jose, CA 95128.</td>
<td>Meeting adjourned at 3:20pm.</td>
</tr>
</tbody>
</table>

**VOTING MEMBERS PRESENT:**
- Joshua E. Markowitz, MD, Specialty Care Physician
- Daniel Nunez, Private Sector Paramedic/EMT
- Douglas Petrick, County EOA Ambulance Provider
- Dan Bobier, Private Ambulance Service Executive Officer
- Casey Potts, Fire Service Executive Officer
- Robert Jonsen, Law Enforcement Executive Officer
- Kent Steffens, City Manager
- Heather Tannehill-Plamondon, County Communications

**Voting Alternates PRESENT:**
- Jeff Horner, Private Ambulance Service Executive Officer
- Jeff Cole, Fire Service Executive Officer

**EMS STAFF PRESENT:**
- Jackie Louthier, EMS Director
- Dr. Ken Miller, Medical Director
- Ramona Aguilar, Executive Assistant
- John Blain, EMS Specialist
- Michael Cabano, EMS Specialist
- Michael Clark, EMS Specialist
- Christopher Duncan, EMS Specialist
- Daniel Franklin, EMS Specialist
- Patricia Natividad, Sr. Management Analyst
- Daniel Peck, EMS Specialist
- John Sampson, EMS Specialist
- Jason Weed, EMS Specialist
- Michael Nicholas, Pro Transport
- Randy Hooks, SVA
- Ian Lien, Westmed
- Diane St. Denis, MVDR
- Jeff Burns, Royal Ambulance
- Ryan Lugo, County Parks
- Yvonne Matagulay, Milpitas Fire

**Others in Attendance:**
- Jenn Caposella, CALSTAR-Reach
- Michael Baulch, Stanford Life Flight
- Tom Woodland, Westmed
- Good Dwight, CalFire
- Michael Nicholas, Pro Transport
- Randy Hooks, SVA
- Ian Lien, Westmed
- Diane St. Denis, MVDR
- Jeff Burns, Royal Ambulance
- Ryan Lugo, County Parks
- Yvonne Matagulay, Milpitas Fire

Attachments, presentations and documents can be found at: www.sccemsagency.org
Date: July 29, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Patricia Natividad
       Senior Management Analyst

Subject: Summary of Approved or Pending Board of Supervisors and Health and Hospital Committee Items

Summary of Health and Hospital Committee Approved Items:

No EMS related items approved.

Summary of Board of Supervisors Approved Items:

No EMS related items approved.
Date: July 29, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Patricia Natividad
Senior Management Analyst

Subject: EMS Trust Fund – Liquidated Damages for Fiscal Year 2019

### Monthly Liquidated Damages for Response Time

**July 1, 2018 – June 30, 2019**

<table>
<thead>
<tr>
<th>Month / Year</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>July-18</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>August-18</td>
<td>$5,000.00</td>
</tr>
<tr>
<td>September-18</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>October-18</td>
<td>$10,000.00</td>
</tr>
<tr>
<td>November-18</td>
<td>$9,000.00</td>
</tr>
<tr>
<td>December-18</td>
<td>$7,000.00</td>
</tr>
<tr>
<td>January-19</td>
<td>$14,000.00</td>
</tr>
<tr>
<td>February-19</td>
<td>$93,250.00</td>
</tr>
<tr>
<td>March-19</td>
<td>$155,250.00</td>
</tr>
<tr>
<td>April-19</td>
<td>$8,000.00</td>
</tr>
<tr>
<td>May-19</td>
<td>$2,000.00</td>
</tr>
<tr>
<td>June-19</td>
<td>$68,750.00</td>
</tr>
<tr>
<td>Total for FY19</td>
<td>$394,250.00</td>
</tr>
<tr>
<td>Average Monthly Total In Period</td>
<td>$32,854.17</td>
</tr>
</tbody>
</table>
Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: John Blain, EMS Specialist, EOA Contract Management

Subject: County EOA Service Area Response Time Performance Reports

**History and Issue**
The County has entered into agreements with private and public entities to provide emergency medical response and advanced life support ambulance transportation services. Periodic response time compliance reports have been provided to the Emergency Medical Care Committee for the purpose of providing public review of those entities’ performance and compliance with contractual response time requirements. The County has performance based contracts with the following entities:

1. County Ambulance Contracted Provider (Rural/Metro of California-AMR)
2. Gilroy, City of
3. Milpitas, City of
4. Morgan Hill, City of
5. Mountain View, City of
6. San Jose, City of
7. Santa Clara, City of
8. Santa Clara County Central Fire Protection District
9. South Santa Clara County Fire District
10. Sunnyvale, City of

**Context**
Compliance is measured by several key performance indicators that include; response time requirements based on population density; designated response areas; type of response priority (red lights & siren or non-red lights & siren); total number of responses; total number of late responses; and total number of responses exempted (removed) from compliance calculations. Compliance is achieved when ninety (90.00%) percent or more of the responses meet the specified response time requirement in each response priority within each designated response area.
### Zone 1

<table>
<thead>
<tr>
<th></th>
<th>Jan 19</th>
<th>Feb 19</th>
<th>Mar 19</th>
<th>Apr 19</th>
<th>May 19</th>
<th>Jun 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 3 Responses</td>
<td>1,147</td>
<td>1,077</td>
<td>1,190</td>
<td>1,130</td>
<td>1,136</td>
<td>1,125</td>
</tr>
<tr>
<td>Code 2 Responses</td>
<td>718</td>
<td>647</td>
<td>667</td>
<td>706</td>
<td>692</td>
<td>718</td>
</tr>
<tr>
<td>Total</td>
<td>1,865</td>
<td>1,724</td>
<td>1,857</td>
<td>1,836</td>
<td>1,828</td>
<td>1,843</td>
</tr>
<tr>
<td>Average Per Day</td>
<td>60.16</td>
<td>61.57</td>
<td>59.90</td>
<td>61.20</td>
<td>58.97</td>
<td>61.43</td>
</tr>
</tbody>
</table>

### Zone 2

<table>
<thead>
<tr>
<th></th>
<th>Jan 19</th>
<th>Feb 19</th>
<th>Mar 19</th>
<th>Apr 19</th>
<th>May 19</th>
<th>Jun 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 3 Responses</td>
<td>1,519</td>
<td>1,403</td>
<td>1,534</td>
<td>1,427</td>
<td>1,470</td>
<td>1,391</td>
</tr>
<tr>
<td>Code 2 Responses</td>
<td>645</td>
<td>564</td>
<td>657</td>
<td>611</td>
<td>614</td>
<td>587</td>
</tr>
<tr>
<td>Total</td>
<td>2,164</td>
<td>1,967</td>
<td>2,191</td>
<td>2,038</td>
<td>2,084</td>
<td>1,978</td>
</tr>
<tr>
<td>Average Per Day</td>
<td>69.81</td>
<td>70.25</td>
<td>70.68</td>
<td>67.93</td>
<td>67.23</td>
<td>65.93</td>
</tr>
</tbody>
</table>

### Zone 3

<table>
<thead>
<tr>
<th></th>
<th>Jan 19</th>
<th>Feb 19</th>
<th>Mar 19</th>
<th>Apr 19</th>
<th>May 19</th>
<th>Jun 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 3 Responses</td>
<td>2,264</td>
<td>2,067</td>
<td>2,398</td>
<td>2,123</td>
<td>2,221</td>
<td>2,260</td>
</tr>
<tr>
<td>Code 2 Responses</td>
<td>635</td>
<td>609</td>
<td>711</td>
<td>625</td>
<td>675</td>
<td>622</td>
</tr>
<tr>
<td>Total</td>
<td>2,899</td>
<td>2,676</td>
<td>3,109</td>
<td>2,748</td>
<td>2,896</td>
<td>2,882</td>
</tr>
<tr>
<td>Average Per Day</td>
<td>93.52</td>
<td>95.57</td>
<td>100.29</td>
<td>91.60</td>
<td>93.42</td>
<td>96.07</td>
</tr>
</tbody>
</table>

### Zone 4

<table>
<thead>
<tr>
<th></th>
<th>Jan 19</th>
<th>Feb 19</th>
<th>Mar 19</th>
<th>Apr 19</th>
<th>May 19</th>
<th>Jun 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 3 Responses</td>
<td>2,293</td>
<td>2,157</td>
<td>2,362</td>
<td>2,200</td>
<td>2,242</td>
<td>2,342</td>
</tr>
<tr>
<td>Code 2 Responses</td>
<td>766</td>
<td>653</td>
<td>733</td>
<td>739</td>
<td>803</td>
<td>723</td>
</tr>
<tr>
<td>Total</td>
<td>3,059</td>
<td>2,810</td>
<td>3,095</td>
<td>2,939</td>
<td>3,045</td>
<td>3,065</td>
</tr>
<tr>
<td>Average Per Day</td>
<td>98.68</td>
<td>100.36</td>
<td>99.84</td>
<td>97.97</td>
<td>98.23</td>
<td>102.17</td>
</tr>
</tbody>
</table>

### Zone 5

<table>
<thead>
<tr>
<th></th>
<th>Jan 19</th>
<th>Feb 19</th>
<th>Mar 19</th>
<th>Apr 19</th>
<th>May 19</th>
<th>Jun 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 3 Responses</td>
<td>506</td>
<td>468</td>
<td>487</td>
<td>498</td>
<td>525</td>
<td>519</td>
</tr>
<tr>
<td>Code 2 Responses</td>
<td>194</td>
<td>203</td>
<td>194</td>
<td>193</td>
<td>217</td>
<td>220</td>
</tr>
<tr>
<td>Total</td>
<td>700</td>
<td>671</td>
<td>681</td>
<td>691</td>
<td>742</td>
<td>739</td>
</tr>
<tr>
<td>Average Per Day</td>
<td>22.58</td>
<td>23.96</td>
<td>21.97</td>
<td>23.03</td>
<td>23.94</td>
<td>24.63</td>
</tr>
</tbody>
</table>

### EOA (All Five Zones)

<table>
<thead>
<tr>
<th></th>
<th>Jan 19</th>
<th>Feb 19</th>
<th>Mar 19</th>
<th>Apr 19</th>
<th>May 19</th>
<th>Jun 19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code 3 Responses</td>
<td>7,729</td>
<td>7,172</td>
<td>7,971</td>
<td>7,378</td>
<td>7,594</td>
<td>7,637</td>
</tr>
<tr>
<td>Code 2 Responses</td>
<td>2,958</td>
<td>2,676</td>
<td>2,962</td>
<td>2,874</td>
<td>3,001</td>
<td>2,870</td>
</tr>
<tr>
<td>Total</td>
<td>10,687</td>
<td>9,848</td>
<td>10,933</td>
<td>10,252</td>
<td>10,595</td>
<td>10,507</td>
</tr>
<tr>
<td>Average Per Day</td>
<td>344.74</td>
<td>351.71</td>
<td>352.68</td>
<td>341.73</td>
<td>341.77</td>
<td>350.23</td>
</tr>
</tbody>
</table>
Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee

From: David Sullivan, EMS Specialist, Vehicle Permit Officer

Subject: Non-911 Ambulance Services and Permitted Vehicles

Current Non-911 Private Ambulance Providers (as of 07/1/19):

<table>
<thead>
<tr>
<th>Provider</th>
<th>Levels of Service</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Medical Response - Sutter</td>
<td>CCT, BLS</td>
</tr>
<tr>
<td>Falck North America</td>
<td>CCT, ALS, BLS</td>
</tr>
<tr>
<td>Falcon Critical Care Transport</td>
<td>CCT, BLS</td>
</tr>
<tr>
<td>NORCAL Ambulance</td>
<td>CCT, BLS</td>
</tr>
<tr>
<td>ProTransport-1</td>
<td>CCT, ALS, BLS</td>
</tr>
<tr>
<td>Royal Ambulance</td>
<td>CCT, BLS</td>
</tr>
<tr>
<td>Silicon Valley Ambulance</td>
<td>ALS, BLS</td>
</tr>
<tr>
<td>Westmed Ambulance</td>
<td>CCT, ALS, BLS</td>
</tr>
</tbody>
</table>

*Bayshore Ambulance ceased operations in Santa Clara County effective Sunday April 28th at 1700

Number of Non-911 resources (as of 07/1/19):

<table>
<thead>
<tr>
<th>Provider</th>
<th>Santa Clara County Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Medical Response - Sutter</td>
<td>7</td>
</tr>
<tr>
<td>Falck North America</td>
<td>14</td>
</tr>
<tr>
<td>Falcon Critical Care Transport</td>
<td>8</td>
</tr>
<tr>
<td>NORCAL Ambulance</td>
<td>6</td>
</tr>
<tr>
<td>ProTransport-1</td>
<td>31</td>
</tr>
<tr>
<td>Royal Ambulance</td>
<td>29</td>
</tr>
<tr>
<td>Silicon Valley Ambulance</td>
<td>9</td>
</tr>
<tr>
<td>Westmed Ambulance</td>
<td>22</td>
</tr>
<tr>
<td>Total</td>
<td>126</td>
</tr>
</tbody>
</table>

Number of field inspections of ambulances and fire apparatus, so far, during CY2019:

<table>
<thead>
<tr>
<th>Resource Type</th>
<th>Inspections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambulances (Fire, EOA, and Non-911)</td>
<td>40</td>
</tr>
<tr>
<td>Fire Apparatus (Non-Transport)</td>
<td>7</td>
</tr>
<tr>
<td>Quick Response Vehicle (EOA)</td>
<td>1</td>
</tr>
</tbody>
</table>
Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee

From: David Sullivan
EMS Specialist

Subject: Ambulance Responses to County Custody Facilities

History:
Westmed Ambulance is the contracted ambulance provider for the Santa Clara County Custody Facilities. Occasionally, 911 ambulances are utilized due to patient condition or nature of the emergency.

Report:
The following graphs show ambulance responses to the Main Jail and Elmwood Jail for the first half of calendar year 2019.
Date: July 31, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Daniel Peck, MSL
EMS Specialist
Investigations/Enforcement

Subject: Investigations Report January 1, 2019 through June 30, 2019

History
Santa Clara County EMS Agency investigates hundreds of cases each year including but not limited to protocol deviations, vehicle failures during a response or transport, criminal situations and general complaints from the public. Cases are reviewed by staff members within the EMS Agency or sent to EMS Program Managers for department review. Below are the numbers of cases that have been reported to the Santa Clara County EMS Agency for the first half of 2019, from January 1, 2019 through June 30, 2019.

Report

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care Concern</td>
<td>10</td>
</tr>
<tr>
<td>Communications Systems</td>
<td>2</td>
</tr>
<tr>
<td>Complaint</td>
<td>12</td>
</tr>
<tr>
<td>Confidential</td>
<td>3</td>
</tr>
<tr>
<td>Criminal - Background</td>
<td>6</td>
</tr>
<tr>
<td>Criminal - Subsequent Arrest</td>
<td>4</td>
</tr>
<tr>
<td>EMS Policy or Protocol</td>
<td>42</td>
</tr>
<tr>
<td>Injury or Illness of EMS Provider</td>
<td>1</td>
</tr>
<tr>
<td>Ordinance or Law Violation</td>
<td>2</td>
</tr>
<tr>
<td>Provider Recognition</td>
<td>2</td>
</tr>
<tr>
<td>Public Comment</td>
<td>1</td>
</tr>
<tr>
<td>Public Concern or Media Event</td>
<td>2</td>
</tr>
<tr>
<td>Quality Assurance (QA)</td>
<td>2</td>
</tr>
<tr>
<td>Vehicle or Equipment Failure</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>135</strong></td>
</tr>
</tbody>
</table>
# MVDR Membership Report
## August 2019

### Current Membership:

<table>
<thead>
<tr>
<th>Type of License</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physician</td>
<td>57</td>
<td>34</td>
<td>13</td>
<td></td>
<td>104</td>
</tr>
<tr>
<td>Registered Nurse</td>
<td>159</td>
<td>96</td>
<td>36</td>
<td></td>
<td>291</td>
</tr>
<tr>
<td>Physician’s Assistant</td>
<td>16</td>
<td>5</td>
<td>0</td>
<td></td>
<td>21</td>
</tr>
<tr>
<td>Nurse Practitioner</td>
<td>8</td>
<td>3</td>
<td>1</td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Paramedic</td>
<td>20</td>
<td>1</td>
<td>4</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>EMT</td>
<td>91</td>
<td>39</td>
<td>28</td>
<td></td>
<td>158</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>14</td>
<td>3</td>
<td>2</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>Social worker</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>Psychologist</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Dentist</td>
<td>3</td>
<td>7</td>
<td>0</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Veterinarian</td>
<td>4</td>
<td>4</td>
<td>0</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Other (Medical)</td>
<td>147</td>
<td>31</td>
<td>10</td>
<td></td>
<td>188</td>
</tr>
<tr>
<td>Other (Non-Medical)</td>
<td>92</td>
<td>33</td>
<td>8</td>
<td></td>
<td>129</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>619</td>
<td>259</td>
<td>102</td>
<td></td>
<td>980</td>
</tr>
</tbody>
</table>

### Membership by Level:

<table>
<thead>
<tr>
<th>Level</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Level 2</td>
<td>619</td>
<td>619</td>
<td>619</td>
<td>619</td>
<td>619</td>
</tr>
<tr>
<td>Level 3</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
<td>259</td>
</tr>
<tr>
<td>Level 4</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
<td>102</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>980</strong></td>
<td><strong>980</strong></td>
<td><strong>980</strong></td>
<td><strong>980</strong></td>
<td><strong>980</strong></td>
</tr>
</tbody>
</table>

**Santa Clara County Emergency Medical Services**

**MVDR Membership Report**
Withdrawals:

<table>
<thead>
<tr>
<th>Membership Withdrawals</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Withdrawn</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reason</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Total Withdrawals</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Event Participation:

<table>
<thead>
<tr>
<th>MONTH</th>
<th>APRIL</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUGUST</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVENT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>DHV Quarterly Drill</td>
<td>Statewide MRC Coordinators Workshop</td>
<td>-</td>
<td>Region 2 MRC Coordinators Meeting</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>DHV/MRC User Group Webinar</td>
<td>-</td>
</tr>
<tr>
<td>PARTICIPANTS</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL MONTHLY PARTICIPANTS</td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>2</td>
<td>-</td>
</tr>
</tbody>
</table>

Event Summary:

The MVDR Program is currently going through a volunteer reconciliation process that will gather appropriate staffing numbers and update current member notification information. This process concluded its reporting period on May 30, 2019. Reconciliation of these responses is currently being completed and should be concluded by the next quarterly membership report.

Since the last membership report the MVDR Program Administrator has participated in several workshops and drills to enhance program readiness and coordinate with state resources. These events occurred on May 29th, May 30th, July 18th and July 25th.

Membership Summary:

There was no documented increase in membership from the last report through July 2019.

Membership Level Definitions:

**Level I**: the program has little or no advanced knowledge of member or prior training. Level I members require emergency credentialing and are last to be utilized to fill resource needs. Level I members and are ineligible to deploy unless sworn in as Disaster Service Workers (DSW)
**Level II:** Basic volunteers who have expressed some level of interest in the program prior to attendance. These members have registered with the DHV but have yet to participate in a new member orientation. These members are used to fill resource needs after Level III and Level IV volunteers. Level II members are ineligible to deploy unless sworn in as Disaster Service Workers (DSW).

**Level III:** Intermediate volunteers are primarily called into service in disaster events and will be attached to existing infrastructure. These individuals regularly participate in training and exercises. They have completed the core competencies and have been issued an MVDR ID.

**Level IV:** Level 4 members are first call for deployments and are deployable with little or no advanced notice. They have completed advanced training classes in addition to frequent participation in training and exercises.
Date: August 15, 2019
To: Santa Clara County Emergency Medical Care Committee
From: Jason Weed, EMS Specialist, Communications/System Providers Unit
Subject: EMS System Initiatives: Equipment and Supplies

History
The Santa Clara County EMS Agency is providing an update related to radio equipment purchased by the EOA contracted provider (County Ambulance). The County also is providing an update on EMS Ballistic Protection and restock supplies requested for the Field Treatment Site Trailers (FTS) through State Homeland Security Grant Program (SHSGP).

Report
County Ambulance has ordered the required new radio equipment and has received the first shipment of radios.

The EMS agency will begin to receive the initial order of the EMS ballistic protection in August of this year.

The Field Treatment Site Trailer (FTS) restock supplies will begin to be delivered in January of 2020. Once the EMS agency has the restock all hospitals and fire stations with a FTS will be notified restock will be delivered and replaced.
Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Michael Clark
EMS Specialist

Subject: EMS Data Systems Update

CEMSIS 911 Data Submission Report

Since the last verbal report to the Emergency Medical Care Committee (EMCC) on May 16, 2019, the EMS Agency has continued to enhance the overall use and functionality of the electronic patient care record (ePCR) solution.

One of the focuses of the Agency was to increase our compliance with data submission to the California EMS Information System (CEMSIS). In May of 2019, we had just reached a submission rate of ~90%. This means that out of the total ePCRs generated by the field crews, only 90% were being accepted by CEMSIS at that time. The Agency discovered that the largest reason for failures was related to the State not having the correct naming of four (4) of the receiving hospitals within our county. This would cause a kickback of the ePCR record with the message that the hospital did not exist. Working with the State EMS Authority, we were able to fix this and resubmit the ePCRs.

As of today, the rate of submission now ranges from 92-97%. For most agencies, the 8-3% that has not been submitted are still either pending submission or being edited by the crew members.

The charts below demonstrate ePCR data submission between January 1, 2019 and July 22, 2019 for the 911 response agency (not including Palo Alto Fire Department).

<table>
<thead>
<tr>
<th>Agency</th>
<th>Total PCRs</th>
<th>Sent to CEMSIS</th>
<th>Pending Submission</th>
<th>Percentage Sent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morgan Hill Fire</td>
<td>909</td>
<td>838</td>
<td>71</td>
<td>92.2%</td>
</tr>
<tr>
<td>South Santa Clara Fire</td>
<td>994</td>
<td>906</td>
<td>88</td>
<td>91.1%</td>
</tr>
<tr>
<td>Milpitas Fire</td>
<td>2,064</td>
<td>1,984</td>
<td>80</td>
<td>96.1%</td>
</tr>
<tr>
<td>Gilroy Fire</td>
<td>2,125</td>
<td>2,054</td>
<td>71</td>
<td>96.7%</td>
</tr>
<tr>
<td>Mountain View Fire</td>
<td>2,749</td>
<td>2,595</td>
<td>154</td>
<td>94.4%</td>
</tr>
<tr>
<td>Santa Clara City Fire</td>
<td>3,523</td>
<td>3,402</td>
<td>121</td>
<td>96.6%</td>
</tr>
<tr>
<td>Sunnyvale DPS</td>
<td>3,534</td>
<td>3,385</td>
<td>149</td>
<td>95.8%</td>
</tr>
<tr>
<td>Santa Clara County Fire</td>
<td>6,668</td>
<td>6,404</td>
<td>264</td>
<td>96.0%</td>
</tr>
<tr>
<td>San Jose Fire</td>
<td>40,824</td>
<td>39,675</td>
<td>1,149</td>
<td>97.2%</td>
</tr>
<tr>
<td>County Ambulance</td>
<td>65,692</td>
<td>62,103</td>
<td>3,589</td>
<td>94.5%</td>
</tr>
<tr>
<td><strong>Combined Total</strong></td>
<td><strong>129,082</strong></td>
<td><strong>123,346</strong></td>
<td><strong>5,736</strong></td>
<td><strong>95.6%</strong></td>
</tr>
</tbody>
</table>
Date: 15 August 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Ken Miller MD PhD
Medical Director

Subject: EMCC Medical Director’s Report, August 15, 2019

History
Santa Clara County EMS Agency has regulatory oversight of the Countywide EMS system

Report

Item #14: EMS System Initiatives: Clinical Care and Patient Outcome

A. EMS Agency Medical Director’s Report
   a. 2019 EMS Update
      i. ePCR documentation and patient care workflow
      ii. hemorrhage control protocol to include tranexamic acid
      iii. HazMat & Patient Decontamination Form and Policy 610
      iv. LVAD Standard Protocol update
      v. EMS Communicable Disease Exposure Policy (new)
      vi. Stroke Protocol update: GFAST=4 for CSC Triage
      vii. Seizure/Status Epilepticus Protocol: increase initial midazolam IM dose
      viii. Naloxone dosing; no maximum
   b. PG&E Public Safety Power Shutdown; effect on EMS system & receiving centers

B. Specialty Center Quality Improvement
   a. Stroke: CSC Triage, GFAST=4 regardless of timeframe of symptom onset
   b. STEMI: 12-lead ECG transmission
   c. Hospital Outcome Data: Stroke, STEMI, cardiac arrest & registries
   d. Community Paramedicine: Pilot Project through November 2019
      i. AB 1544, Chapter 4 Paramedic Regulations
Date: July 31, 2019
To: Santa Clara County Emergency Medical Care Committee Members
From: John Sampson, MICP
Clinical Program Manager
Subject: Specialty Center Quality Improvement Committee

History
History - The Santa Clara County Quality Improvement Committee continues to focus efforts on increasing the county’s intubation success rate. Endotracheal intubation is a medical procedure in which an endotracheal tube is placed into the trachea to assist the patient’s breathing. The committee has implemented numerous mechanisms to improve the intubation success rates. These mechanisms include; airway labs, trainings, protocol changes and the identification of new equipment. Earlier this year new state of the art equipment (Video Laryngoscopy) was implemented to help improve intubation success rates.

Report

- Blended data consist of every intubation (Direct Laryngoscopy (DL) and/or Video Laryngoscopy (VL). Comparison was made between the calendar years of 2018 and 2019 for the corresponding month.
- 2018 data solely consisted of DL intubation attempts were 2019 data consisted of the DL, VL blend.
- Outside of the first complete month of data (March) were VL was implemented, each subsequent month has shown success increase in comparison from last year’s values with only using DL.
• Data only compares VL attempts for 2019 vs DL attempts for 2018.
• Even though the percentages may be close in range, the attempts for VL have a lower frequency compared to the 2018 DL attempts. This statistically puts the VL success at a disadvantage vs DL, Making the VL have a stronger statistical value when weighted against the comparison data.

Although a small sample size due to the implementation start date, the returning data from this procedural change is very promising. The success trends that we are seeing correlate with counties that have already implemented this device in years past. If our data continues to follow the trends of comparison counties studied, it is conceivable that the county could reach success rates of 80% or higher by 2021.
Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee

From: David Sullivan
EMS Specialist

Subject: Policy Development Report

History:
Consistent with Santa Clara County Emergency Medical Services Prehospital Care Policy #109: Policy Development and Implementation, the EMS Agency regularly updates policies and protocols.

Report:
The following policies and protocols were released or updated by the County of Santa Clara EMS Agency in the first half of calendar year 2019.

<table>
<thead>
<tr>
<th>Policy #</th>
<th>Policy Name</th>
<th>Effective Date</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>301</td>
<td>Supplemental EMS System Resources</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>302</td>
<td>Prehospital Care Asset - Minimum Inventory Requirements</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>313</td>
<td>Public Safety First Aid Providers Scope of Practice and Optional Skills</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-A07</td>
<td>Cardiac Arrest</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-A17</td>
<td>Traumatic Cardiac Arrest</td>
<td>2/12/2019</td>
<td>New Policy</td>
</tr>
<tr>
<td>700-M01</td>
<td>Airway Management</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-M11</td>
<td>Spinal Motion Restriction</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-M17</td>
<td>Extremity Hemorrhage Control</td>
<td>2/12/2019</td>
<td>New Policy</td>
</tr>
<tr>
<td>700-P07</td>
<td>Pediatric Cardiac Arrest</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-S01</td>
<td>Continuous Cardiopulmonary Resuscitation</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-S13</td>
<td>Use of Physical Restraints</td>
<td>2/12/2019</td>
<td>New Policy</td>
</tr>
<tr>
<td>700-X01</td>
<td>Airway Management (BLS Optional Scope)</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>700-X06</td>
<td>Pain Management (ALS Optional Scope)</td>
<td>2/12/2019</td>
<td>New Policy</td>
</tr>
<tr>
<td>811</td>
<td>Multiple Casualty Incident Plan</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>811A</td>
<td>MCI Documents/Tools</td>
<td>2/12/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>620A</td>
<td>Permitted Ambulance Providers</td>
<td>5/14/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>616</td>
<td>Surgeon to Scene Request and Response</td>
<td>6/1/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>201</td>
<td>Emergency Medical Technician Certification</td>
<td>7/1/2019</td>
<td>Updated</td>
</tr>
<tr>
<td>620</td>
<td>Interfacility Transfer - Ground Ambulance</td>
<td>7/1/2019</td>
<td>Updated</td>
</tr>
</tbody>
</table>
Calls for Service

The Palo Alto Fire Department (PAFD) responded to a total of 4,264 calls for service in the first six-month period of Fiscal Year 2019. This includes responses within Palo Alto, Stanford, and neighboring cities to provide Auto and Mutual Aid. Approximately eighty-three percent (83%) of calls are generated from Palo Alto, fifteen percent (15%) from Stanford, and the remainder from neighboring cities or requests for regional fire deployment.

The majority of calls were for Rescue and Emergency Medical Services, making up sixty-two percent (62%) of the responses. Table 1 below shows the main categories of the calls to which PAFD responded. Calls are classified based on the actual event occurred, rather than the initial call request.

<table>
<thead>
<tr>
<th>Call Type</th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rescue and Emergency Medical Services Incidents</td>
<td>2,692</td>
<td>2,632</td>
</tr>
<tr>
<td>Good Intent</td>
<td>804</td>
<td>620</td>
</tr>
<tr>
<td>False Alarm and False Call</td>
<td>695</td>
<td>620</td>
</tr>
<tr>
<td>Service Call</td>
<td>264</td>
<td>231</td>
</tr>
<tr>
<td>Fire</td>
<td>105</td>
<td>85</td>
</tr>
<tr>
<td>Hazardous Condition, No Fire</td>
<td>77</td>
<td>76</td>
</tr>
<tr>
<td>Grand Total</td>
<td>4,637</td>
<td>4,264</td>
</tr>
</tbody>
</table>

Good Intent and False Alarm calls make up the second largest types of responses. Most calls for service that may be a true threat of fire, gas or other emergency hazard are actually found to be something else after Firefighters investigate the situation. These calls are coded as Good Intent calls. As well, many fire alarm activations are from causes other than fire or emergency hazard. These situations are categorized as False Alarm calls.
Emergency Medical Services and Rescue

Emergency Medical Service (EMS) is the primary service that the Palo Alto Fire Department provides to Palo Alto and Stanford. While this shift toward EMS is being seen across the region, the Palo Alto Fire Department is the only Fire Department in the County that provides ambulance and transport services.

Of the 2,632 Emergency Medical Service calls the PAFD responded to in the first period of Fiscal Year 2019, the overwhelming majority were for medical, trauma and cardiac calls that did not involve a vehicle accident.

<table>
<thead>
<tr>
<th>Rescue and EMS Performance Measures</th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Medical Service Incident</td>
<td>2,643</td>
<td>2,577</td>
</tr>
<tr>
<td>Lock-In</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>Extrication, Rescue</td>
<td>32</td>
<td>41</td>
</tr>
<tr>
<td>Rescue or EMS Standby</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Water and Ice-Related Rescue</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Search for Lost Person</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>2,692</strong></td>
<td><strong>2,632</strong></td>
</tr>
</tbody>
</table>

Transports

<table>
<thead>
<tr>
<th></th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Transports</td>
<td>1,703</td>
<td>1,774</td>
</tr>
<tr>
<td>Percent of EMS Calls resulting in transport</td>
<td>63%</td>
<td>67%</td>
</tr>
</tbody>
</table>

Response Times

<table>
<thead>
<tr>
<th></th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of first responder arriving on scene to EMS calls within 8 minutes</td>
<td>95%</td>
<td>93%</td>
</tr>
<tr>
<td>Percent of paramedic responder arriving on scene to EMS calls within 12 minutes</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Average response time for first responder arriving on scene to EMS calls</td>
<td>4:48</td>
<td>5:06</td>
</tr>
</tbody>
</table>

This period reflects a slight dip in the number of Rescue and EMS Incident calls. The number of EMS calls that resulted in an ambulance transport to a local hospital or care facility, accounted for sixty seven percent (67%) of all EMS calls. This is the primary source of revenue generated from emergency medical services, and the Department has seen the revenue flatten out over the last period.

🌟 Response Time Goal Met: At least 90% of first responder arriving on scene to EMS calls within eight minutes.

This period the PAFD first responder arrived on scene to EMS calls within eight minutes ninety-three percent (93%) of the time.

🌟 Response Time Goal Met: At least 99% of paramedic responder arriving on scene to EMS calls within 12 minutes.

This quarter the PAFD paramedic responder arrived on scene to EMS calls within 12 minutes ninety-nine percent (99%) of the time.
Fire Suppression

Very few of the potential fire calls coming into dispatch turn out to be a real fire once PAFD investigates the scene and cause of the concerning elements. This period PAFD responded to 85 calls where fire was present, with 74 in Palo Alto or Stanford. There were seven building fires that the Department responded to in Palo Alto and Stanford, five of which were contained to the area of origin.

Here are the descriptions of the significant fires for this period:

July 20, 2018
Fire Units responded to the report of a fire in the bathroom of a single family residence. Units arrived to find light smoke in the house. The fire investigator found that the fire was caused by a bathroom fan that burned into the attic, where the fire was extinguished.

August 14, 2018
There was a report of smoke and flames seen inside of a single family residence. There was also a report that a child may still be in the house. The fire was in one of the bedrooms and quickly extinguished. The child was found outside of the house. Based on the investigation, the fire was caused by a furnace that was recently serviced, located in the attic. The extent of the damage was limited to the attic and the bedroom.

October 21, 2018
Fire units were dispatched to a water flow alarm at a multiple unit student housing occupancy. There were reports of water flowing out of a room, typically indicative of a fire sprinkler activation. The first due engine arrived to find the building being evacuated and smoke rolling down the hallway. The fire crews, with the assistance of the fire sprinkler, were able to fully extinguish the fire and confine the damage to the room of origin. The fire was caused by a pot that was left on the stove.

November 11, 2018
Palo Alto Fire Engine 65 was dispatched to join a Santa Clara County strike team to assist with the Camp Fire in Butte County, the deadliest and most destructive fire in California history. For 11 days, fire crews were responsible for constructing fire lines, structure preparation and defense, and overhaul. The crew returned safely without any injuries.

November 16, 2018
Fire crews were dispatched to smoke coming from a single family residence. When the crews made entry, the house was full of smoke with zero visibility, and a fire sprinkler was activated. Eventually, the crews made it to the bathroom and quickly extinguished the fire. Based on the investigation, the fire was caused by a faulty exhaust fan in the bathroom.
<table>
<thead>
<tr>
<th>Fire Suppression Measures</th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structure Fire</td>
<td>46</td>
<td>32</td>
</tr>
<tr>
<td>Outside rubbish fire</td>
<td>22</td>
<td>19</td>
</tr>
<tr>
<td>Mobile property (vehicle) fire</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Natural vegetation on fire</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>Fire, Other</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Special outside fire</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Fire in mobile property used as a fixed structure</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>105</strong></td>
<td><strong>85</strong></td>
</tr>
</tbody>
</table>

### Response Times
- Percent of first responder arriving on scene to Fire calls within 8 minutes: 90% vs. 87%
- Average response time for first responder arriving on scene to Fire calls: 5:27 vs. 5:46

### Fire Containment
- Percent of building and structure fires contained to the room or area of origin: 83% vs. 71%

**Response Time Not Goal Met**: At least 90% of first responder arriving on scene to Fire calls within eight minutes.

This period the PAFD first responder arrived on scene to Fire calls within eight minutes eighty seven percent (87%) of the time.

**Fire Containment Goal Not Met**: At least 90% of building and structure fires contained to the room or area of origin.

This period there were seven building or structure fires within Palo Alto or Stanford, of which five were contained to the room or area of origin. In both cases the fire had spread beyond the original area despite a response time under eight minutes.
Hazardous Materials

The Fire Department responded to a total of 76 calls related to hazardous material incidents. The most common Hazardous Material call is spills and leaks of either natural or liquid petroleum gas (LPG) which totaled 36. This number accounted for forty-seven (47%) percent of all Hazardous Material calls.

The second highest Hazardous Material calls were related to electrical wiring or equipment problems. fifteen (15) of these calls account for twenty (20%) percent of all Hazardous Material calls.

<table>
<thead>
<tr>
<th>Hazardous Materials Response Measures</th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustible/Flammable spills and leaks</td>
<td>42</td>
<td>36</td>
</tr>
<tr>
<td>Electrical wiring/Equipment problem</td>
<td>26</td>
<td>15</td>
</tr>
<tr>
<td>Hazardous Condition, Other</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>Biological hazard</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Chemical release, reaction, or toxic condition</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Accident, potential accident</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Attempted burning, illegal action</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>77</td>
<td>76</td>
</tr>
</tbody>
</table>

**Response Times**

Average response time for first responder arriving on scene to Rescue & Hazardous Materials calls

- FY18 JUL-DEC: 5:50
- FY19 JUL-DEC: 6:42
Mutual and Automatic Aid

The Fire Department previously held automatic aid agreements with five regional Fire Departments, including Mountain View, Menlo Park, and Santa Clara County Fire. At the request of the City of Mountain View, the automatic aid agreement was modified at the beginning of January 2018 resulting in a significant decrease in the number of calls compared to the prior fiscal year. The Palo Alto Fire Department continues to advocate for the closest unit response and collects objective data to support improved services to all of our communities under the previous automatic aid agreement.

Santa Clara County received the highest amount of aid from the department this period accounting for fifty-six (56%) of all mutual and auto aid provided. The Department received the most aid from Mountain View with a total of 28 incidents.

<table>
<thead>
<tr>
<th>Mutual Aid Performances</th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agency</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Santa Clara County Fire</td>
<td>37</td>
<td>34</td>
</tr>
<tr>
<td>Mountain View Fire</td>
<td>221</td>
<td>21</td>
</tr>
<tr>
<td>Menlo Park Fire</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>San Mateo City</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>San Mateo County</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Out of Area</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td><strong>All Mutual and Auto Aid Provided</strong></td>
<td>271</td>
<td>61</td>
</tr>
</tbody>
</table>

| Mutual and Auto Aid Received |                |              |
|-----------------------------|                |              |
| Agency                      |                |              |
| Mountain View Fire          | 147            | 28           |
| Menlo Park Fire             | 27             | 16           |
| Santa Clara County Fire     | 13             | 4            |
| Woodside Fire               | 15             | 0            |
| Moffett Fire                | 2              | 0            |
| Sunnyvale                   | 2              | 0            |
| Cal-Fire                    | 2              | 0            |
| **All Mutual and Auto Aid Received** | 208 | 48 |
Fire Prevention

The Fire Prevention Bureau ensures compliance with the Fire Code for the safety of occupants and protection of property. Fire Inspectors perform fire sprinkler and fire alarm plan checks, permitting, and field inspections with the goal of ensuring all construction complies with local and national codes.

This period saw a decrease in the number of electric vehicle permits issued compared to the same period in the prior year. The number of Fire Inspections and Hazardous Material inspections increased, and the number of plans to review remained steady.

<table>
<thead>
<tr>
<th>Prevention Bureau Performance Measures</th>
<th>FY18 JUL-DEC</th>
<th>FY19 JUL-DEC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Permits</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Permits Issued</td>
<td>230</td>
<td>225</td>
</tr>
<tr>
<td>Sprinkler Permits Issued</td>
<td>114</td>
<td>136</td>
</tr>
<tr>
<td>Solar Permits Issued</td>
<td>26</td>
<td>46</td>
</tr>
<tr>
<td>Electric Vehicle Permits Issued</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td><strong>Inspections</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire Inspections</td>
<td>4,617</td>
<td>5,046</td>
</tr>
<tr>
<td>Hazardous Material Inspections Completed</td>
<td>219</td>
<td>241</td>
</tr>
<tr>
<td>Number of Hazardous Material Inspections for the year</td>
<td>563</td>
<td>565</td>
</tr>
<tr>
<td>Percent of Hazardous Material Facilities Inspections Complete</td>
<td>39%</td>
<td>43%</td>
</tr>
<tr>
<td>State Mandated Inspections Completed</td>
<td>137</td>
<td>228</td>
</tr>
<tr>
<td>Number of State Mandated Inspections for the year</td>
<td>397</td>
<td>574</td>
</tr>
<tr>
<td>Percent of State Mandated Facilities Inspections Complete</td>
<td>35%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Fire and Life Safety Plan Review</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plans Reviewed</td>
<td>853</td>
<td>860</td>
</tr>
<tr>
<td>Percent of Reviews Completed On-Time</td>
<td>94%</td>
<td>95%</td>
</tr>
</tbody>
</table>
**Workforce Planning**

The Department operates daily emergency response operations with a total of 86.00 FTE line personnel. This includes three battalions of crews that staff six stations in the City and Stanford 24 hours each day. Over the last period, the department has operated with 7.0 positions vacant and 10.0 employees off-line creating a total of 17.00 FTE positions that require backfill.

The vacant positions are primarily within the Firefighter and Apparatus Operator Classifications, since a promotional process for Fire Captain was conducted last fiscal year there are no permanent vacant Fire Captain positions.

The proportion of shift staff eligible to retire within the next five years continues to remain steady, currently making up more than half of all shift staff. The Department hired 9.0 FTE Entry Level Firefighters in November in order to fill these vacancies after receiving approval to over-hire in anticipation of future retirements. These new hires are currently in a Fire Academy and are anticipated to graduate in March.

The Department will be focusing on succession planning efforts to fill the current Battalion Chief vacancy. The Department will hold a promotional exam, and those that pass will be given the opportunity to serve as Acting Battalion Chiefs.

<table>
<thead>
<tr>
<th>Vacancies and Off-Line Employees FY19 JUL-DEC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>Budgeted FTE</td>
</tr>
<tr>
<td>Battalion Chief</td>
<td>4</td>
</tr>
<tr>
<td>Fire Captain</td>
<td>22</td>
</tr>
<tr>
<td>Fire Apparatus Operator &amp; Fire Fighters</td>
<td>60</td>
</tr>
<tr>
<td>TOTAL</td>
<td>86</td>
</tr>
</tbody>
</table>

| Succession Planning | FY18 JUL-DEC | FY19 JUL-DEC |  |
| --- | --- | --- |  |
| Personnel |  |
| Number of Shift Staff Currently Eligible to Retire | 24 | 25 |
| Number of Shift Staff Eligible to Retire in Five Years | 19 | 18 |
| Percent of all Shift Staff Eligible to Retire within Five Years | 51% | 51% |
| Number of Acting Battalion Chief Hours | 0 | 48 |
| Number of Acting Captain Hours | 3,045 | 1,681 |
| Number of Acting Apparatus Operator Hours | 7,053 | 8,107 |
| Training |  |
| Hours of Training Completed | 14,748 | 17,464 |
| Average Hours Per Line Personnel | 202 | 253 |
Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Jackie Lowther, RN, MSN, MBA
EMS Director

Subject: Hospital Destination, Diversion and Advisory Status Reports

History

Diversion is a management process that diverts ambulances to the next closest facility. This may be used temporarily by local hospitals when the patient load exceeds emergency department or specialty center resources.

Facility diversion should be a last resort and utilized only when emergency department/specialty center resources continue to be overwhelmed after internal procedures to manage the situation have been implemented.

Report

The Santa Clara County EMS system saw a steady transport volume over the period from January to June with the busiest months being March and January. EMS Policy #603 states that each hospital shall request no more than thirty-six hours of 911 system bypass within a calendar month. All hospitals except one did not exceed 22 hours of bypass per month; with the majority staying below 10 hours per month. There was no significant flu season this winter compared to 2017/18. The EMS Agency monitors the use of Hospital Bypass on a continuous basis and works closely with each hospitals Emergency Department management as well as Hospital Administrations to address surge times.
Report for Time Period: May 2019

### Table 1: Number of Patients Transported to Hospital ED from 9-1-1 System*

<table>
<thead>
<tr>
<th>Hospital (Diversion Zone)</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
<th>May-19</th>
<th>Jun-19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford (North)</td>
<td>465</td>
<td>455</td>
<td>497</td>
<td>479</td>
<td>512</td>
<td>494</td>
<td>2,902</td>
</tr>
<tr>
<td>El Camino - Mt. View (North)</td>
<td>823</td>
<td>728</td>
<td>819</td>
<td>787</td>
<td>773</td>
<td>760</td>
<td>4,690</td>
</tr>
<tr>
<td>Kaiser - Santa Clara (North)</td>
<td>788</td>
<td>708</td>
<td>859</td>
<td>733</td>
<td>740</td>
<td>716</td>
<td>4,544</td>
</tr>
<tr>
<td>Regional - San Jose (Central)</td>
<td>1,382</td>
<td>1,206</td>
<td>1,347</td>
<td>1,247</td>
<td>1,338</td>
<td>1,261</td>
<td>7,781</td>
</tr>
<tr>
<td>O'Connor (Central)</td>
<td>566</td>
<td>480</td>
<td>643</td>
<td>560</td>
<td>519</td>
<td>575</td>
<td>3,343</td>
</tr>
<tr>
<td>VMC (Central)</td>
<td>1,408</td>
<td>1,266</td>
<td>1,415</td>
<td>1,318</td>
<td>1,379</td>
<td>1,328</td>
<td>8,114</td>
</tr>
<tr>
<td>Good Samaritan (South)</td>
<td>788</td>
<td>765</td>
<td>788</td>
<td>761</td>
<td>752</td>
<td>756</td>
<td>4,610</td>
</tr>
<tr>
<td>Kaiser - San Jose (South)</td>
<td>742</td>
<td>633</td>
<td>752</td>
<td>706</td>
<td>733</td>
<td>714</td>
<td>4,280</td>
</tr>
<tr>
<td>Saint Louise (South)</td>
<td>281</td>
<td>253</td>
<td>275</td>
<td>295</td>
<td>333</td>
<td>332</td>
<td>1,769</td>
</tr>
<tr>
<td>El Camino - Los Gatos (N/A)</td>
<td>102</td>
<td>109</td>
<td>136</td>
<td>115</td>
<td>121</td>
<td>115</td>
<td>698</td>
</tr>
<tr>
<td>VA - Palo Alto (N/A)</td>
<td>85</td>
<td>61</td>
<td>85</td>
<td>58</td>
<td>76</td>
<td>70</td>
<td>435</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>7,430</td>
<td>6,664</td>
<td>7,616</td>
<td>7,059</td>
<td>7,276</td>
<td>7,121</td>
<td>43,166</td>
</tr>
</tbody>
</table>

*Source: Santa Clara County Communications & Palo Alto Fire Department

**Notes for Tables 1 and 2:** These numbers only reflect patients that originated in Santa Clara County and were transported by the County's EOA Ambulance Provider and Palo Alto Fire Department. Data for Stanford does not include patients from San Mateo County. The data includes but, does not differentiate specialty center status (TRAUMA, STROKE, STEMI, BURN).

### Table 2: Daily Average of 9-1-1 Patients Transported By Hospital*

<table>
<thead>
<tr>
<th>Hospital (Diversion Zone)</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
<th>May-19</th>
<th>Jun-19</th>
<th>6 Mth Avg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford (North)</td>
<td>16</td>
<td>15</td>
<td>17</td>
<td>15</td>
<td>17</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>El Camino - Mt. View (North)</td>
<td>27</td>
<td>23</td>
<td>27</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Kaiser - Santa Clara (North)</td>
<td>26</td>
<td>23</td>
<td>29</td>
<td>24</td>
<td>24</td>
<td>23</td>
<td>25</td>
</tr>
<tr>
<td>Regional - San Jose (Central)</td>
<td>46</td>
<td>39</td>
<td>45</td>
<td>40</td>
<td>43</td>
<td>41</td>
<td>42</td>
</tr>
<tr>
<td>O'Connor (Central)</td>
<td>19</td>
<td>15</td>
<td>21</td>
<td>18</td>
<td>17</td>
<td>19</td>
<td>18</td>
</tr>
<tr>
<td>VMC (Central)</td>
<td>47</td>
<td>41</td>
<td>47</td>
<td>43</td>
<td>44</td>
<td>43</td>
<td>44</td>
</tr>
<tr>
<td>Good Samaritan (South)</td>
<td>26</td>
<td>25</td>
<td>26</td>
<td>25</td>
<td>24</td>
<td>24</td>
<td>25</td>
</tr>
<tr>
<td>Kaiser - San Jose (South)</td>
<td>25</td>
<td>20</td>
<td>25</td>
<td>23</td>
<td>24</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>Saint Louise (South)</td>
<td>9</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>El Camino - Los Gatos (N/A)</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>VA - Palo Alto (N/A)</td>
<td>3</td>
<td>2</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total Daily Average</strong></td>
<td>248</td>
<td>215</td>
<td>254</td>
<td>228</td>
<td>235</td>
<td>230</td>
<td></td>
</tr>
</tbody>
</table>
Table 3: Total Monthly Hours of Emergency Department on "AMBULANCE" Bypass

<table>
<thead>
<tr>
<th>Hospital (Diversion Zone)</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
<th>May-19</th>
<th>Jun-19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford (North)</td>
<td>1.00</td>
<td>2.01</td>
<td>5.75</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>8.76</td>
</tr>
<tr>
<td>El Camino - Mt. View (North)</td>
<td>10.02</td>
<td>8.19</td>
<td>18.12</td>
<td>14.48</td>
<td>6.04</td>
<td>11.02</td>
<td>67.87</td>
</tr>
<tr>
<td>Kaiser - Santa Clara (North)</td>
<td>8.02</td>
<td>11.04</td>
<td>22.05</td>
<td>9.02</td>
<td>9.02</td>
<td>9.02</td>
<td>68.17</td>
</tr>
<tr>
<td>Regional - San Jose (Central)</td>
<td>5.90</td>
<td>5.48</td>
<td>1.01</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>12.39</td>
</tr>
<tr>
<td>O'Connor (Central)</td>
<td>1.00</td>
<td>1.14</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.14</td>
</tr>
<tr>
<td>VMC (Central)</td>
<td>60.13</td>
<td>44.74</td>
<td>36.06</td>
<td>37.06</td>
<td>19.03</td>
<td>22.05</td>
<td>219.07</td>
</tr>
<tr>
<td>Good Samaritan (South)</td>
<td>1.37</td>
<td>13.03</td>
<td>13.03</td>
<td>1.52</td>
<td>2.74</td>
<td>0.50</td>
<td>32.19</td>
</tr>
<tr>
<td>Kaiser - San Jose (South)</td>
<td>0.00</td>
<td>8.43</td>
<td>6.14</td>
<td>2.62</td>
<td>2.00</td>
<td>1.00</td>
<td>20.19</td>
</tr>
<tr>
<td>Saint Louise (South)</td>
<td>4.00</td>
<td>2.00</td>
<td>9.02</td>
<td>7.02</td>
<td>8.75</td>
<td>0.00</td>
<td>30.79</td>
</tr>
<tr>
<td>El Camino - Los Gatos (N/A)</td>
<td>2.00</td>
<td>1.00</td>
<td>2.00</td>
<td>1.00</td>
<td>0.00</td>
<td>3.12</td>
<td>9.12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>93.44</strong></td>
<td><strong>97.06</strong></td>
<td><strong>113.18</strong></td>
<td><strong>72.72</strong></td>
<td><strong>47.58</strong></td>
<td><strong>46.71</strong></td>
<td><strong>470.69</strong></td>
</tr>
</tbody>
</table>

Color Legend for ED Ambulance Bypass Only
- Above 37hrs
- Above 30hrs
- Below 30hrs

Table 4: Total Monthly Hours of Stroke Center on "STROKE" Bypass*

<table>
<thead>
<tr>
<th>Hospital (Diversion Zone)</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
<th>May-19</th>
<th>Jun-19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford (North)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>El Camino - Mt. View (North)</td>
<td>0.00</td>
<td>3.53</td>
<td>0.00</td>
<td>0.74</td>
<td>2.87</td>
<td>0.00</td>
<td>7.14</td>
</tr>
<tr>
<td>Kaiser - Santa Clara (North)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.25</td>
<td>0.00</td>
<td>0.00</td>
<td>0.25</td>
</tr>
<tr>
<td>Regional - San Jose (Central)</td>
<td>1.21</td>
<td>0.97</td>
<td>138.07</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>140.25</td>
</tr>
<tr>
<td>O'Connor (Central)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.43</td>
<td>0.00</td>
<td>0.00</td>
<td>0.43</td>
</tr>
<tr>
<td>VMC (Central)</td>
<td>0.00</td>
<td>0.09</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.09</td>
</tr>
<tr>
<td>Good Samaritan (South)</td>
<td>7.27</td>
<td>42.39</td>
<td>6.48</td>
<td>2.84</td>
<td>1.94</td>
<td>0.49</td>
<td>61.41</td>
</tr>
<tr>
<td>Kaiser - San Jose (South)</td>
<td>0.00</td>
<td>0.42</td>
<td>0.00</td>
<td>0.60</td>
<td>0.00</td>
<td>0.00</td>
<td>1.02</td>
</tr>
<tr>
<td>Saint Louise (South)</td>
<td>3.18</td>
<td>32.74</td>
<td>31.13</td>
<td>5.76</td>
<td>12.89</td>
<td>0.00</td>
<td>85.70</td>
</tr>
<tr>
<td>El Camino - Los Gatos (N/A)</td>
<td>0.56</td>
<td>0.90</td>
<td>0.00</td>
<td>7.06</td>
<td>0.00</td>
<td>7.02</td>
<td>15.54</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>12.22</strong></td>
<td><strong>81.04</strong></td>
<td><strong>175.68</strong></td>
<td><strong>17.68</strong></td>
<td><strong>17.70</strong></td>
<td><strong>7.51</strong></td>
<td><strong>311.83</strong></td>
</tr>
</tbody>
</table>

Table 5: Total Monthly Hours of STEMI Center on "STEMI" Bypass*

<table>
<thead>
<tr>
<th>Hospital (Diversion Zone)</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
<th>May-19</th>
<th>Jun-19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford (North)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>El Camino - Mt. View (North)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.73</td>
<td>0.00</td>
<td>0.00</td>
<td>0.73</td>
</tr>
<tr>
<td>Kaiser - Santa Clara (North)</td>
<td>0.00</td>
<td>0.00</td>
<td>9.07</td>
<td>12.50</td>
<td>0.00</td>
<td>11.77</td>
<td>33.34</td>
</tr>
<tr>
<td>Regional - San Jose (Central)</td>
<td>1.19</td>
<td>0.98</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>2.17</td>
</tr>
<tr>
<td>O'Connor (Central)</td>
<td>0.00</td>
<td>4.94</td>
<td>0.00</td>
<td>0.00</td>
<td>28.54</td>
<td>0.00</td>
<td>33.48</td>
</tr>
<tr>
<td>VMC (Central)</td>
<td>0.00</td>
<td>0.09</td>
<td>0.00</td>
<td>23.36</td>
<td>0.00</td>
<td>0.00</td>
<td>23.45</td>
</tr>
<tr>
<td>Good Samaritan (South)</td>
<td>0.37</td>
<td>42.40</td>
<td>6.48</td>
<td>2.84</td>
<td>1.94</td>
<td>0.50</td>
<td>54.53</td>
</tr>
<tr>
<td>Kaiser - San Jose (South)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>6.00</td>
<td>0.00</td>
<td>0.00</td>
<td>6.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.56</strong></td>
<td><strong>48.41</strong></td>
<td><strong>15.55</strong></td>
<td><strong>40.03</strong></td>
<td><strong>30.48</strong></td>
<td><strong>12.27</strong></td>
<td><strong>148.30</strong></td>
</tr>
</tbody>
</table>

Table 6: Total Monthly Hours of Trauma Center on "TRAUMA" Bypass

<table>
<thead>
<tr>
<th>Hospital (Diversion Zone)</th>
<th>Jan-19</th>
<th>Feb-19</th>
<th>Mar-19</th>
<th>Apr-19</th>
<th>May-19</th>
<th>Jun-19</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stanford (North)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Regional - San Jose (Central)</td>
<td>1.21</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.21</td>
</tr>
<tr>
<td>VMC (Central)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1.21</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
<td><strong>0.00</strong></td>
<td><strong>1.21</strong></td>
</tr>
</tbody>
</table>
California Code of Regulations
Title 22. Social Security
Division 9. Prehospital Emergency Medical Services
Chapter 7.1 ST-Elevation Myocardial Infarction Critical Care System

ARTICLE 1. DEFINITIONS
§ 100270.101. Cardiac Catheterization Laboratory
"Cardiac catheterization laboratory" or "Cath lab" means the setting within the hospital where diagnostic and therapeutic procedures are performed on patients with cardiovascular disease.

Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

§ 100270.102. Cardiac Catheterization Team
"Cardiac catheterization team" means the specially trained health care professionals that perform percutaneous coronary intervention. It may include, but is not limited to, an interventional cardiologist, mid-level practitioners, registered nurses, technicians, and other health care professionals.

Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

§ 100270.103. Clinical Staff
"Clinical staff" means individuals that have specific training and experience in the treatment and management of ST-Elevation Myocardial Infarction (STEMI) patients. This includes, but is not limited to, physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists.

Note: Authority cited: Sections 1797.107 and 1798.150, Health and Safety Code.
Reference: Sections 1797.103 and 1797.176, Health and Safety Code.

§ 100270.104. Emergency Medical Services Authority
"Emergency Medical Services Authority" or "EMS Authority" or "EMSA" means the department in California responsible for the coordination and integration of all state activities concerning EMS.

Note: Authority cited: Sections 1797.1, 1797.107 and 1797.54, Health and Safety Code.
Reference: Sections 1797.100, and 1797.103, Health and Safety Code.

§ 100270.105. Immediately Available
"Immediately available" means:
(a) Unencumbered by conflicting duties or responsibilities.
(b) Responding without delay upon receiving notification.
(c) Being physically available to the specified area of the hospital when the patient is delivered in accordance with local EMS agency policies and procedures.

§ 100270.106. Implementation
"Implementation," "implemented," or "has implemented" means the development and activation of a STEMI Critical Care System Plan by the local EMS agency, including the prehospital and hospital care components in accordance with the plan.


§ 100270.107. Interfacility Transfer
"Interfacility transfer" means the transfer of a STEMI patient from one acute general care facility to another acute general care facility.


§ 100270.108. Local Emergency Medical Services Agency
"Local emergency medical services agency" or "local EMS agency" means the agency, department, or office having primary responsibility for administration of emergency medical services in a county or region and which is designated pursuant Health and Safety Code commencing with section 1797.200.


§ 100270.109. Percutaneous Coronary Intervention (PCI)
"Percutaneous coronary intervention" or "PCI" means a procedure used to open or widen a narrowed or blocked coronary artery to restore blood flow supplying the heart, usually done on an emergency basis for a STEMI patient.


§ 100270.110. Quality Improvement
"Quality improvement" or "QI" means methods of evaluation that are composed of structure, process, and outcome evaluations that focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process, and recognize excellence in performance and delivery of care.

§ 100270.111. ST-Elevation Myocardial Infarction (STEMI)
"ST-Elevation Myocardial Infarction" or "STEMI" means a clinical syndrome defined by symptoms of myocardial infarction in association with ST-segment elevation on Electrocardiogram (ECG).


§ 100270.112. STEMI Care
"STEMI care" means emergency cardiac care, for the purposes of these regulations.


§ 100270.113. STEMI Medical Director
"STEMI medical director" means a qualified board-certified physician by the American Board of Medical Specialties (ABMS) as defined by the local EMS agency and designated by the hospital that is responsible for the STEMI program, performance improvement, and patient safety programs related to a STEMI critical care system.


§ 100270.114. STEMI Patient
"STEMI patient" means a patient with symptoms of myocardial infarction in association with ST-Segment Elevation in an ECG.


§ 100270.115. STEMI Program
"STEMI program" means an organizational component of the hospital specializing in the care of STEMI patients.


§ 100270.116. STEMI Program Manager
"STEMI program manager" means a registered nurse or qualified individual as defined by the local EMS agency, and designated by the hospital responsible for monitoring, coordinating and evaluating the STEMI program.


§ 100270.117. STEMI Receiving Center (SRC)
“STEMI receiving center” or “SRC” means a licensed general acute care facility that meets the minimum hospital STEMI care requirements pursuant to Section 100270.124 and is able to perform PCI.


§ 100270.118. STEMI Referring Hospital (SRH)
“STEMI referring hospital” or “SRH” means a licensed general acute care facility that meets the minimum hospital STEMI care requirements pursuant to Section 100270.125.


§ 100270.119. STEMI Critical Care System
“STEMI critical care system” means a critical care component of the EMS system developed by a local EMS agency that links prehospital and hospital care to deliver treatment to STEMI patients.


§ 100270.120. STEMI Team
“STEMI team” means clinical personnel, support personnel, and administrative staff that function together as part of the hospital’s STEMI program.


ARTICLE 2. LOCAL EMS AGENCY STEMI CRITICAL CARE SYSTEM REQUIREMENTS

§ 100270.121. STEMI Critical Care System Plan
(a) The local EMS agency may develop and implement a STEMI critical care system.

(b) The local EMS agency implementing a STEMI critical care system shall have a STEMI Critical Care System Plan approved by the EMS Authority prior to implementation.

(c) A STEMI Critical Care System Plan submitted to the EMS Authority shall include, at a minimum, all of the following components:

(1) The names and titles of the local EMS agency personnel who have a role in a STEMI critical care system.

(2) The list of STEMI designated facilities with the agreement expiration dates.
(3) A description or a copy of the local EMS agency's STEMI patient identification and destination policies.

(4) A description or a copy of the method of field communication to the receiving hospital specific to STEMI patient, designed to expedite time-sensitive treatment on arrival.

(5) A description or a copy of the policy that facilitates the inter-facility transfer of a STEMI patient.

(6) A description of the method of data collection from the EMS providers and designated STEMI hospitals to the local EMS agency and the EMS Authority.

(7) A policy or description of how the local EMS agency integrates a receiving center in a neighboring jurisdiction.

(8) A description of the integration of STEMI into an existing quality improvement committee or a description of any STEMI specific quality improvement committee.

(9) A description of programs to conduct or promote public education specific to cardiac care.

(d) The EMS Authority shall, within 30-days of receiving a request for approval, notify the requesting local EMS agency in writing of approval or disapproval of its STEMI Critical Care System Plan. If the STEMI Critical Care System Plan is disapproved, the response shall include the reason(s) for the disapproval and any required corrective action items.

(e) The local EMS agency shall provide a corrected plan to the EMS Authority within 60 days of receipt of the disapproval letter.

(f) The local EMS agency currently operating a STEMI critical care system implemented before the effective date of these regulations, shall submit to the EMS Authority a STEMI Critical Care System Plan as an addendum to its next annual EMS plan update, or within 180-days of the effective date of these regulations, whichever comes first.

(g) After approval of the STEMI Critical Care System Plan, the local EMS agency shall submit an update to the plan as part of its annual EMS update, consistent with the requirements in Section 100270.122.

(h) No health care facility shall advertise in any manner or otherwise hold itself out to be affiliated with a STEMI critical care system or a STEMI center unless they have been so designated by the local EMS agency, in accordance with this chapter.

Note: Authority cited: Sections 1797.107, 1797.103, 1797.105, 1797.250, 1797.254 and
§100270.122. STEMI Critical Care System Plan Updates

(a) The local EMS agency shall submit an annual update of its STEMI Critical Care System Plan, as part of its annual EMS plan submittal, which shall include, at a minimum, all the following:

(1) Any changes in a STEMI critical care system since submission of the prior annual plan update or a STEMI Critical Care System Plan addendum.

(2) The status of a STEMI critical care system goals and objectives.

(3) The STEMI critical care system quality improvement activities.

(4) The progress on addressing action items and recommendations provided by the EMS Authority within the STEMI Critical Care System Plan or status report approval letter if applicable.


ARTICLE 3. PREHOSPITAL STEMI CRITICAL CARE SYSTEM REQUIREMENTS

§ 100270.123. EMS Personnel and Early Recognition

(a) The local EMS agency with an established STEMI critical care system shall have protocols for the identification and treatment of STEMI patients, including paramedic performance of a 12-lead ECG and determination of the patient destination.

(b) The findings of 12-lead ECG shall be assessed and interpreted through one or more of the following methods:

(1) Direct paramedic interpretation.

(2) Automated computer algorithm.

(3) Wireless transmission to facility followed by physician interpretation or confirmation.

(c) Notification of prehospital ECG findings of suspected STEMI patients, as defined by the local EMS agency, shall be communicated in advance of the arrival to the STEMI centers according to the local EMS agency's STEMI Critical Care System Plan.

Note: Authority cited: Sections 1797.103, 1797.107, 1797.114, 1797.176, 1797.206, 1797.214 and 1798.150, Health and Safety Code. Reference: Section 1797.176,
ARTICLE 4. STEMI CRITICAL CARE FACILITY REQUIREMENTS

§ 100270.124. STEMI Receiving Center Requirements

(a) The following minimum criteria shall be used by the local EMS agency for the designation of a STEMI receiving center:

(1) The hospital shall have established protocols for triage, diagnosis, and Cath lab activation following field notification.

(2) The hospital shall have a single call activation system to activate the Cardiac Catheterization Team directly.

(3) Written protocols shall be in place for the identification of STEMI patients.

(A) At a minimum, these written protocols shall be applicable in the intensive care unit/coronary care unit, Cath lab and the emergency department.

(4) The hospital shall be available for treatment of STEMI patients twenty-four (24) hours per day, seven (7) days per week, three hundred and sixty-five (365) days per year.

(5) The hospital shall have a process in place for the treatment and triage of simultaneously arriving STEMI patients.

(6) The hospital shall maintain STEMI team and Cardiac Catheterization Team call rosters.

(7) The Cardiac Catheterization Team, including appropriate staff determined by the local EMS agency, shall be immediately available.

(8) The hospital shall agree to accept all STEMI patients according to the local policy.

(9) STEMI receiving centers shall comply with the requirement for a minimum volume of procedures for designation required by the local EMS agency.

(10) The hospital shall have a STEMI program manager and a STEMI medical director.

(11) The hospital shall have job descriptions and organizational structure clarifying the relationship between the STEMI medical director, STEMI program manager, and the STEMI team.

(12) The hospital shall participate in the local EMS agency quality improvement processes related to a STEMI critical care system.
(13) A STEMI receiving center without cardiac surgery capability on-site shall have a written transfer plan and agreements for transfer to a facility with cardiovascular surgery capability.

(14) A STEMI receiving center shall have reviews by local EMS agency or other designated agency conducted every three years.

(b) A STEMI center designated by the local EMS agency prior to implementation of these regulations may continue to operate. Before re-designation by the local EMS agency at the next regular interval, STEMI centers shall be re-evaluated to meet the criteria established in these regulations.

(c) Additional requirements may be stipulated by the local EMS agency medical director.


§ 100270.125. STEMI Referring Hospital Requirements

(a) The following minimum criteria shall be used by the local EMS agency for designation of a STEMI referring hospital:

(1) The hospital shall be committed to supporting the STEMI Program.

(2) The hospital shall be available to provide care for STEMI patients twenty-four (24) hours per day, seven (7) days per week, three hundred and sixty-five (365) days per year.

(3) Written protocols shall be in place to identify STEMI patients and provide an optimal reperfusion strategy, using fibrinolytic therapy.

(4) The emergency department shall maintain a standardized procedure for the treatment of STEMI patients.

(5) The hospital shall have a transfer process through interfacility transfer agreements, and have pre-arranged agreements with EMS ambulance providers for rapid transport of STEMI patients to a SRC.

(6) The hospital shall have a program to track and improve treatment of STEMI patients.

(7) The hospital must have a plan to work with a STEMI receiving center and the local EMS agency on quality improvement processes.

(8) A STEMI referring hospital designated by the local EMS agency shall have a review
conducted every three years.

(b) A STEMI center designated by the local EMS agency prior to implementation of these regulations may continue to operate. Before re-designation by the local EMS agency at the next regular interval, STEMI centers shall be re-evaluated to meet the criteria established in these regulations.

(c) Additional requirements may be stipulated by the local EMS agency medical director.


ARTICLE 5. DATA MANAGEMENT, QUALITY IMPROVEMENT AND EVALUATIONS

§ 100270.126. Data Management.

(a) The local EMS agency shall implement a standardized data collection and reporting process for a STEMI critical care system.

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

(c) The prehospital STEMI patient care elements selected by the local EMS agency shall be compliant with the most current version of the California EMS Information Systems (CEMSIS) database, and the National EMS Information System (NEMSIS).

(d) All hospitals that receive STEMI patients via EMS shall participate in the local EMS agency data collection process in accordance with local EMS agency policies and procedures.

(e) The prehospital care record and the hospital data elements shall be collected and submitted to the local EMS agency, and subsequently to the EMS Authority, on no less than a quarterly basis and shall include, but not be limited to, the following:

1. The STEMI patient data elements:

(A) EMS ePCR Number.
(B) Facility.
(C) Name: Last, First.
(D) Date of Birth.
(E) Patient Age.
(F) Patient Gender.
(G) Patient Race.
(H) Hospital Arrival Date.
(I) Hospital Arrival Time.
(J) Dispatch Date.
(K) Dispatch Time.
(L) Field ECG Performed.
(M) 1st ECG Date.
(N) 1st ECG Time.
(O) Did the patient suffer out-of-hospital cardiac arrest.
(P) CATH LAB Activated.
(Q) CATH LAB Activation Date.
(R) CATH LAB Activation Time.
(S) Did the patient go to the CATH LAB.
(T) CATH LAB Arrival Date.
(U) CATH LAB Arrival Time.
(V) PCI Performed.
(W) PCI Date.
(X) PCI Time.
(Y) Fibrinolytic Infusion.
(Z) Fibrinolytic Infusion Date.
(AA) Fibrinolytic Infusion Time.
(BB) Transfer.
(CC) SRH ED Arrival Date.
(DD) SRH ED Arrival Time.
(EE) SRH ED Departure Date.
(FF) SRH ED Departure Time.
(GG) Hospital Discharge Date.
(HH) Patient Outcome.
(II) Primary and Secondary Discharge Diagnosis.

(2) The STEMI System data elements:

(A) Number of STEMI patients treated.
(B) Number of STEMI patients transferred.
(C) Number and percent of emergency department STEMI patients arriving by private transport (non-EMS).
(D) The false positive rate of EMS diagnosis of STEMI, defined as the percentage of STEMI alerts by EMS which did not show STEMI on ECG reading by the emergency physician.


§ 100270.127. Quality Improvement and Evaluation Process

(a) Each STEMI critical care system shall have a quality improvement process that shall include, at a minimum:
(1) Evaluation of program structure, process, and outcome.

(2) Review of STEMI-related deaths, major complications, and transfers.

(3) A multidisciplinary STEMI Quality Improvement Committee, including both prehospital and hospital members.

(4) Participation in the QI process by all designated STEMI centers and prehospital providers involved in the STEMI critical care system.


(6) Compliance with the California Evidence Code, Section 1157.7 to ensure confidentiality, and a disclosure-protected review of selected STEMI cases.

(b) The local EMS agency shall be responsible for on-going performance evaluation and quality improvement of the STEMI critical care system.

ARTICLE 1. DEFINITIONS

§ 100270.200. Acute Stroke Ready Hospital
"Acute stroke-ready hospitals" or "Satellite stroke centers" means a hospital able to provide the minimum level of critical care services for stroke patients in the emergency department, and are paired with one or more hospitals with a higher level of stroke services.


§ 100270.201. Board-certified
"Board-certified" means a physician who has fulfilled all the Accreditation Council for Graduate Medical Education (ACGME) requirements in a specialty field of practice, and has been awarded a certification by an American Board of Medical Specialties (ABMS) approved program.


§ 100270.202. Board-eligible
"Board-eligible" means a physician who has applied to a specialty board examination and has completed the requirements and is approved to take the examination by ABMS. Board certification must be obtained within the allowed time by ABMS from the first appointment.


§ 100270.203. Comprehensive Stroke Center
"Comprehensive stroke center" means a hospital with specific abilities to receive, diagnose and treat all stroke cases and provide the highest level of care for stroke patients.


§ 100270.204. Clinical Stroke Team
"Clinical stroke team" means a team of healthcare professionals who provide care for the stroke patient and may include, but is not limited to, neurologists, neuro-
interventionalists, neurosurgeons, anesthesiologists, emergency medicine physicians, registered nurses, advanced practice nurses, physician assistants, pharmacists, and technologists.


§ 100270.205. Emergency Medical Services Authority
“Emergency Medical Services Authority” or “EMS Authority” means the department in California that is responsible for the coordination and the integration of all state activities concerning emergency medical services (EMS).


§ 100270.206. Local Emergency Medical Services Agency
“Local emergency medical services agency” or “local EMS agency” means the agency, department, or office having primary responsibility for administration of emergency medical services in a county and which is designated pursuant Health and Safety Code section 1797.200.


§ 100270.207. Primary Stroke Center
“Primary stroke center” means a hospital that treats acute stroke patients, and identifies patients who may benefit from transfer to a higher level of care when clinically warranted.


§ 100270.208. Protocol
“Protocol” means a predetermined, written medical care guideline, which may include standing orders.


§ 100270.209. Quality Improvement
“Quality improvement” or “QI” means methods of evaluation that are composed of a structure, process, and outcome evaluations which focus on improvement efforts to identify causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process and recognize excellence in performance and delivery of care.
§ 100270.210. Stroke
"Stroke" means a condition of impaired blood flow to a patient's brain resulting in brain dysfunction, most commonly through vascular occlusion or hemorrhage.

§ 100270.211. Stroke Call Roster
"Stroke call roster" means a schedule of licensed health professionals available twenty-four (24) hours a day, seven (7) days a week for the care of stroke patients.

§ 100270.212. Stroke Care
"Stroke care" means emergency transport, triage, diagnostic evaluation, acute intervention and other acute care services for stroke patients that potentially require immediate medical or surgical intervention treatment, and may include education, primary prevention, acute intervention, acute and subacute management, prevention of complications, secondary stroke prevention, and rehabilitative services.

100270.213. Stroke Critical Care System
"Stroke critical care system" means a subspecialty care component of the EMS system developed by a local EMS agency. This critical care system links prehospital and hospital care to deliver optimal treatment to the population of stroke patients.

§ 100270.214. Stroke Medical Director
"Stroke medical director" means a board-certified physician in neurology or neurosurgery or another board with sufficient experience and expertise dealing with cerebrovascular disease as determined by the hospital credentialing committee that is responsible for the stroke service, performance improvement, and patient safety programs related to a stroke critical care system.
§ 100270.215. Stroke Program Manager

"Stroke program manager" means a registered nurse or qualified individual designated by the hospital with the responsibility for monitoring and evaluating the care of stroke patients and the coordination of performance improvement and patient safety programs for the stroke center in conjunction with the stroke medical director.


§ 100270.216. Stroke Program

"Stroke program" means an organizational component of the hospital specializing in the care of stroke patients.


§ 100270.217. Stroke Team

"Stroke team" means the personnel, support personnel, and administrative staff that function together as part of the hospital's stroke program.


§ 100270.218. Telehealth

"Telehealth" means the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient's health care while the patient is at the originating site and the health care provider is at a distant site.


§ 100270.219. Thrombectomy-Capable Stroke Center

"Thrombectomy-capable stroke center" means a primary stroke center with the ability to perform mechanical thrombectomy for the ischemic stroke patient when clinically warranted.

Note: Authority cited: Sections 1797.107, and 1798.150, Health and
ARTICLE 2. LOCAL EMS AGENCY STROKE CRITICAL CARE SYSTEM REQUIREMENTS

§ 100270.220. Stroke Critical Care System Plan

(a) The local EMS agency may develop and implement a stroke critical care system.

(b) The local EMS agency implementing a stroke critical care system shall have a Stroke Critical Care System Plan approved by the EMS Authority prior to implementation.

(c) The Stroke Critical Care System Plan submitted to the EMS Authority shall include, at a minimum, all of the following components:

1. The names and titles of the local EMS agency personnel who have a role in a stroke critical care system.

2. The list of stroke designated facilities with the agreement expiration dates.

3. A description or a copy of the local EMS agency’s stroke patient identification and destination policies.

4. A description or a copy of the method of field communication to the receiving hospital-specific to stroke patients, designed to expedite time-sensitive treatment on arrival.

5. A description or a copy of the policy that facilitates the inter-facility transfer of stroke patients.

6. A description of the method of data collection from the EMS providers and designated stroke hospitals to the local EMS agency and the EMS Authority.

7. A policy or description of how the Local EMS agency integrates a receiving center in a neighboring jurisdiction.

8. A description of the integration of stroke into an existing quality improvement committee or a description of any stroke-specific quality improvement committee.

9. A description of programs to conduct or promote public education specific to stroke.

(d) The EMS Authority shall, within 30 days of receiving a request for approval, notify the requesting local EMS agency in writing of approval or disapproval of its
Stroke Critical Care System Plan. If the Stroke Critical Care System Plan is disapproved, the response shall include the reason(s) for the disapproval and any required corrective action items.

(e) The local EMS agency shall provide an amended plan to the EMS Authority within 60 days of receipt of the disapproval letter.

(f) The local EMS agency currently operating a stroke critical care system implemented before the effective date of these regulations, shall submit to the EMS Authority a Stroke Critical Care System Plan as an addendum to its next annual EMS plan update, or within 180 days of the effective date of these regulations, whichever comes first.

(g) Any stroke center designated by the local EMS agency before implementation of these regulations may continue to operate. Before re-designation by the local EMS agency at the next regular interval, stroke centers shall be re-evaluated to meet the criteria established in these regulations.

(h) No health care facility shall advertise in any manner or otherwise hold itself out to be affiliated with a stroke critical care system or a stroke center unless they have been designated by the local EMS agency, in accordance with this chapter.


§ 100270.221. Stroke Critical Care System Plan Updates

(a) The local EMS agency shall submit an annual update of its Stroke Critical Care System Plan, as part of its annual EMS plan submittal, which shall include, at a minimum, all the following:

(1) Any changes in a stroke critical care system since submission of the prior annual plan update or the Stroke Critical Care System Plan addendum.

(2) The status of the Stroke Critical Care System Plan goals and objectives.

(3) Stroke critical care system performance improvement activities.

(4) The progress on addressing action items and recommendations provided by the EMS Authority within the Stroke Critical Care System Plan or status report approval letter, if applicable.

ARTICLE 3. PREHOSPITAL STROKE CRITICAL CARE SYSTEM REQUIREMENTS

§ 100270.222. EMS Personnel and Early Recognition

(a) The local EMS agency shall establish prehospital care protocols related to the early recognition, assessment, treatment, and transport of stroke patients for prehospital emergency medical care personnel as determined by the local EMS agency.

(b) The local EMS agency shall require the use of a validated prehospital stroke-screening algorithm for early recognition and assessment.

(c) The local EMS agency's protocols for the use of online medical direction shall be used to determine the most appropriate stroke center to transport a patient in cases of confusing or complex findings.

(d) The prehospital treatment policies for stroke-specific basic life support (BLS), advanced life support (ALS), and limited advanced life support (LALS) shall be developed according to the scope of practice and local accreditation.

(e) Notification of prehospital findings of suspected stroke patients shall be communicated in advance of the arrival to the stroke centers according to the local EMS agency's Stroke Critical Care System Plan.


ARTICLE 4. HOSPITAL STROKE CARE REQUIREMENTS AND EVALUATIONS

§ 100270.223. Comprehensive Stroke Care Centers

(a) Hospitals designated as a comprehensive stroke center by the local EMS agency shall meet the following minimum criteria:

(1) Satisfy all the requirements of a thrombectomy-capable and primary stroke center as provided in this chapter.

(2) Neuro-endovascular diagnostic and therapeutic procedures available twenty-four (24) hours a day, seven (7) days a week.

(3) Advanced imaging, available twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year, which shall include but not be limited to:

(A) All imaging requirements for thrombectomy-capable centers.
(B) Diffusion-weighted magnetic resonance imaging (MRI) and computed tomography (CT) perfusion imaging.

(4) Transcranial Doppler (TCD) shall be available in a timeframe that is clinically appropriate.

(5) Intensive care unit (ICU) beds with licensed independent practitioners with the expertise and experience to provide neuro-critical care twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five days (365) days per year.

(6) Data-driven, continuous quality improvement process including collection and monitoring of standardized performance measures.

(7) A stroke patient research program.

(8) Satisfy all the following staff qualifications:

(A) A neurosurgical team capable of assessing and treating complex stroke and stroke-like syndromes.

(B) A qualified neuro-radiologist, board-certified by the American Board of Radiology or the American Osteopathic Board of Radiology.

(C) If teleradiology is used in image interpretation, all staffing and staff qualification requirements contained in this section shall remain in effect and shall be documented by the hospital.

(D) Written call schedule for attending neurointerventionalist, neurologist, neurosurgeon providing availability twenty-four (24) hours a day seven (7) days a week.

(9) Provide comprehensive rehabilitation services either on-site or by written transfer agreement with another health care facility licensed to provide such services.

(10) Written transfer agreements with primary stroke centers in the region to accept the transfer of patients with complex strokes when clinically warranted.

(11) A comprehensive stroke center shall at a minimum, provide guidance and continuing stroke-specific medical education to hospitals designated as a primary stroke center with which they have transfer agreements.

(b) Additional requirements may be stipulated by the local EMS agency medical director.

Note: Authority cited: Sections 1797.107, 1797.176, and 1798.150, Health and Safety
§ 100270.224. Thrombectomy-Capable Stroke Centers

(a) Hospitals designated as a thrombectomy-capable stroke center by the local EMS agency shall meet the following minimum criteria:

(1) Satisfy all the requirements of a primary stroke center as provided in this chapter.

(2) The ability to perform mechanical thrombectomy for the treatment of ischemic stroke twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year.

(3) Dedicated neuro-intensive care unit beds to care for acute ischemic stroke patients twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year.

(4) Satisfy all the following staff qualifications:

(A) A qualified physician, board certified by the American Board of Radiology, American osteopathic Board of Radiology, American Board of Psychiatry and Neurology, or the American osteopathic Board of Neurology and Psychiatry, with neuro-interventional angiographic training and skills on staff as deemed by the hospital's credentialing committee.

(B) A qualified neuro-radiologist, board-certified by the American Board of Radiology or the American Osteopathic Board of Radiology.

(C) A qualified vascular neurologist, board-certified by the American Board of Psychiatry and Neurology or the American Osteopathic Board of Neurology and Psychiatry, or with appropriate education and experience as defined by the hospital credentials committee.

(D) If teleradiology is used in image interpretation, all staffing and staff qualification requirements contained in this section shall remain in effect and shall be documented by the hospital.

(5) The ability to perform advanced imaging twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year, which shall include, but not be limited to, the following:

(A) Computed tomography angiography (CTA).

(B) Diffusion-weighted MRI or CT Perfusion.
(C) Catheter angiography.

(D) Magnetic resonance angiography (MRA).

(E) And the following modalities available when clinically necessary:
   (i) Carotid duplex ultrasound.
   (ii) Transesophageal echocardiography (TEE).
   (iii) Transthoracic Echocardiography (TTE).

(6) A process to collect and review data regarding adverse patient outcomes following mechanical thrombectomy.

(7) Written transfer agreement with at least one comprehensive stroke center.

(b) Additional requirements may be stipulated by the local EMS agency medical director.


§ 100270.225. Primary Stroke Centers

(a) Hospitals designated by the local EMS agency as a primary stroke center shall meet all the following minimum criteria:

(1) Adequate staff, equipment, and training to perform rapid evaluation, triage, and treatment for the stroke patient in the emergency department.

(2) Standardized stroke care protocol/order set.

(3) Stroke diagnosis and treatment capacity twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year.

(4) Data-driven, continuous quality improvement process including collection and monitoring of standardized performance measures.

(5) Continuing education in stroke care provided for staff physicians, staff nurses, staff allied health personnel, and EMS personnel.

(6) Public education on stroke and illness prevention.
(7) A clinical stroke team, available to see in person or via telehealth, a patient identified as a potential acute stroke patient within 15 minutes following the patient’s arrival at the hospital’s emergency department or within 15 minutes following a diagnosis of a patient’s potential acute stroke.

(A) At a minimum, a clinical stroke team shall consist of:

(i) A neurologist, neurosurgeon, interventional neuro-radiologist, or emergency physician who is board certified or board eligible in neurology, neurosurgery, endovascular neurosurgical radiology, or other board-certified physician with sufficient experience and expertise in managing patients with acute cerebral vascular disease as determined by the hospital credentials committee.

(ii) A registered nurse, physician assistant or nurse practitioner capable of caring for acute stroke patients that has been designated by the hospital who may serve as a stroke program manager.

(8) Written policies and procedures for stroke services which shall include written protocols and standardized orders for the emergency care of stroke patients. These policies and procedures shall be reviewed at least every three (3) years, revised as needed, and implemented.

(9) Data-driven, continuous quality improvement process including collection and monitoring of standardized performance measures.

(10) Neuro-imaging services capability that is available twenty-four (24) hours a day, seven (7) days a week, three hundred sixty-five (365) days per year, such that imaging shall be initiated within twenty-five (25) minutes following emergency department arrival.

(11) CT scanning or equivalent neuro-imaging shall be initiated within twenty-five (25) minutes following emergency department arrival.

(12) Other imaging shall be available within a clinically appropriate timeframe and shall, at a minimum, include:

(A) MRI.

(B) CTA and / or Magnetic resonance angiography (MRA).

(C) TEE or TTE.

(13) Interpretation of the imaging.

(A) If teleradiology is used in image interpretation, all staffing and staff qualification
requirements contained in this section shall remain in effect and shall be documented by the hospital.

(B) Neuro-imaging studies shall be reviewed by a physician with appropriate expertise, such as a board-certified radiologist, board-certified neurologist, a board-certified neurosurgeon, or residents who interpret such studies as part of their training in ACGME-approved radiology, neurology, or neurosurgery training program within forty-five (45) minutes of emergency department arrival.

(i) For the purpose of this subsection, a qualified radiologist shall be board certified by the American Board of Radiology or the American Osteopathic Board of Radiology.

(ii) For the purpose of this subsection, a qualified neurologist shall be board certified by the American Board of Psychiatry and Neurology or the American Osteopathic Board of Neurology and Psychiatry.

(iii) For the purpose of this subsection, a qualified neurosurgeon shall be board certified by the American Board of Neurological Surgery.

(14) Laboratory services capability that is available twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year, such that services may be performed within forty-five (45) minutes following emergency department arrival.

(15) Neurosurgical services shall be available, including operating room availability, either directly or under an agreement with a thrombectomy-capable, comprehensive or other stroke center with neurosurgical services, within two (2) hours following the arrival of acute stroke patients to the primary stroke center.

(16) Acute care rehabilitation services.

(17) Transfer arrangements with one or more higher level of care centers when clinically warranted or for neurosurgical emergencies.

(18) There shall be a stroke medical director of a primary stroke center, who may also serve as a physician member of a stroke team, who is board-certified in neurology or neurosurgery or another board-certified physician with sufficient experience and expertise dealing with cerebral vascular disease as determined by the hospital credentials committee.

(b) Additional requirements may be stipulated by the local EMS agency medical director.

§ 100270.226. Acute Stroke Ready Hospitals

(a) Hospitals designated by the local EMS agency as an acute stroke ready hospital shall meet all the following minimum criteria:

(1) A clinical stroke team available to see, in person or via telehealth, a patient identified as a potential acute stroke patient within twenty (20) minutes following the patient’s arrival at the hospital’s emergency department.

(2) Written policies and procedures for emergency department stroke services that are reviewed, revised as needed, and implemented at least every three (3) years.

(3) Emergency department policies and procedures shall include written protocols and standardized orders for the emergency care of stroke patients.

(4) Data-driven, continuous quality improvement process including collection and monitoring of standardized performance measures.

(5) Neuro-imaging services capability that is available twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year, such that imaging shall be performed and reviewed by a physician within forty-five (45) minutes following emergency department arrival.

(6) Neuro-imaging services shall, at a minimum, include CT or MRI, or both.

(7) Interpretation of the imaging.

(A) If teleradiology is used in image interpretation, all staffing and staff qualification requirements contained in this section shall remain in effect and shall be documented by the hospital.

(B) Neuro-imaging studies shall be reviewed by a physician with appropriate expertise, such as a board-certified radiologist, board-certified neurologist, a board-certified neurosurgeon, or residents who interpret such studies as part of their training in ACGME-approved radiology, neurology, or neurosurgery training program within forty-five (45) minutes of emergency department arrival.

(i) For the purpose of this subsection, a qualified radiologist shall be board-certified by the American Board of Radiology or the American Osteopathic Board of Radiology.

(ii) For the purpose of this subsection, a qualified neurologist shall be board-certified by the American Board of Psychiatry and Neurology or the American Osteopathic Board of Neurology and Psychiatry.

(iii) For the purpose of this subsection, a qualified neurosurgeon shall be board-
certified by the American Board of Neurological Surgery.

(8) Laboratory services shall, at a minimum, include blood testing, electrocardiography and x-ray services, and be available twenty-four (24) hours a day, seven (7) days a week, three hundred and sixty-five (365) days per year, and able to be completed and reviewed by physician within sixty (60) minutes following emergency department arrival.

(9) Neurosurgical services shall be available, including operating room availability, either directly or under an agreement with a thrombectomy-capable, primary or comprehensive stroke center, within three (3) hours following the arrival of acute stroke patients to an acute stroke-ready hospital.

(10) Provide IV thrombolytic treatment and have transfer arrangements with one or more thrombectomy-capable, primary or comprehensive stroke center(s) that facilitate the transfer of patients with strokes to the stroke center(s) for care when clinically warranted.

(11) There shall be a medical director of an acute stroke-ready hospital, who may also serve as a member of a stroke team, who is a physician or advanced practice nurse who maintains at least four (4) hours per year of educational time in cerebrovascular disease;

(12) Clinical stroke team for an acute stroke-ready hospital at a minimum shall consist of a nurse and a physician with training and expertise in acute stroke care.

(b) Additional requirements may be stipulated by the local EMS agency medical director.


§ 100270.227. EMS Receiving Hospitals (Non-designated for Stroke Critical Care Services)

(a) An EMS receiving hospital that is not designated for stroke critical care services shall do the following, at a minimum and in cooperation with stroke receiving centers and the local EMS agency in their jurisdictions:

(1) Participate in the local EMS agency's quality improvement system, including data submission as determined by the local EMS agency medical director.

(2) Participate in the inter-facility transfer agreements to ensure access to a stroke critical care system for a potential stroke patient.
ARTICLE 5. DATA MANAGEMENT, QUALITY IMPROVEMENT AND EVALUATION

§ 100270.228. Data Management Requirements

(a) The local EMS agency shall implement a standardized data collection and reporting process for stroke critical care systems.

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

(c) The prehospital stroke patient care elements shall be compliant with the most current version of the California EMS Information Systems (CEMSIS) database and the National EMS Information System (NEMSIS) database.

(d) The hospital stroke patient care elements shall be consistent with the U.S. Centers for Disease Control and Prevention, Paul Coverdell National Acute Stroke Program Resource Guide, dated October 24, 2016, which is hereby incorporated by reference.

(e) All hospitals that receive stroke patients via EMS shall participate in the local EMS agency data collection process in accordance with local EMS agency policies and procedures.

(f) The prehospital care record and the hospital data elements shall be collected and submitted by the local EMS agency, and subsequently to the EMS Authority, on no less than a quarterly basis.


§ 100270.229. Quality Improvement and Evaluation Process

(a) Each stroke critical care system shall have a quality improvement process that shall include, at a minimum:

(1) Evaluation of program structure, process, and outcome.

(2) Review of stroke-related deaths, major complications, and transfers.

(3) A multidisciplinary Stroke Quality Improvement Committee, including both prehospital and hospital members.
(4) Participation in the QI process by all designated stroke centers and prehospital providers involved in the stroke critical care system.


(6) Participation in the stroke data management system.

(7) Compliance with the California Evidence Code, Section 1157.7 to ensure confidentiality, and a disclosure-protected review of selected stroke cases.

(b) The local EMS agency shall be responsible for on-going performance evaluation and quality improvement of the stroke critical care system.

Note: Chapter 14 and the underlying articles and sections listed below shall be adopted in full by the Emergency Medical Services Authority.

Chapter 14. Emergency Medical Services for Children

ARTICLE 1. DEFINITIONS

"California emergency medical services information system" or "CEMSIS" means the secure, standardized, and centralized electronic information and data collection system administered by the California EMS Authority which is used to collect statewide emergency medical services (EMS) and trauma data.


§ 100450.201. Emergency Medical Services Authority.
"Emergency medical services authority" or "EMS authority" or "EMSA" means the department in California responsible for the coordination and integration of all state activities concerning emergency medical services.


"Emergency medical services for children program" or "EMSC program" means the prehospital and hospital pediatric care components integrated into an existing local EMS agency's EMS Plan for pediatric emergency care.


§ 100450.203. Interfacility Transfer.
"Interfacility transfer" means the transfer of an admitted or non-admitted pediatric patient from one licensed health care hospital to another pursuant to the policies and procedures of the local EMS agency.

§ 100450.204. Local Emergency Medical Services Agency.
"Local emergency medical services agency" or "local EMS agency" or "LEMSA" means the agency, department, or office having primary responsibility for administration of emergency medical services in a county or multicounty region and which is designated pursuant Health and Safety Code commencing with section 1797.200.


"National EMS information system" or "NEMSIS" means the national repository used to store secure, standardized, and centralized electronic EMS data from every state in the nation.


§ 100450.206. Pediatric Emergency Care Coordinator (PECC).
"Pediatric emergency care coordinator" or "PECC" means a physician or registered nurse who is qualified in the emergency care of pediatric patients pursuant to section 100450.218(b).


§ 100450.207. Pediatric Experience.
"Pediatric experience" means demonstrated competency through experience to care for children of all ages within their specialty as determined by hospital staff credentialing.


§ 100450.208. Pediatric Intensivist.
"Pediatric intensivist" means a physician who is board-certified or board-eligible in pediatric critical care medicine as recognized by the American Board of Medical Specialties, the Royal College of Physicians and Surgeons of Canada, or the American Osteopathic Board of Medical Specialties.


§ 100450.209. Pediatric Patient.
"Pediatric patient" means a person who is less than 14 years of age, consistent with Title 22, Division 5, Chapter 1, Article 6, section 70537 of the California Code of Regulations.


"Pediatric Receiving Center" or "PedRC" means a licensed general acute care hospital with, at a minimum, a permit for standby, basic, or comprehensive emergency services that has been formally designated as one of four types of PedRCs pursuant to sections 100450.218 through 100450.222, by the local EMS agency for its role in an EMS system.


§ 100450.211. Qualified Emergency Specialist.
"Qualified emergency specialist" means a physician who is licensed in California, board certified or board eligible in emergency medicine or pediatric emergency medicine by the American Board of Medical Specialties, the American Osteopathic Association Bureau of Osteopathic Specialties, or a Canadian Board or other appropriate foreign specialty board as determined by the American Board of Medical Specialties.


§ 100450.212. Qualified Pediatric Specialist.
"Qualified pediatric specialist" means a physician who is licensed in California, board certified or board eligible in a pediatric specialty by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, or a Canadian Board or other appropriate foreign specialty board as determined by the American Board of Medical Specialties.


§ 100450.213. Qualified Specialist.
"Qualified specialist" means a physician licensed in California who is board certified or board eligible in the corresponding specialty by the American Board of Medical Specialties, the Advisory Board for Osteopathic Specialties, or a Canadian Board or other appropriate foreign specialty board as determined by the American Board of Medical Specialties.

§ 100450.214. Quality Improvement.
“Quality Improvement” or “QI” means methods of evaluation that are comprised of structure, process, and outcome evaluations that focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process, and recognize excellence in performance and delivery of care.


§ 100450.215. Telehealth.
“Telehealth” means the mode of delivering health care services and public health via information and communication technologies to facilitate the diagnosis, consultation, treatment, education, care management, and self-management of a patient’s health care while the patient is at the originating site and the health care provider is at a distant site.


Article 2. LOCAL EMS AGENCY EMSC PROGRAM REQUIREMENTS

§ 100450.216. EMSC Program Approval.

(a) A local EMS agency may develop and implement an EMSC program.

(b) A local EMS agency implementing a new EMSC program shall have the EMSC component of an EMS plan approved by the EMS Authority prior to implementation.

(c) The EMSC component of an EMS plan submitted to the EMS Authority shall include, at a minimum, the following:

(1) EMSC program goals and objectives.

(2) The names and titles of the local EMS agency personnel who have a role in the planning, implementation, and management of an EMSC program.

(3) Injury and illness prevention planning that includes coordination, education, and data collection.

(4) (A) Policies for care and services rendered to pre-hospital EMS pediatric patients:

1. First response non-transport.
2. Transport.

3. Interfacility Transfer.


(B) This shall include, but not be limited to:

1. Pediatric-specific personnel training.

2. Pediatric ambulance equipment.

(5) A quality improvement plan containing process-outcome measures as referenced in section 100450.224 of this Chapter.

(6) A list of facilities providing pediatric critical care and pediatric trauma services.

(7) List of designated hospitals with agreements to participate in the EMSC system of care.

(8) A list of facilities providing pediatric physical rehabilitation resources.

(9) Copies of the local EMS agency’s EMSC pediatric patient destination policies.

(10) A description of the method of field communication to the receiving hospital specific to the EMSC patient.

(11) A description of the method of data collection from the EMS providers and designated EMSC hospitals to the local EMS agency and the EMS Authority.

(12) A policy or description of how the local EMS agency integrates a PedRC in a neighboring jurisdiction.

(13) Pediatric surge planning.

(d) The EMS Authority shall, within 30 days of receiving a request for approval, notify the requesting local EMS agency in writing of approval or disapproval of its EMSC program. If the EMSC program is disapproved, the response shall include the reason(s) for the disapproval and any required corrective action items.

(e) The local EMS agency shall provide an amended plan to the EMS Authority within 60 days of receipt of the disapproval letter.

(f) A local EMS agency currently operating an EMSC program implemented prior to the effective date of these regulations, shall submit, to the EMS Authority, an EMSC
component of an EMS plan as an addendum to its annual EMS plan update, or within 180 days of the effective date of these regulations, whichever comes first.

(g) No health care facility shall advertise in any manner or otherwise hold itself out to be affiliated with an EMSC program or PedRC unless they have been designated by the local EMS agency, in accordance with this Chapter.


§ 100450.217. Annual EMSC Program Update.

(a) The local EMS agency shall submit an annual update to its EMSC program as part of its annual EMS plan submittal, which shall include, at a minimum, all the following:

(1) Any changes in the EMSC program since submission of the prior annual EMS plan.

(2) The status of EMSC program goals and objectives.

(3) A summary of the EMSC program performance improvement activities.

(4) Progress on addressing action items and recommendations provided by the EMS Authority within the EMSC program or Status Report approval letter, if applicable.


Article 3: Pediatric Receiving Centers

§ 100450.218. All PedRC Requirements.

(a) All PedRCs shall meet the following facility requirements:

(1) All PedRCs shall have an interfacility transfer plan for pediatric patients in accordance with Title 22, Division 9, Chapter 7, Article 5, section 100266.

(2) Establish a process for obtaining and providing consultation via phone, telehealth, or onsite for emergency care and stabilization, transfer, and transport.

(b) All PedRCs shall meet the following personnel requirements:

(1) All physician PECCs shall be licensed in California and meet all the following minimum requirements:
(A) Be a qualified emergency specialist, or

(B) Be a qualified specialist in Pediatrics or Family Medicine, and

(C) Shall have competency in resuscitation of pediatric patients of all ages from neonates to adolescents.

(2) All nurse PECCs shall be licensed in California and meet all the following minimum requirements:

(A) Have at least two (2) years of experience in pediatric or emergency nursing within the previous five (5) years.

(B) Shall have competency in resuscitation of pediatric patients of all ages from neonates to adolescents through American Heart Association Pediatric Advanced Life Support or American College of Emergency Physicians sponsored Advanced Pediatric Life Support.

(3) The designated PECC shall be responsible for all of the following:

(A) Provide oversight of the emergency department pediatric quality improvement program.

(B) Liaison with appropriate hospital-based pediatric care committees.

(C) Liaison with other PedRCs, the local EMS agency, base hospitals, prehospital care providers, and neighboring hospitals.

(D) Facilitate pediatric emergency department continuing education and competency evaluations in pediatrics for emergency department staff.

(E) Coordinate pediatric disaster preparedness.

(F) Ensure family centered care practices are in place.

(4) All PedRCs shall have personnel available for consultation to the emergency department through live interactive telehealth or other means determined by the local EMS agency including, but not limited to:

(A) A qualified pediatric specialist.

(B) A pediatric intensivist.

(C) Support services, including respiratory care, laboratory, radiology, and pharmacy shall include staff and equipment to care for the pediatric patient.
(D) Respiratory care specialists who respond to the emergency department.

1. Respiratory care specialists shall verify their competence to support oxygenation and ventilation of pediatric patients to the Director of Respiratory Services. This verification may include, but is not limited to:

   a. Current completion of the American Heart Association Pediatric Advanced Life Support Course, or

   b. The American Academy of Pediatrics and American College of Emergency Physicians sponsored Advanced Pediatric Life Support Course, or

   c. Continuing education courses specific to resuscitation of pediatric patients.

   (c) The pediatric equipment, supplies, and medications in all PedRCS, for pediatric patients from neonates to adolescents, shall include, but not be limited to:

   (1) A length-based resuscitation tape, medical software, or other system available to assure proper sizing of resuscitation equipment and proper dosing of medication.

   (2) Portable resuscitation supplies, such as a crash cart or bag, with a method of verification of contents on a regular basis.

   (3) Equipment for patient and fluid warming, patient restraint, weight scale (in kilograms) and pain scale tools for all ages of pediatric patients.

   (4) Monitoring equipment appropriate for pediatric patients including, but not limited to, blood pressure cuffs, doppler device, electrocardiogram monitor/defibrillator, hypothermia thermometer, pulse oximeter, and end tidal carbon dioxide monitor.

   (5) Respiratory equipment and supplies appropriate for pediatric patients including, but not limited to, clear oxygen masks, bag-mask devices, intubation equipment, supraglottic airways, oral and nasal airways, nasogastric tubes, and suction equipment.

   (6) Vascular access supplies and equipment for pediatric patients including, but not limited to, intravenous catheters, intraosseous needles, infusion devices, and intravenous solutions.

   (7) Fracture management devices for pediatric patients including extremity splints and spinal motion restriction devices.

   (8) Medications for the care of pediatric patients requiring resuscitation.

   (9) Specialized pediatric trays or kits which shall include, but not be limited to:
(A) Lumbar puncture tray.

(B) Difficult airway kit with devices to assist intubation and ventilation.

(C) Tube thoracostomy tray including chest tubes in sizes for pediatric patients of all ages.

(10) Newborn delivery kit to include, but not limited to, the following:

(A) Towel,

(B) Clamps and scissors for cutting the umbilical cord,

(C) Bulb suction,

(D) Warming pad, and

(E) Neonatal bag-mask ventilation device with appropriate sized masks.

(F) Urinary catheter tray including urinary catheters for pediatric patients of all ages.


§ 100450.219. Basic PedRC Requirements.

(a) A hospital may be designated as a Basic PedRC by the local EMS agency upon meeting all the following criteria:

(1) All designated Basic PedRCs shall be licensed as a general acute care hospital with a basic or standby Emergency Department permit.

(2) Emergency Department services may include physician staffing 24 hours a day, 7 days a week or a physician available for consultation.

(3) At minimum, one licensed registered nurse or advanced care practitioner per shift in the emergency department shall have current completion of the American Heart Association Pediatric Advanced Life Support, Advanced Pediatric Life Support, completion of an Emergency Nursing Pediatric Course, or other equivalent pediatric emergency care nursing course, as determined by the local EMS agency.

(4) The emergency department in the hospital shall be able to stabilize critically ill or injured infants, children, and adolescents prior to admission to the pediatric intensive care unit (PICU) or transfer to a Comprehensive PedRC facility.
(5) Establish agreements with at least one Comprehensive PedRC, as approved by the local EMS agency, for education, consultation, and transfer of critical pediatric patients.

(6) Establish agreements with an Advanced or General PedRC, as approved by the local EMS agency, for consultation and transfer of pediatric patients.

(7) Establish transfer agreements for pediatric patients needing specialized care, if the specialized care is not available at a Comprehensive, Advanced or General PedRC, such as trauma, burn, spinal cord injury, rehabilitation, and behavioral health.

(8) All Basic PedRCs shall have a physician and/or nurse PECC which may be shared with other PedRCs.

(b) Additional requirements may be stipulated by the local EMS agency medical director.


§ 100450.220. General PedRC Requirements.

(a) A hospital may be designated as a General PedRC by the local EMS agency upon meeting all the following criteria:

(1) All designated General PedRCs shall be licensed as a general acute care hospital with a basic or comprehensive Emergency Department permit.

(2) Participate with a Comprehensive and/or Advanced PedRC for pediatric emergency education for hospital staff and emergency care providers consistent with the local EMS agency plan for ongoing pediatric education.

(3) The emergency department in the hospital shall be able to stabilize critically ill or injured infant, children, and adolescents prior to admission to the PICU or transfer to a Comprehensive PedRC facility.

(4) Establish agreements with Comprehensive and/or Advanced PedRCs as approved by the local EMS agency, for education, consultation, and transfer.

(5) Establish transfer agreements for pediatric patients needing specialized care, if the specialized care is not available at a Comprehensive, Advanced or General PedRC, such as trauma, burn, spinal cord injury, rehabilitation, and behavioral health.

(6) All designated General PedRCs shall have a physician and/or nurse PECC which may be shared with other PedRCs.
(7) All designated General PedRCs shall meet the following additional equipment requirements:

(A) Neonatal resuscitation equipment, including:

1. Pediatric laryngoscope with Miller 0 and 00 blades,
2. Size 2.5 and 3.0 endotracheal tubes, and
3. Umbilical vein catheters.

(b) Additional requirements may be stipulated by the local EMS agency medical director.


§ 100450.221. Advanced PedRC Requirements.

(a) A hospital may be designated as an Advanced PedRC by the local EMS agency upon meeting the following criteria:

(1) All designated Advanced PedRCs shall be licensed by the Department of Health Services (DHS), Licensing and Certification Division, under California Code of Regulations (CCR), Title 22, Division 5, Chapter 1, as follows:

(A) As an acute care hospital pursuant to Article 1, sections 70003 and 70005.
(B) For pediatric service pursuant to Article 6, section 70535 et seq.
(C) For basic or comprehensive emergency medical services pursuant to Article 6, section 70411, et seq.
(D) For social services pursuant to Article 6, section 70535 et seq.
(E) Community neonatal intensive care unit (NICU) or as an Intermediate NICU if it meets the following requirements, as per:

1. Article 6, Section 70545 et seq., for the provision of perinatal services and licensed by DHS, Licensing and Certification Division as a perinatal service;
2. Article 6, Section 70481 et seq., for the provision of neonatal intensive care services and licensed by DHS, Licensing and Certification Division as an Intensive Care Newborn Nursery (ICNN)
(F) If the hospital has a PICU then it shall be licensed by DHS, Licensing and Certification Division for intensive care services, and meet the requirements for the provision of intensive care services pursuant to CCR Title 22, Division 5, Chapter 1, Article 6, Section 70491 et seq.

(G) The emergency department in the hospital shall be able to stabilize critically ill or injured infant, children, and adolescents prior to admission to the PICU or transfer to a Comprehensive PedRC facility.

(2) Establish agreements with a minimum of one Comprehensive PedRC as approved by the local EMS agency, for consultation.

(3) Participate with a Comprehensive PedRC for pediatric emergency education for emergency care providers consistent with the local EMS agency plan for ongoing pediatric education.

(4) Establish transfer agreements with a Comprehensive PedRC to transfer pediatric patients for stabilization, ensuring the highest level of care.

(5) Establish transfer agreements for pediatric patients needing specialized care, if the specialized care is not available at a Comprehensive, Advanced or General PedRC, such as trauma, burn, spinal cord injury, and rehabilitation and behavioral health.

(b) All Advanced PedRCs shall meet the following personnel requirements:

(1) Advanced PedRCs shall have a physician and nurse Pediatric Emergency Care Coordinator (PECC).

(2) Respiratory care service in the pediatric service department and emergency department provided by respiratory care practitioners (RCPs) who are licensed in the state of California and who have completed formal training in pediatric respiratory care which includes clinical experience in the care of children.

(3) Social work services in the pediatric service department provided by a medical social worker (MSW) holding a master’s degree in social work who has expertise in the psychosocial issues affecting the families of seriously ill infants, children, and adolescents.

(4) Behavioral health specialists with pediatric experience to include, but not be limited to, psychiatrists, psychologists, and nurses.

(5) The following specialties shall be on-call, and available for consultation to the ED or NICU within 30 minutes by telephone and in-person within one hour:

(A) Neonatologist.
(B) General Surgeon with pediatric experience.

(C) Anesthesiologist with pediatric experience.

(D) Pediatric Cardiologist.

(6) The following specialties shall be on-call, and available to the NICU or ED either in-person, by phone, or by telehealth, within 30 minutes:

(A) Radiologist with pediatric experience.

(B) Otolaryngologist with pediatric experience.

(C) Mental health professional with pediatric experience.

(D) Orthopedist with pediatric experience.

(7) The following qualified specialists shall be available twenty-four (24) hours a day, 7 days a week, for consultation which may be met through a transfer agreement or telehealth:

(A) Pediatric Gastroenterologist.

(B) Pediatric Hematologist/Oncologist.

(C) Pediatric Infectious Disease.

(D) Pediatric Nephrologist.

(E) Pediatric Neurologist.

(F) Pediatric Surgeon.

(G) Cardiac Surgeon with pediatric experience.

(H) Neurosurgeon with pediatric experience.

(I) Obstetrics/Gynecologist with pediatric experience.

(J) Pulmonologist with pediatric experience.

(K) Pediatric Endocrinologist.

(8) The hospital or LEMSA may require additional specialists or more rapid response times.
(c) The pediatric equipment, supplies, and medications in all Advanced PedRCs for pediatric patients from neonates to adolescents shall include all General PedRC equipment, and:

(1) Crash carts with pediatric resuscitation equipment that shall be standardized and available on all units, including but not limited to, the emergency department, radiology suite, and inpatient pediatric service.

(d) Additional requirements may be stipulated by the local EMS agency medical director.


(a) A hospital may be designated as a Comprehensive PedRC by the local EMS agency upon meeting all criteria of an Advanced PedRC, as well as the following facility requirements:

(1) All designated Comprehensive PedRCs shall be licensed as a general acute care hospital with a basic or comprehensive Emergency Department permit and have full, provisional, or conditional California Children’s Services (CCS) approval by the Department of Health Care Services as a tertiary hospital, or meet CCS criteria as a tertiary hospital as approved by the local EMS agency.

(2) Can provide comprehensive specialized pediatric medical and surgical care to any acutely ill or injured child.

(3) Inpatient resources including a neonatal intensive care unit (NICU) and a pediatric intensive care unit (PICU).

(4) Provide ongoing outreach and pediatric education for Community, General and Basic PedRCs, and prehospital care providers, in collaboration with the local EMS agency.

(5) Establish transfer agreements or serve as a regional referral center for specialized care, such as trauma, burn, spinal cord injury, and rehabilitation and behavioral health, of pediatric patients.

(6) Emergency department services include a separate pediatric emergency department or a designated area for emergency care of pediatric patients within an emergency department, with physician staff who are qualified specialists in emergency medicine or pediatric emergency medicine.
(7) All designated Comprehensive PedRCs shall meet the equipment requirements of Advanced PedRCs.

(b) Additional requirements may be stipulated by the local EMS agency medical director.


**Article 4: Data Management, Quality Improvement and Evaluations**

§ 100450.223. Data Management Requirements.

(a) The local EMS agency shall implement a standardized data collection and reporting process for EMSC program.

(1) The EMSC program shall include the collection of both prehospital and hospital patient care data, as determined by the local EMS agency.

(2) The prehospital EMSC patient care elements selected by the local EMS agency shall be compliant with the most current version of the CEMSIS and the NEMSIS databases.

(b) All PedRCs shall participate in the local EMS agency data collection process in accordance with local EMS agency policies and procedures.

(c) Following approval of the EMSC program, PedRCs shall submit data to the local EMS agency which shall include, but not be limited to:

(1) Baseline data from pediatric ambulance transports, including, but not limited to:

(A) Arrival time/date to the emergency department.

(B) Date of birth.

(C) Mode of arrival.

(D) Gender.

(E) Primary impression.

(2) Basic outcomes for EMS quality improvement activities, including but not limited to:

(A) Admitting hospital name if applicable.
(B) Discharge or transfer diagnosis.

(C) Time and date of discharge or transfer from the Emergency Department.

(D) Disposition from the Emergency Department.

(E) External cause of injury.

(F) Injury location.

(G) Residence zip code.

(d) Pediatric data shall be integrated into the local EMS agency and the EMS Authority data management systems through data submission on no less than a quarterly basis.

Note: Authority cited: Sections 1797.107 and 1799.204, Health and Safety Code.


(a) Each local EMS agency shall have a quality improvement program in collaboration with all PedRCs.

(b) All PedRCs shall have a quality improvement program. This process shall include, at a minimum:

(1) Compliance with the California Evidence Code, Section 1157.7 to ensure confidentiality, and a disclosure protected review of selected pediatric cases.

(2) A process that integrates emergency department quality improvement activities with the prehospital, trauma, inpatient pediatrics, pediatric critical care and hospital-wide quality improvement activities.

(3) A process to integrate findings from quality improvement audits and reviews into education and clinical competency evaluations of staff.

(4) Each PedRC will complete an online or paper assessment of the National Pediatric Readiness Project self-assessment and share the results with the local EMS agency every three years at minimum.

(5) A multidisciplinary pediatric quality improvement committee to review prehospital, emergency department, and inpatient care which shall include, but not be limited to:

(A) Cardiopulmonary or respiratory arrests.

(B) Child maltreatment cases.
(C) Deaths.

(D) Intensive care unit admissions.

(E) Operating room admissions.

(F) Transfers.

(G) Trauma admissions.

c) The local EMS agency is responsible for:

(1) Ongoing performance evaluations of the local or regional EMSC programs.

(2) Ensuring the designated PedRCs, other hospitals that provide care to pediatric patients, and prehospital providers involved in the EMSC program, participate in the quality improvement program contained in this section.

Date: August 15, 2019

To: Santa Clara County Emergency Medical Care Committee Members

From: Michael Cabano, EMS Specialist, All Hazards / Medical-Health Mutual Aid Unit

Subject: EMS System Initiatives: Preparedness and Significant Events

History and Issue

The purpose of this report is to identify actions or initiatives that have been implemented to increase preparedness within the EMS System and to report on any significant events that have occurred within the EMS System during reporting period.

Report

The EMS Agency has been working with the Stanford University Department of Public Safety and City of San Jose Park Rangers to institute Public Safety Narcan Programs. The Department’s policy has been reviewed by the EMS Agency and are in the final approval phase with implementation expected in August 2019.

Since the last reporting period several significant events have occurred that were mitigated without significant impact to the EMS System and they are as follows:

- June 23, 2019- South County Level 1 MCI Activation
- June 23, 2019- City of San Jose Residential Shooting
- June 25, 2019- Morgan Hill Ford Store Shooting
- July 13, 2019- Shoreline Amphitheatre Audiotistic Music Festival
- July 14, 2019- Shoreline Amphitheatre Audiotistic Music Festival