Reasonable accommodations can be made for persons with disabilities planning to attend the EMCC Meeting by contacting EMS Staff at least 24 hours in advance at (925) 646-4690.

Any disclosable public records related to an item on a regular meeting agenda and distributed by the County to a majority of members of the Emergency Medical Care Committee less than 96 hours prior to that meeting are available for public inspection at 1340 Arnold Drive, Suite 126, Martinez, during normal business hours.
### Members Present Representing

| Chair: Kacey Hansen Trauma Center (CC Contract) |
| Vice Chair: Gary Napper Public Managers’ Association |
| Executive Committee: Ellen Leng Alameda-Contra Costa Medical Association |
| Terence Carey Ambulance Providers (CC Contract) |
| Pat Frost EMS Agency Director |
| David Goldstein EMS Agency Medical Director |
| Denise Pangelinan Communications Center Managers’ Assoc. |
| Anthony Rodigin Emergency Dept. Physicians (CC Receiving Hospital) |
| David Samuelson Emergency Nurses Assoc. East Bay |
| John Speakman District II |
| Kelley Stieler District I |
| Allan Tobias District IV |
| Jason Vorhauer Contra Costa Office of the Sheriff |

### Members Absent Representing

| Ara Gregorian California Highway Patrol |
| Jon King Police Chiefs’ Association |
| Elaina Petrucci Gunn American Heart Association |

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**Chair Hansen** called the meeting to order at 4:10 p.m.

1. **Introduction of Members and Guests**

2. **Approval of Minutes from March 14**
   
   Member Speakman motioned to approve the Minutes from March 14, 2018. Member Napper seconded; none opposed. Motion passed. March minutes are approved.

3. **Chair's Report - Kacey Hansen, EMCC Chair**
   
   No Report

4. **Comments from the Public**
   
   No Comments

5. **Members’ Reports**
   
   No Reports

6. **American Red Cross Presentation**
   
   Jennifer Lucas, CCC Disaster Program Manager for the American Red Cross gave a presentation on Red Cross programs and recent activities within the County. Covered Contra Costa disaster cycle: prepare-respond-recover. Preparation is 95% of cycle. Red Cross three largest programs: 1. DAT (disaster action team) - a team of Red Cross volunteers who help people after a fire, day or night. Disaster Health Services, spiritual, mental care; 2. Home Fire Preparedness Campaign - have teams that will go out into at risk communities and install free 10 year smoke alarms and educate on fire safety; 3. Pillow case project - sponsored by Disney - go into schools within the County and talk to third, fourth, and fifth graders about disaster preparedness and how to respond. Red Cross is involved in upcoming yellow command UASI training drill, providing the shelter element to that drill. Red Cross continues to work with community partners and Lucas stated a need to connect with the EMS community more. Member Carey thanked her for the service of the Red Cross and asked if the Red Cross tracks the number of smoke alarms donated, where they are installed, etc. Lucas was able to share that the Red Cross reached over 530 homes and installed over 5,000 alarms. Member Carey asked what information does the Red Cross need during “call for the canteen”; Lucas stated “I have X number of responders and expect to be here X number of hours” - can ask for water, coffee, snacks, sandwiches, etc. Vice Chair Napper asked what does the Red Cross do for animals? Lucas – the County has great resources; can set up a “4 legged” shelter next to a “2 legged” shelter. Only allow service animals into human shelters.

7. **EMCC Legislative Update**
8. Fire Chiefs' Report

No Report

9. Quarterly Update on Alliance Ambulance Services – Chief Terry Carey, CCCFPD

- Member Carey recognized Chad Neiwand, AMR, for his involvement with training members of the public in hands only CPR.
- Continuing effort of meeting with hospital partners and working with hospitals on wall times – Rebecca Rozen, Hospital Council, assisting with meeting facilitation.
- Member Goldstein, along with MDs Gene Hern and Peter Benson have been working through a dispatch process to get the appropriate units to the respective calls. Had been sending engine and ambulance code 3; looking at usefulness of that and how does that affect other calls with rigs being tied up. CCCFPD is adding engine companies/personnel to the Department and still can’t always keep up with population growth, so a streamlined process could help with that.
- ALS IFT program – efforts continuing to promote/market the program. Member Frost added that the reason for the program came from an expressed need from hospital stakeholders and is exclusive to Contra Costa Fire. Member Carey stated that one hospital expressed interest to enter into a contract for the program, but an effort is being made to not move too quickly while the program ramps up.

10. Nominations and Election for Executive Committee Vacancy (Action Item)

Chair Hansen addressed the vacancy on the EMCC executive committee. Member Frost had been advised of potential nominee; Member King who was willing to fill the executive committee vacancy, if needed. Member King was absent at the meeting, but Chair Hansen clarified a nomination can still be made. Member Leng made a motion to nominate Member King. Member Vorhauer seconded the nomination; none opposed. Motion passed.

11. EMS Medical Director’s Report - David Goldstein, MD, Contra Costa EMS Agency Medical Director

Member Goldstein reported on the CPR Highly Defined (CPR-HD) Pilot Study. It is a choreographed process to delivering CPR - the goal has been to trial a very prescribed set of roles with the intent of improving cardiac arrest care, and then to generalize and roll out across the entire County. The trial has been successful up to this point; the next step is how to roll out. Member Goldstein expects this will roll out (goal) by the beginning of 2019. Chair Hansen requested a presentation at the next EMCC meeting of what the pilot results are before rolling out to the County.

12. EMS Director’s Report - Pat Frost, Contra Costa EMS Agency Director

- San Ramon RFP – the Board of Supervisors (BOS) approved a one year contract extension to allow further exploration of 224 rights. EMS Agency will bring issue back to BOS for further direction, by January 2019.
- Ambulance Ordinance – still with County Counsel; have had some back and forth. What is happening: we get close to the next step, but then additional questions come up before can move forward. New document should be much improved.
- ePOLST (electronic Physician Order for Life Sustaining Treatment) Registry – Prehospital pilot project went live in April. It allows EMS field provider to query whether patient has order for life sustaining treatment while in the field. The success of the registry depends on having enough records to make the program work; the registry continues to grow as we collect more data.
- Alta Bates – no new news on hospital closure.
- LEMSA directed by BOS Finance Committee to work with Fire Executive Chiefs to explore a ballot measure; LEMSA to collaborate on a proposal.
- 2nd Annual Survivors Reunion – LEMSA asking for cases and continuing to accept event sponsorships. Handout provided.
- Contra Costa EMS received Gold Plus Mission Lifeline award for STEMI care.
- APOT report (handout) – focus on delays greater than 1 hour, sometimes up to 2-3 hours. Report shows 435 instances so far. Last year averaging 63 a month, this year it is up to 83 a month. All parties need to help to turn ambulance performance times around. The EMS Agency does not allow ED diversion in this County.
- LEMSA working with the Hospital Council to create a ReddiNet report card. Two years ago LEMSA has expanded use of ReddiNet to support real time emergency communication throughout the health care system-wide. It is now connected to hospitals, dispatch, long term care facilities and ambulance providers to support situation awareness and disaster communications.
- EMS Authority has denied our RFP and system plan, alleging LEMSA did not hold fair competitive process; County has appealed. Nothing changes to EMS system service delivery. We have not yet received a response to our appeal. Chair Hansen asked that a news article be shared with EMCC as part of minutes.

13. Proposed agenda items for September 12, 2018: CPR Highly Defined (CPR-HD) Pilot Presentation. Location of next meeting will be at the new EMS office, pending actual move in August.

14. Adjournment at 5:30pm
<table>
<thead>
<tr>
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<td>Alameda Contra Costa Medical Association</td>
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<td>American Red Cross</td>
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<td>California Highway Patrol</td>
<td>Ara Gregorian (effective 3/14/18)</td>
<td>Vacant</td>
<td>Vacant</td>
<td>(B. Goldhammer Present)</td>
<td>(B. Goldhammer Absent)</td>
<td>Vacant</td>
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<td>Communications Center Managers’ Association</td>
<td>Denise Pangellinan</td>
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<td>Present</td>
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<td>Present</td>
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<tr>
<td>B 7</td>
<td>Contra Costa Police Chiefs’ Association</td>
<td>Jon King</td>
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<td>Present</td>
<td>Absent</td>
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<td>Hospital Council East Bay</td>
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<td>Public Managers’ Association</td>
<td>Gary Napper</td>
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<td>Trauma Center (Contra Costa Contract)</td>
<td>Kacey Hansen</td>
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<td>Contra Costa Office of the Sheriff</td>
<td>Jason Vorhauer</td>
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<td>Vacant (Cynthia Belon)</td>
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<td>Absent</td>
<td>Present</td>
<td>Absent</td>
<td>Vacant</td>
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<tr>
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<td>Terence Carey</td>
<td>Present</td>
<td>Absent</td>
<td>Present</td>
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<td>Air Medical Transportation Provider</td>
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<td>E 2</td>
<td>Ex Officio</td>
<td>Pat Frost</td>
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<td>E 3</td>
<td>Ex Officio</td>
<td>David Goldstein</td>
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Advisory Body + Brown Act done

Meeting Attendance Requirements per the Bylaws:
A. EMCC members shall attend EMCC meetings.
B. A member who cannot attend a meeting must notify the Chair and may have one excused absence in a twelve month period.
C. Whenever a member does not attend two regularly scheduled meetings, within a rolling twelve month period, complete their Brown Act requirements or fail to meet the criteria for sitting on the advisory body the EMS Agency shall notify the nominating agency/organization of the absences and request appropriate action.
D. Members must complete the required Ethics and Brown Act training provided by the County within three months of appointment and submit the "Training Certification for Member of County Advisory Body" form to EMS staff prior to participating at any meeting.
E. Members who do not complete the Ethics and Brown Act training within 3 months may not further participate until the requirement is fulfilled.
F. Ethics and Brown Act training is recommended to be completed every two years while serving on a County Advisory Committee.
Bi-Directional Pre-Hospital Health Information Exchange

A Summary of Countywide EMS Data Integration Efforts Supporting Valued Based Patient Care

Contra Costa EMS Staff Report
August 2016
Introduction

Stimulated by the implementation of the Affordable Care Act, The State of California EMS Authority with support from the Office of the National Coordinator (ONC) has made it an expectation for all EMS Agencies to support bi-directional exchange of patient care data collected during the provision of Emergency Medical Services (EMS) to hospitals, public health, registries and state and federally mandated reporting. This is designed to support a wide variety of activities including:

- Patient safety
- High utilizer population management
- Public health and ACA patient care initiatives
- STEMI, Stroke, Cardiac Arrest, Trauma Systems of Care performance
- Quality and patient safety initiatives to achieve desired outcomes in environments grappling with limited resources and funding.
- Current and future State and National registries and reporting mandates for:
  - California Stroke Registries
  - Get with the Guidelines STEMI System Reporting
  - Trauma System Reporting
  - EMS-ED Transfer of Care Time
  - POLST (Physician Orders for Life Sustaining Treatment)
  - CARES (Cardiac Arrest Registry for Enhanced Survival)
- PULSE (Patient Unified Lookup System for Emergencies) Disaster Communications supporting patient movement

The Contra Costa EMS (CCEMS) efforts build on a foundation of well-established partnerships, working with system experts to wholly integrate EMS patient data with hospital data, thus completing a full account of patient care from the inception of a 9-1-1 call to the discharge of that patient from the hospital. Over the five years the CCEMSA been focused on realistic, local solutions using current data resources and interface technology. This report provides a high level update for Contra Costa EMS stakeholders.

EMS Data System Problem: Silos, Silos, Everywhere

In 2013, EMSA awarded CCEMS grant funding to conduct an analysis of the EMS system’s current data infrastructure. That study revealed untapped potentials for meaningful use associated with the preponderance of complex, user-unfriendly data systems and silos created that simply were unable to communicate with each other integration. The data systems in place were not interoperable.

This lack of interoperability created data management environments that were difficult for Fire-EMS first responders, ambulance providers, hospitals, County Public Health and the EMS Agency statutorily responsible for optimal county-wide coordination of emergency services. This resulted in laborious manual data entry, difficult access to basic analytics for performance reporting and situational awareness.
Bi-Directional Exchange

Bi-directional exchange is essential to supporting the Office of the National Coordinator and State EMS Authority required SAFR (Search, Alert, File and Reconcile) functions. The EMS Agency will be using First Watch as our county-wide EMS Data Hub to connect EMS related data platforms to achieve this this level of functionality and upgrading the system to First Pass as the primary tool for provider agency and EMS Agency. This will allow hospital discharge and patient disposition information to finally be available to the EMS provider agencies as part of their quality and medical oversight providing a level of data integration and analytics that will assist all end-users in their care of the patient.

Upcoming federal and state mandates associated with PULSE (Patient Unified Lookup System for Emergencies), Health Care Registries for Cardiac Arrest for Enhance Survival (CARES), Ambulance Patient Transfer of Care (APOT), Stroke and Physician orders for Life-Sustaining Treatment (POLST), Prehospital Core Measures, High Utilizer Initiatives, Public Health Global community efforts and care coordination optimization required for valued-based reimbursement.

Options for bi-directional exchange will be configured to use current hospital electronic health care record platforms through EPIC’s peer to peer CARE Everywhere model and/or have the opportunity to work with other software based models such as EDIE (Pre-Manage ED). In addition the EMS Agency is in the process of partnering with health care system providers to enhance options for real time dashboards and status screens, population based analytics supporting situation awareness in normal and catastrophic conditions.

The EMS Agency is working with EMS System partners to enhance their capability to develop new initiatives between first responders, ambulance, hospitals and the health care community at large. Activities implementing bi-directional data exchange will be designed with the end-user in mind to enhance coordination of services matching patient need to health care resource while being sensitive to staff workflows by focusing on interfaces between data systems. In the new model data will be optimized to flow based on patient need. An EMS system infrastructure project of this scope will take some time but long term will bring significant opportunities to enhance patient care including options for community para-medicine and alternative mobile medical services.

Background and Significance

The 2013 Contra Costa EMS data system analysis produced three core deliverables that were intended to address a long-term strategic process of aligning and integrating EMS data systems with those of the patient’s hospital medical record to enhance the
delivery of coordinated patient care services. As a result of that study Contra Costa EMS formed a Data Integration Working Group composed of interested stakeholders to explore solutions and next steps. That report also informed the Fitch EMS Modernization Study\(^1\) and the 2015 ambulance RFP\(^2\) data integration requirements.

The Working Group has been active since 2013 and was integral to the submission of a +EMS Local Assistance Grant Application in January 27, 2016. Although the CCEMS did not receive the award, our innovative peer to peer model using EPIC received praise from the California EMS Authority and the ONC.

**Description of Area Served: CCEMS Operational Area Data**

Enormous amounts of data are collected to support EMS operations in Contra Costa County. The EMS system provides coordinated emergency services for over 1.1 million people. Services are coordinated and delivered through public-private partnerships with Fire-EMS first responders trained at the basic or advanced life support level coupled with single-role paramedic and EMT staffed ambulances providing transport. The following are some of the operational area demographics as of 2015:

- The county consists of 802 square miles of rural, suburban, and urban communities.
- The population is ethnically and economically diverse.
- The operational area is served by eight (8) community hospitals with basic emergency department (ED) services.
- Five (5) of the eight (8) hospitals are designated STEMI and Cardiac Arrest Receiving Centers.
- Six (6) of the eight (8) hospitals are designated Stroke Receiving Centers.
- There is one (1) level II Trauma Center among the community hospitals.
- There are three (3) 9-1-1 ambulance providers in the county:
  - Moraga Orinda Fire Protection District provides 2% of all transports.
  - San Ramon Fire Protection District provides 6% of all transports.
  - American Medical Response provides 92% of all 9-1-1 transports.
- There are nine (9) BLS and CCT providers in the county.
- Since 2008, the community hospitals see approximately 400,000 ED patients per year.
- In 2015, the EMS system responded to 94,278 calls and transported over 73,064 patients.
- As of 2015, the Electronic Health Record (EHR) platform for all Contra Costa County community hospitals is Epic\(^3\).
- As of 2016, Contra Costa Prehospital electronic Patient Care Record (ePCR) will be part of efforts to identify and reduce EMS and Emergency Department patients who are high utilizers.

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1 Link to EMS system Review Documents http://cchealth.org/ems/system-review.php#simpleContained3
2 Link to EMS RFP process http://cchealth.org/ems/rfp.php
3 San Ramon Medical Center utilizes Cerner EHR software, which is CARE Everywhere accessible.
HIE Solution and System Integration

Rather than using a traditional health information exchange organization (HIO), CCEMS has found that using an HIE environment supported by Epic's CARE Everywhere allows the system to achieve the same results while utilizing existing infrastructure. CARE Everywhere functions as an enterprise HIO supporting the exchange of information between unaffiliated entities. Although Contra Costa County’s community hospitals are using Epic, each hospital's platform is unique. CARE Everywhere is the common conduit allowing for seamless transfer of a patient’s health record between unaffiliated entities. CARE Everywhere also has the capability to include additional connections to other unaffiliated entities, including sub-acute and tertiary facilities that augment the County’s acute care health system. Care Every-where’s interoperability similarly supports specialty consultation between community hospitals and regional specialty centers such as UCSF and UC Davis.

- In 2010, Contra Costa Community Hospital Leadership individually selected Epic with the intent of regional interoperability supporting the potential for whole community HIE between the facilities as part of healthcare reform.
  - Kaiser is a legacy user of Epic throughout California.
  - Bay Area Sutter facilities are implementing Epic.
  - UCSF and UC Davis provide specialty services to partner hospitals and also use Epic as their EHR.
- Coalition partner Contra Costa Regional Medical Center (CCRMC) is the County's only regional hospital, which has 20 emergency department beds, and in 2015 served:
  - 49,197 ED encounters, averaging 134 patients per day.
  - Received 12,842 patients via EMS, representing 17% of all patients transported by ambulance.
- Coalition partner American Medical Response (AMR) serves 92% of the county and will continue to provide emergency ambulance services as a member of a new EMS service delivery model through Contra Costa Fire Protection District. In 2015 AMR Contra Costa:
  - Responded to 85,767 calls.
  - Transported 67,564 patients.
  - In 2015 AMR transported approximately 5,500 patients to CCRMC for Emergency Department treatment.
- CARE Everywhere, Epic’s interoperability platform, exchanges patient data with other health institutions, HIEs, and government agencies on the eHealth Exchange (formally the Nationwide Health Information Network).

Coalition Preparedness: A Track Record of Engagement and HIE Readiness

CCEMS has over 25 EMS partners providing data to support the medical and system oversight of patient care delivery and the coordination of emergency medical services. The Contra Costa EMS System has mature Trauma, STEMI (ST Elevation Myocardial Infarction), Stroke and Cardiac Arrest systems of care and is an experienced participant in local, state, and national data registries, including Trauma One, State Core Metrics,
California Stroke Registry, Mission Lifeline, and CARES (Cardiac Arrest Registry to Enhance Survival).

**Current**

![FirstWatch Diagram](image)

**Figure 1. Contra Costa County current HIE data infrastructure capabilities**

For the past five years, CCEMS has been using near real-time dashboard technology with FirstWatch to manage actual offload times between all EMS System community hospitals. All community hospitals routinely share patient information between facilities, private providers, and clinics through CARE Everywhere and Epic portals. Some additional elements depicting coalition preparedness are listed below:

- 90% of the 9-1-1 operational area is supported by a single prehospital EHR (MEDS). As of January 1, 2016, all in-county fire department first responder agencies have the option of using MEDS to support a single patient care record for each EMS encounter over the next 2-5 years.
- MEDS is currently NEMSIS 3.3 compliant and will be 3.4 compliant in early 2016.
- All EHR systems introduced by EMS providers must be NEMSIS 3.4 compliant by January 2017.
- HL7-ready EHR platforms have been available since 2014.
- FirstWatch Hospital Dashboard available for all in-county community hospitals.
- In 2015, Epic’s recommendations for documenting EMS and patient transport (ASAP) were reviewed by CCEMS / CCHS / ccLink(Epic) and the HIE Working Group.
In 2014, CCEMS collaborated with stakeholders and created a model Continuity of Care Document (CCD) with AMR and Kaiser which will be used for this project and includes the following data elements:

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<td>ED Disposition</td>
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<tr>
<td>Race</td>
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<td>Language of Preference</td>
<td>ED Disposition Time</td>
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<td>ED Diagnosis (ICD 10)</td>
</tr>
<tr>
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</tr>
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<td>Discharge Disposition</td>
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<tr>
<td>Hospital Medical Record Number</td>
<td>Discharge Diagnosis (ICD 10)</td>
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</tbody>
</table>

CCEMS and our partners are committed to developing the infrastructure required for our proposed solutions for each of the +EMS functions that will not require translation software. We understand that a tremendous amount of work will be required, but we are confident that our existing and proposed infrastructure and coalition partners will be successful in achieving each of the goals proposed while improving patient care, safety, and billing when compared to a traditional HIE.

**Description of Proposed Work With Methodology For Achieving: Search, Alert, File, and Reconcile Functionality.**

CCEMS is pleased to address each of the requirements for the four functions outlined within this proposal. Each of the functions, Search, Alert, File, and Reconcile are discussed in detail as projects below:

**Proposed Search Function**

Using CARE Everywhere’s proven algorithm for patient matching and records return, the Search feature is designed to allow EMS providers to search for a limited data set such as health problems, medications, allergies, and advanced directives at the patient’s side using demographic information. The intent of search is to streamline workflow by requiring search to be accomplished within the prehospital EHR. Recognizing that human error is a significant factor in data entry, the proposed Search feature will validate through the proposed Reconcile feature.
Proposed Alert Function

The Alert feature is designed to notify the receiving hospital that a patient is being transported by ambulance to their facility. This feature will include the patient’s status and will be visually displayed to provide key patient metrics, including the paramedic’s primary impression for the patient.

Proposed File Function

The File feature is designed to populate the prehospital EHR information into the longitudinal hospital EHR as discrete data. This feature will include more detailed
information than that previously transmitted through the Alert feature. The hospital user will have the ability to view and option to incorporate the prehospital EHR data into the hospital EHR.

Proposed Reconcile Function

Using proven methodology used by FirstWatch in Sedgwick County, Kansas, we propose leveraging proven solutions from all coalition partners for the Reconcile feature. It is designed to merge a comprehensive set of outcome and billing information from the patient’s hospital EHR back into the prehospital EHR and FirstWatch’s data set to allow for quality analysis, benchmarking, and system improvement. This feature will include detailed information such as patient insurance information, discharge diagnosis (ICD-10 code(s)), and length of stay, if applicable.
Summary

Please be advised that recent legislation AB503, AB1129, AB1223, and SB19 requires all Local EMS Agencies to plan, promote, and implement prehospital and emergency department bi-directional health care information exchange within the next 18 months.

In preparation for health information exchange between local community hospitals and EMS System providers, the Contra Costa EMS Agency advises the following:

- All EMS transport agencies permitted in Contra Costa County must be capable of sending a prehospital continuity of care document (CCD) directly to the receiving hospital’s medical records system no later than January 2018.
- All community hospitals in Contra Costa County must be capable of consuming a prehospital electronic health record (EHR) CCD no later than January 2018.
- All prehospital EHRs must be compliant with new state EMS Data system requirements as specified in the January 5, 2016 California EMSA letter.

To learn more about local EMS Health Information bi-directional exchange efforts please contact Contra Costa Emergency Medical Services. To learn more about state and national EMS and Health System bi-directional exchange please visit http://www.emsa.ca.gov/HIE.
Contra Costa EMS System Ambulance Patient Offload Times (APOT)


Month over Month EMS System (Contra Costa Community Hospitals ONLY)

Month over Month by Hospital (All Destinations) thru July 2018
Contra Costa EMS System Ambulance Patient Offload Times (APOT)

APOT events > 60 minutes by ALL Hospitals July 2018

July Total Contra Costa EMS Ambulance Volume
Annual Performance Evaluation
Emergency Medical Services (EMS)
A Comprehensive Report of Emergency Ambulance Services Delivered by the Alliance 2017

Pat Frost, EMS Director
Contra Costa County EMS Agency
Jeff Carman, Fire Chief
Contra Costa County Fire Protection District

Performance Evaluation 2017

- Performance Based Contract:
  - Key Driver of Countywide EMS System enhancement
- Performance Report:
  - Response times
  - Clinical Performance
  - Innovation
  - Workforce Stability
  - Pricing & Revenue Recovery
  - Reporting Compliance
  - Fiscal Stability & Sustainability

The Alliance
Year Two of Outstanding Service

- On January 1, 2016, Contra Costa County Fire Protection District (CCCFPD) assumed Emergency Ambulance Services for Exclusive Operating Areas (EOAs) I, II and V covering West, Central and East County = 92% of the County.

- Alliance Model: CCCFPD (contractor) operationally responsible for the subcontractor performance provided by American Medical Response (AMR). CCCEMS (contract performance oversight and compliance evaluator)

Countywide EMS Ambulance Volume 2017
A Powerhouse of 9-1-1 EMS System Delivery

<table>
<thead>
<tr>
<th>Total Dispatches</th>
<th>All Providers</th>
<th>Contra Costa County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>Transported</td>
<td>103617</td>
<td>100.0%</td>
</tr>
<tr>
<td>Cancelled</td>
<td>80555</td>
<td>77.8%</td>
</tr>
<tr>
<td>Total Cancelled</td>
<td>23032</td>
<td>22.2%</td>
</tr>
<tr>
<td>Total Patient Transports</td>
<td>80585</td>
<td>100.0%</td>
</tr>
<tr>
<td>Transported Code 1</td>
<td>4196</td>
<td>5.2%</td>
</tr>
<tr>
<td>Transported Code 2</td>
<td>75430</td>
<td>93.6%</td>
</tr>
<tr>
<td>Transport Code Not Reported</td>
<td>959</td>
<td>1.2%</td>
</tr>
<tr>
<td>Total Cancelled</td>
<td>23032</td>
<td>100.0%</td>
</tr>
<tr>
<td>Enroute</td>
<td>6581</td>
<td>28.0%</td>
</tr>
<tr>
<td>On Scene</td>
<td>16451</td>
<td>71.4%</td>
</tr>
</tbody>
</table>

EMS Response Re-designed
4 New Response Zones

Contra Costa County
High Density-Low Density Response Zones - Plate A...

Response Time Performance
Highly Reliable Service

<table>
<thead>
<tr>
<th>Response Area</th>
<th>Response Time Performance</th>
<th>Arrival Performance</th>
<th>Average Response Times</th>
<th>Average Response Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zone A (Richmond)</td>
<td>10:00 minutes</td>
<td>90% of the time</td>
<td>93.7%</td>
<td>4:05</td>
</tr>
<tr>
<td>Zone B (West)</td>
<td>11:45 minutes</td>
<td>90% of the time</td>
<td>93.6%</td>
<td>4:38</td>
</tr>
<tr>
<td>Zone C (Central)</td>
<td>11:45 minutes</td>
<td>90% of the time</td>
<td>93.9%</td>
<td>4:05</td>
</tr>
<tr>
<td>Zone D** (East)</td>
<td>11:45 minutes</td>
<td>90% of the time</td>
<td>93.92%</td>
<td>4:34</td>
</tr>
</tbody>
</table>

** RFP redefined Zone E includes Antioch/Bay Point/Pittsburg
Partners in System Optimization
2017 Focus: Reduce Ambulance Response Time Delays

- Even with excellent contract compliance EMS ambulance response delays occur in all EMS Systems
- EMS Modernization Study Findings: Delays A Public Concern
  - Fire stations closures
  - Population Growth
  - Hospital Closures
- RFP Contractor Outlier Goals
  - Improve Reliability in Response
  - Reduce risk in vulnerable communities

Ambulance Response Time Performance
The Outlier Improvement Initiative
(Average 7,752 ambulance responses/month)

Outlier Fee Re-Investment
Alliance Accountability Supporting EMS System Optimization

<table>
<thead>
<tr>
<th>Year</th>
<th>Responses Per Year</th>
<th>Total Number** (fee)</th>
<th>Code 2 Outlier Optimization Re-investment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>89,768</td>
<td>$140,000</td>
<td>DELCAN System Status Management Dispatch (Total Cost $131,000)</td>
</tr>
<tr>
<td>2017</td>
<td>93,389</td>
<td>$199,500</td>
<td>4 Motorola Dispatcher Radio Consoles (Total Cost $204,592)</td>
</tr>
</tbody>
</table>

**Outliers within reasonable control of the provider

Ambulance Patient Offload Time (APOT)
EMS System Hospital APOT Standard
20 min 90% of the Time

Hospital Delays > 60 minutes
Due to Walk-In Patients Not Ambulance
Delivering ambulance availability for next 911 call

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total ED Encounters (All Hospitals)</td>
<td>411,032</td>
<td>475,037</td>
<td>381,791</td>
<td>434,705</td>
</tr>
<tr>
<td>Total EMS Transports (All Providers)</td>
<td>64,870</td>
<td>75,064</td>
<td>76,316</td>
<td>80,110</td>
</tr>
<tr>
<td>EMS Portion of all ED Encounters</td>
<td>15.8%</td>
<td>17.2%</td>
<td>20.0%</td>
<td>18.9%</td>
</tr>
<tr>
<td>Total Annual APOT Delays &gt; 60 minutes</td>
<td>401</td>
<td>483</td>
<td>618</td>
<td>752</td>
</tr>
<tr>
<td>Average APOT Delays &gt; 60 minutes/month</td>
<td>33</td>
<td>49</td>
<td>52</td>
<td>63</td>
</tr>
</tbody>
</table>

Service Line Expansion
Paramedic Inter-facility Transport

- Advanced Life Support Inter-facility Transport (ALS-IFT)
- Launched March 6, 2018
- Community Hospital Need
- RFP Requirement
- Revenue Opportunity
Emergency Medical Dispatch Improvement
Right Resources to the Right Patient

- After extensive study, in collaboration, the LEMSA and Alliance adjusted response configurations for a certain component of call types.

EMD Improvement Goals:
- Introduce flexibility into the EMS system
- Introduce added safety into our EMS response
- Introduce efficiency into our EMS response
- Understand that there is no “one size fits all”

Dedicated Workforce

- CCFPD – Paramedics 123/EMTs 147
- AMR – Paramedics: 171/EMTs 165

AMR Retention Strategies
- Annual scholarships for paramedic school and CE reimbursements
- CISM/EAP
- Resilience Training
- Wellness Education
- Quarterly town hall meetings

Financial Stability and Transparency

At the current payer mix, collections rate, and contract expenses, Alliance model is financially sustainable

- The CCFPD established a separate fund and budget (EMS Transport Fund) associated with Alliance ambulance service delivery.
  - Allows tracking of revenue from different payer groups and expenditures associated with the provision of ambulance services.
- The End of Year fund/balance (EMS Transport Fund) for Fiscal Year 2016-17
  - $10.5 million.
- In November 2015, the Board authorized the Auditor-Controller to transfer funds as necessary from the District’s General Operating Fund to the EMS Transport Fund to pay expenditures in anticipation of future revenue.
  - The District “borrowed” $3 million to fund these start-up costs.
  - In January 2018, the District repaid the $3 million and still had fund balance remaining.
- The District continues to build appropriate reserves and to prepare for future uncertainties in the health care system and payer plans.
  - It is the District’s goal to set aside six months of operating expenses as reserves

Physician Orders for Life Sustaining Treatment
California State POLST Registry Pilot
Proof on Concept

- Senate Bill 19: Statewide POLST Registry
- ePOLST Pilot (EMSA)
- 2 State Sites: Contra Costa and San Diego
- Regional Partnership
  - California Health Care Foundation
  - Coalition for Compassionate Care
  - Alameda and Contra Costa Medical Association (ACCMA)
  - Vynca Technologies
  - Limited to Alliance ambulance

EMS Data Driven Innovation

Alliance 92% of EMS System Care

EMS Agency/System Stakeholder
“System of Care” Achievement
The Alliance Model
Innovative Yet Controversial

- Evolved from a Robust EMS System Redesign
  - Responsive to Public & Stakeholder Input

- First of its Kind Service Delivery Model
  - Focus on EMS System Optimization
  - Positioned to be fiscally resilient and patient-centric

- Focus of Statewide and National interest
  - Not replicated in California since

Collaborative Partnerships
#Stronger Together!

CCCFPD-AMR-CCCEMS
Contra Costa County Emergency Medical Services Agency  
(CCCEMSA)

Alliance Emergency Ambulance Response: Outlier FAQs

What is an Emergency Ambulance Response Outlier? These are 911 calls that have ambulance response times of greater than 150% of performance requirements AND are validated to be within the ambulance provider’s control.

Why does “Outlier Response Time Performance” exist in the current ambulance contract? The outlier requirement was established as part of the 2015 emergency ambulance request for proposal (RFP) to reduce disparities in countywide emergency ambulance response. The requirement serves as a safety net that enables the county to merge ambulance response zones for efficiency while providing exceptional EMS ambulance service.

How is Outlier Ambulance Response defined by contract? An outlier ambulance response is defined in the RFP as a “response time that is excessive for the category such that it represents a potential threat to health and safety” (RFP page 431).

Outlier call priorities, time limits and fees

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>High Call Density (Urban)</th>
<th>Low Call Density (Rural)</th>
<th>Fee per Outlier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority 1 Outlier</td>
<td>&gt;18:59 min</td>
<td>&gt; 29:59 min</td>
<td>$1,500</td>
</tr>
<tr>
<td>Priority 2 Outlier</td>
<td>&gt;22:59 min</td>
<td>&gt;44:59 min</td>
<td>$1,000</td>
</tr>
<tr>
<td>Priority 3 Outlier</td>
<td>&gt;39:59 min</td>
<td>&gt;59:59 min</td>
<td>$750</td>
</tr>
</tbody>
</table>

(Standard ambulance response criteria are 11:45 minutes or less 90% of the time for urban areas and 30 minutes or less for rural areas.)

Where do ambulance outlier delays occur? Outlier ambulance delay mapping demonstrates that outliers can and do occur anywhere in the county.

Is the Alliance being held to a higher performance standard than the prior contracts? Yes. The standard was increased to optimize ambulance service delivery.

How do outlier ambulance delays impact patients and communities? While the vast majority of ambulance response delays involve patients with medical conditions that are stable, delays in emergency ambulance response increases the time it takes for a patient to arrive at an emergency department and may impact patient outcomes.

How often do outliers occur? The chart below lists the number of outliers within the reasonable control of the contractor and represents less than 0.2% of all responses.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Responses</th>
<th>Contract Compliance Performance*</th>
<th>Total Response Time delays**</th>
<th>Total Outliers***</th>
<th>Outlier Delay Range****</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>90,153</td>
<td>94%</td>
<td>5,409</td>
<td>174</td>
<td>19-47 minutes</td>
</tr>
<tr>
<td>2017</td>
<td>93,368</td>
<td>96%</td>
<td>3,734</td>
<td>139</td>
<td>20-56 minutes</td>
</tr>
</tbody>
</table>

* Number represents contractor annual performance
** Total number of ambulance response time delays based on contractor’s annual performance level
*** Total number of outliers validated to be within the reasonable control of the ambulance provider
**** Outlier Response Time delay in minutes

How are outlier response times validated and outlier fees assigned? After CCCEMSA uses a third-party Online Compliance Utility (OCU) process to validate each emergency ambulance response for compliance, response time fees would be levied in accordance with the contract.

What are fees used for? Fees are focused on “fixing the problem of ambulance delays” and invested in equipment, technology and software that reduce ambulance response delays as approved by the Board of Supervisors.

Can outliers be eliminated? Outlier emergency ambulance delays, which are within the control of the ambulance provider, can and should be reduced if not eliminated. Improvement efforts to reduce outliers are part of contract requirements to optimize the availability of emergency ambulance services.
DATE: July 23, 2018

TO: FINANCE COMMITTEE
Supervisor Karen Mitchoff, District IV, Chair
Supervisor John Gioia, District I, Vice Chair

FROM: Patricia Frost, Director, Emergency Medical Services

SUBJECT: Contra Costa EMS System Funding Report

Information:

Referral History:
On March 19, 2017, the EMS Agency submitted a follow-up report on Community Service Area EM-1 (Measure H) and EMS System funding gaps. The report included two key recommendations to assure continuity of technology operations supporting programs (e.g. Trauma, Cardiac Arrest, STEMI, Stroke and EMS for Children) known to produce life-saving outcomes.

Recommendation #1: Establish an interim annual EMS System Program enhancement contribution/investment of up to $750,000 from available Board designated revenue sources until such time a new benefit assessment or other revenue source with a COLA could be established to support and enhance the Countywide EMS System.

Committee Response: The Finance committee reviewed the items for gap-funding from the general fund reserves to total $500,000. In July of 2018 the EMS Director was asked to return with an updated report for further discussion.

Recommendation #2: Preserve and enhance the Fire First Responder funding by an additional 2 million dollars by moving forward by exploring a long term funding measure.

Committee Response: The Finance committee discussed the long term EMS System funding needs and recommended on-going referral to Finance to begin working on the two year process

1 In 2014 the Contra Costa EMS System Modernization Study identified the need for an additional $750,000 to sustain Countywide EMS System of Care programs.
to put a Special Tax on the June 2020 ballot. Chief Carman and EMS Director were directed to submit an updated funding report by the end of 2018 in collaboration with County Fire Chiefs.

<table>
<thead>
<tr>
<th>Program Infrastructure</th>
<th>Countywide EMS System Purpose</th>
<th>Annual Funding Request</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Watch/First Pass Patient Safety and EMS Ambulance Compliance Data System</td>
<td>This technology platform and program supports contract specified ambulance response time compliance reporting. It is also positioned to be the EMS System data hub for all electronic patient care record oversight. All patient care delivery will eventually be connect to the CCCEMS First Watch data hub to enable comprehensive medical oversight and EMS Systems of Care reporting. <em>(Regulatory System Compliance)</em></td>
<td>$ 200,000</td>
</tr>
<tr>
<td>ImageTrend technology certification and provider permitting system</td>
<td>This program supports continuity of operations using an online system supporting timely processing of ambulance provider permitting, EMT certification, ambulance equipment checks and training program authorizations and audits. <em>(Regulatory System Compliance)</em></td>
<td>$ 50,000</td>
</tr>
<tr>
<td>Bi-directional Prehospital Exchange with Hospitals <strong>CMS Grant opportunity</strong></td>
<td>In April 2018 the Centers for Medicare and Medicaid will offer a State Health Information Exchange (HIE) grant to assist local EMS Agencies in achieving new requirements for bi-directional HIE. The annual funding level requested includes dollars for both the grant match and non-grant covered project management costs. Bi-directional exchange will allow life-saving patient information to be sent and received between the field and hospitals. When patient disposition information is connected to the prehospital record bi-directional exchange will support value based reimbursement for providers participating in MediCaid, MediCare and GEMT programs. The EMS Agency intends to apply for an upcoming grant however significant progress to support bi-directional exchange could occur with this funding. <em>(NEW: EMS System requirement)</em></td>
<td>$ 250,000</td>
</tr>
<tr>
<td>ReddiNet EMS System emergency and disaster communication platforms</td>
<td>This program represents the cost of medical health satellite and web based technology system and upgrades supporting all clinics, hospitals, dispatch centers, long term care facilities and OES emergency communications in day-to-day and multi-casualty and disaster conditions. <em>(Regulatory Med/Health Disaster System Infrastructure)</em></td>
<td>$ 43,000</td>
</tr>
<tr>
<td>CARES (Cardiac Arrest Registry for Enhanced Survival)</td>
<td>National Registry annual subscription fee. National Cardiac Arrest Data Registry participation is required to meet EMSA standardized reporting requirements for Cardiac Arrest. <em>(EMSA State Regulatory System Requirement)</em></td>
<td>$ 7,000</td>
</tr>
</tbody>
</table>

---

January 5, 2016 California EMSA letter New State EMS Data System Requirements
The Importance of Bi-directional Exchange: As one of the highest performing EMS systems in California and the Bay Area, the Contra Costa EMS Agency is responsible for both creating and sustaining technology and patient information sharing programs and infrastructure required under Title 22 Health and Safety Code 2.5.

The requests submitted by the Contra Costa EMS Agency act to optimize pre-hospital care improving patient outcomes during day to day and disaster operations. Of crucial importance is the need to create a prehospital bi-directional exchange capability with hospitals to position the county EMS System for further optimization and value based medical transportation reimbursement.

In the present environment the lack of an integrated patient care record constrains EMS field providers and the county health care system from addressing challenges that waste time, effort and money including: emergency department overcrowding, substance abuse, domestic violence, frequent users, vulnerable populations, infectious disease and homelessness. This lack of integration silos EMS providers from being a full partner in crafting solutions that assure:

*The right patient receives the right response with the right resource within the right amount of time...at the right cost.*

Without integrated data Contra Costa EMS providers will simply bear the burden of responding to large numbers of patients who are known in “integrated systems” to benefit from more appropriate health care services including alternative destination.

*At present the Contra Costa EMS System does not have the data infrastructure to support the sophisticated triage needed to meet those challenges.*

The Local EMS Agency requires up to $750,000 per year to assure the continuity of operations of the County’s High Performance EMS System and fulfill all statutory functions, until such time that a long term revenue model can be established. As discussed in previous reports Fire Paramedic programs are anticipated to require up to 2.5 million in EMS System support

**Summary:**

Gaps in Emergency Medical Services funding threaten the Countywide EMS Services in meeting its statutory mission. LEMSA Measure H funding is no longer sufficient to sustain program operations and upgrade data system infrastructure to meet the demands of an EMS system that has increased in volume and complexity by 250% since Measure H was approved.
Contra Costa Emergency Medical Services
EMS System Response and Transport Volume
1990-2017

Local EMS Agency cost of compliance with local, state and grant requirements for EMS Systems and Programs
Contra Costa Emergency Medical Services
EMS System of Care and Paramedic Program Support*
FY 2017-2018 total $1,675,560

- Alliance Contract Compliance
  $231,000, 14%
- Other
  $76,473, 5%
- STEMI,
  $77,007, 5%
- Stroke
  $90,989, 5%
- Trauma
  $93,587, 6%
- Cardiac Arrest,
  $103,380, 6%
- Professional Standards
  $198,988, 12%
- EMS for Children,
  $39,106, 2%
- EMS System Quality and Medical Oversight
  $512,037, 30%
- Disaster Preparedness,
  $252,994, 15%
- Other
  $76,473, 5%

Local EMS Agency cost of compliance with local, state and grant requirements for EMS Systems and Programs
EMS BI-DIRECTIONAL EXCHANGE
“PATIENT INFORMATION WHEN IT IS NEEDED THE MOST”

- Best Prehospital Care
- EMS Patient Record
- Connected/Integrated Care
- Value Based Reimbursement
- Alternative Destinations

- Best Medical Outcomes
- Hospital Patient Record
- Right Treatment Right Place

6
Health Information Technology for EMS (HITEMS) Program
Medi-Cal Funding and Matching Options Summary
Version: May 3, 2017

Funding to emergency medical services for the development of health information exchange and interoperability is now available via Medi-Cal (Medicaid) through a process established by the California Department of Health Care Services (DHCS). The State of California Emergency Medical Services Authority (EMSA) has submitted a proposal to develop a statewide approach to implement health information exchange (HIE) for two critical components of the health care system: Emergency medical services (EMS) and disaster response. Funding would be used to complete HIE on-boarding and to design and implement HIE architecture. This program is estimated to be up to $40 million and last through September 30, 2021.

The proposal focuses upon two primary integrated use cases, and several sub-cases, to incorporate interoperable health information technology tools and services to allow for hospitals and eligible professionals to achieve meaningful use objectives, such as transitions of care, counter-alerting, and medication reconciliation:

(1) Emergency Medical Services
   1a. Daily Operations for Search, Alert, File, and Reconcile (SAFR) activities
   1b. POLST eRegistry and Access
   1c. Community Paramedicine and Mobile Integrated Healthcare
   1d. EMS analytics

(2) Disaster response
   2a. Disaster Professional Patient Search
   2b. Patient Tracking

These use cases would utilize national standards that facilitate health information exchange and build upon the HIE work already accomplished in California under previous HIE funding, including the lessons learned in ONC Project.

PROJECTIONS:
It is anticipated that with project would be over $40 million ($10 million per year) and continue through September 30, 2021. Matching funds (estimated to be over $4 million) would be obtained from counties and non-profit Foundations.

Funding Plan:
To achieve the necessary funding match, the following sequential steps would be required:
   1. A cash match (Non-Federal funds) from multiple sources would be identified.
2. "Matching" funds from non-profit Foundations, Counties, Health Departments*, would be transferred to EMSA. *Note: Redirection of existing use of Maddy EMS Fund for data and information purposes and count toward CPE may be allowable in some cases.

3. EMSA would enter into an Interagency Agreement with DHCS to allow for an Intergovernmental Transfer (IGT) to DHCS.

4. DHCS would approve and match with Federal funding upon invoice and send back to EMSA.

5. EMSA would provide funding to local entities for Interoperability and HIT planning for EMS upon invoice.

6. EMSA would maintain HITEMS coordination, operations and statewide HIT compliance for EMS and disaster objectives.

Three major components are proposed as part of the 4 year plan:
- State HITEMS Coordination ($3 million)
- Contracts for EMS, POLST, and Community Paramedic Integration ($34 million)
- Disaster Operations Integration ($4 million)

State HITEMS Coordination:

State project coordination is estimated to be approximately $3 million ($750,000 annually). This would allow for HIE coordination, grant administration, technical assistance, and data analytics.

Contracts for EMS integration for EMS, POLST, and Community Paramedics:

It is estimated that up to 33 contracts (each LEMS A) at an average of $1 million each to allow for EMS providers to onboard to hospitals, HIEs, long term care facilities, behavioral health providers, and social services providers. This would allow for:
- EMS daily operations to implement the SAFR model for EMS providers,
- POLST eRegistry access and community integration,
- Community Paramedicine/Mobile Integrated Healthcare, and
- EMS analytics.

Disaster Operations Integration:

The creation of interoperability for disaster operations will include:
- Patient Unified Lookup System for Emergencies onboarding to HIEs,
- HIE to HIE Interoperability,
- Patient Matching,
- Patient Tracking.
MATCHING FUNDS:

It is anticipated that over $4 million in matching funds will come to EMSA from local County fund sources and the California HealthCare Foundation. This $4 million over 4 years will allow for the 90/10 match to yield up to $40 for HIE implementation.

Matching Sources:

1. Maddy EMS Funds
   Utilize unallocated (Fund Balance) Maddy EMS Fund from the Discretionary EMS Account

2. California HealthCare Foundation
   Utilize unspent ePOLST Registry money for matching purposes

3. County General Fund
   Utilize CPE as fund source

4. EMSA General Fund
   Redirect EMSA GF sources

For Further Information:

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HIE Project Manager
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Rick Trussell
Division Chief, Fiscal, Administration, and Information Services
Rick.trussell@emsa.ca.gov
The Emergency Medical Services Administrators Association of California (EMSAAC) and the Emergency Medical Directors Association of California (EMDAC) believe:

- Patients access the emergency medical services (EMS) system for many reasons. Not all patients accessing the EMS system want or require transport to an emergency department.
- Current EMS Authority interpretation of statute compel all ambulance transportation to an emergency department regardless of patient need.
- Daily paramedics and emergency medical technicians safely make complex triage decisions in accordance with local EMS medical control policies.
- The vast majority of emergency departments do not have the specialty care resources to properly care for behavioral health patients that require the services of licensed psychiatric facilities.
- Sobriety programs in San Francisco and other communities nationwide have demonstrated that intoxicated persons may be safely managed in a non-acute care setting with proper supervision during the sobering process.
- In California, emergency departments are often overcrowded due in part to the number of behavioral health patients awaiting transfer to a licensed psychiatric facility and with intoxicated persons whose needs could be safely met in a sobering center.
- Ambulance patient destination decisions are and historically have been fully within the medical control authority of the local EMS agency medical director.

**Concept:**

Develop a process that is consistent with the Emergency Medical Services Authority (EMSA), "California Statewide Guidelines to Inform Local EMS Policies and Protocols for EMS Response without Patient Transport" to authorize the assessment and referral of specified patients by paramedics and emergency medical technicians to a County behavioral health designated psychiatric crisis center (PCC) or an authorized sobering center (SC).

**Problem Statement:**

The medical direction of emergency medical services (EMS) systems has proven effective in developing policies allowing prehospital care personnel to triage complex patients to a variety of specialty care centers designed to meet the specific needs of a wide category of patients. It is a recognized EMS system best practice to triage patients to the facility with the specialized staff and equipment to care for the specific patient’s need. However, in California two categories of patients are excluded from receiving the benefits of this best practice – patients in need of psychological services and patients in need of sobering center services.

In 2016, according to data from the Office of Statewide Health Planning (OSHPD) there were more than 14 million hospital emergency department visits in California.\(^1\) EMSA, local EMS agencies and the California Hospital Association all recognize the impact emergency department (ED) overcrowding is having on the delivery of medical services to acutely ill and injured patients throughout the state.\(^2\)

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1. [https://www.oshpd.ca.gov/HID/ED-AS-Data.html#Encounters](https://www.oshpd.ca.gov/HID/ED-AS-Data.html#Encounters)
The impact of ED overcrowding is exacerbated when behavioral patients and alcohol-intoxicated individuals whose needs would be best addressed in a PCC or SC are transported instead to an ED. Behavioral health patients and intoxicated individuals often require one-on-one staffing in the ED environment and occupy limited bed and treatment space needed for acutely ill and injured patients. This results in EDs being doubly taxed by the need to care for individuals whose needs would be best met by a PCC or SC. Patients experiencing a psychiatric emergency and/or placed on an involuntary hold and inebriated individuals may be held in the ED from several hours to several days waiting to sober or to be transferred to a PCC. These patients require specialized care and referrals that are not available in the ED. Their very presence adds to the ED overcrowding; decreases the number of ED beds available; which, in turn, delays the off-loading patients and increases the amount of time ambulances and their personnel are held at the hospital.

The EMS Authority has the position that advanced life support (ALS) ambulances operating in the 911 system are required to transport to the ED of an acute care hospital. EMSA has cited various statutes, Health and Safety Code Sections (H&SC) 1797.52 and 1797.218, to support its position that ALS ambulances are required to transport every patient to the ED of an acute care hospital regardless of the level of care required. This interpretation of statute is a significant departure from EMSA’s previous position that: “We [EMSA] believe that the reference to ‘transport to a general acute care hospital’ found in 1797.52 and 1797.218 are permissive and nonspecific. Because of the overriding need to allow flexibility of EMS medical directors, HCC 1797.220 prevails.”

More recently, EMSA has opined that this statute may also apply to basic life support (BLS) ambulances. The EMSA may not be aware of the common, long-standing practice of BLS ambulance companies contracting to transport patients for Department of Mental Health, insurers, and law enforcement to psychiatric facilities.

Coinciding with EMSA’s reinterpretation of H&SC 1797.52 and 1797.218, it has been EMSA’s push for the use of community paramedic pilot projects as a vehicle for local EMS Agency (LEMSA) oversight and approval of alternate destinations such as transport to a PCC or sobering center. Even though many local EMS agencies had already authorized the use of alternative destinations (e.g., behavioral health crisis centers, sobering centers) since the 1990s, EMSA pressured these local EMS agencies into participating in the community paramedicine pilot projects. EMSA seems to have switched its position without warning or preamble that local EMS agencies did not have the authority to authorize ALS and BLS ambulances to transport patients to alternative destinations outside of EMSA’s new community paramedic pilot projects. Though EMSA seemed to have good intentions, this change severely disrupted established safe and effective local medical control policies that had been meeting patient and community needs for many years.

As more fully discussed below, It is the position of the Emergency Medical Services Administrators of California (EMSAAC) and the Emergency Medical Directors Association of California (EMDAC) that the local EMS agency medical director has clear and unambiguous authority under Health and Safety Code Section 1797.220 and 1798 to develop and enact policies to allow for the transport of patients and individuals not requiring evaluation at an acute care emergency department to a psychiatric crisis center or sobering center. Such policies are inherently a triage decision and are not a violation of H&SC 1797.52 or 797.218, which pertain only to when a demonstrated need for transport to an ED exists. Nor are such policies a deviation from the recognized scope of practice of paramedics and emergency medical technicians.

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3 Letter from Joseph Morales, M.D., Director to local EMS agencies dated April 5, 1995
Recent experience with legislation attempting to address alternate destination using the community paramedicine model have been disappointing, highlighting the difficulty of working through the legislative process with its myriad of special interest groups that do not understand the history of EMS systems in California and the role of the LEMSA medical director in ensuring medical control. Senate Bill 944/Hertzberg, the only existing legislative vehicle for keeping community paramedicine projects operating, placed local EMS agencies in an untenable situation. It is unclear if any LEMSA would even consider enacting a community paramedicine program if the legislation passes as written.

Assess and Refer Program (ARP):

A recent document promulgated by the EMSA, "California Statewide Guidelines to Inform Local EMS Policies and Protocols for EMS Response without Patient Transport" describes a best practice process for local EMS agencies to establish a standardized approach for “Assess and Refer Protocols” (ARP). It is the intent of local EMS agencies throughout the state to develop and refine their existing policies that allow prehospital care personnel to respond to an incident and perform an assessment and refer the individual to a facility that will best meet the needs of the individual. EMTs and paramedics frequently perform assessments on individuals and release low acuity patients or non-ill/non-injured individuals at scene; or, by use of triage protocols, determine that a patient requires specialized transport to an appropriate hospital (i.e., STEMI, trauma, stroke).

A standardized ARP policy/procedure would be implemented under the existing medical control and CQI models established in each local EMS system which allows prehospital care personnel to respond to calls for service, perform an assessment, and when appropriate not transport the individual. The prehospital patient assessment determines if an acute medical problem exists that requires transport to an emergency department or whether the individual’s condition meets criteria to be referred to a destination that will meet their specific needs, which could be a behavioral health crisis center or a sobering center. Essentially, once it is determined that the individual does not require care at an emergency department, local EMS destination policies will guide ambulance personnel to transport the patient to the most appropriate facility that will meet his/her needs. The presumption of a medical emergency no longer applies based on an objective patient assessment performed according to the medical control standards of the local EMS agency.

The goal of ARP is to get the individual to the right place the first time and the emergency department is not always the right place.

Existing Authority

Local EMS agencies are required to exercise “medical control” over their local EMS systems. HS&C 1797.220. They do so under the “direction and management” of a local medical director. HS&C 1798(a). As the California Supreme Court has made clear, the medical control LEMSAs exercise must be construed “in fairly expansive terms, encompassing matters directly related to regulating the quality of emergency medical services ....” County of San Bernardino v. City of San Bernardino, 938 P.2d 876, 887 (Cal. 1997). Local EMS agencies, moreover, must “formulate medically related policies and procedures to govern EMS providers.” Valley Med. Transport, Inc. v. Apple Valley Fire Protec. Dist., 952 P.2d 664, 668 (Cal. 1998).

Consistent with this statutory responsibility, local EMS agencies have the authority to implement an Assess and Refer programs. EMSA frequently uses 1797.52 (definition of ALS), 1797.114 (EMS Transport Guidelines) and 1797.218 (LEMSA Approval of ALS program) as evidence that an ALS ambulance is required to transport to an acute care hospital. Two of these sections refer to “advanced life support” and the “scene of an emergency”; however, the responses we are discussing do not involve ALS care and once properly assessed, the scene is no longer presumed to be an emergency. HS&C 1797.114, in particular, makes clear that paramedics and EMTs must transport a patient to a medical facility “if the emergency health care needs of the patient dictate
this course of action." As this language recognizes the need for emergency responders to make qualitative judgments about patient needs and medical conditions, such personnel frequently release individuals at scene after an assessment.

The decision-making that would be required under an ARP would be very similar, except the ambulance is not leaving the individual at scene; they are transporting the individual to a non-acute care facility to receive appropriate care. This concept is consistent with the EMSA’s discussions with EMDAC regarding the establishment of standardized treat and refer guidelines. Objectively, prehospital personnel transporting a patient to a designated facility is conservatively safer than releasing the patient from scene.

The regulations provided in Health and Safety Code, Division 2.5, do not specify any restriction on the use of BLS ambulance transport as it relates to this subject. Thus, local EMS agencies, may under the authority of H&SC 1797.220, develop policies utilizing BLS ambulance transport to any appropriate medical, psychiatric, or other care facility. Indeed, BLS ambulances and even critical care transport (in some cases), transport to dialysis centers, clinics, jails, etc.

Health and Safety Code Sections:

1797.52. (Advanced Life Support) “Advanced life support” means special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of a local EMS system at the scene of an emergency, during transport to an acute care hospital, during interfacility transfer, and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital. (Amended by Stats. 1984, Ch. 1391, Sec. 4.) [Underline added]

1797.88. (Hospital) “Hospital” means an acute care hospital licensed under Chapter 2 (commencing with Section 1250) of Division 2, with a permit for basic emergency service or an out-of-state acute care hospital which substantially meets the requirements of Chapter 2 (commencing with Section 1250) of Division 2, as determined by the local EMS agency which is utilizing the hospital in the emergency medical services system, and is licensed in the state in which it is located. (Amended by Stats. 1986, Ch. 1162, Sec. 1. Effective September 26, 1986.)

1797.114. (EMS Transport Guidelines) The rules and regulations of the authority established pursuant to Section 1797.107 shall include a requirement that a local EMS agency local plan developed pursuant to this division shall require that in providing emergency medical transportation services to any patient, the patient shall be transported to the closest appropriate medical facility, if the emergency health care needs of the patient dictate this course of action. Emergency health care need shall be determined by the prehospital emergency medical care personnel under the direction of a base hospital physician and surgeon or in conformance with the regulations of the authority adopted pursuant to Section 1797.107. (Added by Stats. 1998, Ch. 979, Sec. 4. Effective January 1, 1999.) [Underline added]

1797.218 (Local EMS Agency Approval of ALS & Limited ALS Programs) Any local EMS agency may authorize an advanced life support or limited advanced life support program which provides services utilizing EMT-II or EMT-P, or both, for the delivery of emergency medical care to the sick and injured at the scene of an emergency, during transport to a general acute care hospital, during interfacility transfer, while in the emergency department of a general acute care hospital until care responsibility is assumed by the regular staff of that hospital, and during training within the facilities of a participating general acute care hospital. (Amended by Stats. 1983, Ch. 1246, Sec. 34.) [Underline added]
Proposed ARP Guidelines

In order to promote consistency between local EMS agencies the following is a list of items each medical director should address in establishing an Assess and Refer Plan that include PCC and/or SC:

- Paramedic education hours and curriculum
- Agreements or MOUs between the LEMSA and recognized sobering centers and psychiatric centers addressing:
  - Facility requirements
    - Medical staff
    - Program coordinator
    - Medical training (CPR) and equipment (AED)
    - Quality Improvement including case review and patient disposition
- LEMSA consultation with the County’s Public Health Officer or Director of Department of Behavioral Health before entering an agreement or MOU
- Prehospital triage protocols
- Prehospital transfer of care protocol
- Prehospital, sobering center, and psychiatric center documentation
- Tracking and reporting data including patient disposition and outcome
By Kurt Bilse, RN, BSN, PHN–

Last year, like so many other Americans, I watched the hurricanes, fires and other natural disasters sweep across our country and wished that I could help in the aftermaths. As a registered nurse, I knew that my skills could be used. I made last minute calls to disaster aid agencies, only to get bogged down in unanswered voicemails and emails due to the fact that everyone was out working the field. I realized if I wanted to be of any help at the next disaster, I needed to do my research and get involved “now” rather than “later.” After a lot of research, I registered with the American Red Cross (ARC) and my local Medical Reserve Corps (MRC).

While many people are familiar with the ARC, few know about their local and national MRC. As the Corps holds: “The need for the MRC became apparent after the 9/11 terrorist attacks, when thousands of medical and public health professionals, eager to volunteer in support of emergency relief activities, found that there was no organized approach to channel their efforts. Local responders were already overwhelmed and did not have a way to identify and manage
Within minutes I was packing my bag, checking electronics and gathering my medical equipment. Soon a text followed from our unit leader saying that we were going on standby to see how the Mendocino Fire Complex progressed and if we were going to be needed more locally. Within 24 hours, the fires around Clear Lake exploded and the communities around Lake County began to be evacuated one by one. I was deployed to Lower Lake High School, which served as one of the main shelters for the fire. As I drove in the dark through the Napa Valley and up into the hills, I could smell the smoke in the morning air become thicker and more pungent as I ascended.

When I arrived at the campus, I saw tents covering the football field and lawns surrounding the classrooms. People walked through the campus as if in a stupor, waking their pets and trying to assess the events that had taken place. I walked in to the first of three gyms on the campus that was filled with a mass of people sleeping, or sitting, on cots. A look of bewilderment on those who were awake displayed the shock that they were still in from having to flee their homes so quickly. Eventually we would see all three gyms fill to approximately 450 people as communities around the lake were evacuated and then allowed to return in succession as the fire lines encircled the lake.

Over the following week we heard countless stories of evacuation notices, police banging on doors, people having less than five minutes to grab pets, purses, wallets and shoes, and fleeing for their lives. Then followed the confusion of getting to safety: figuring out where to go, where to stay, how to get there and more. Those who did not have family or friends to stay with out of the area ended up at one of the ARC shelters. They were greeted with a cot, blankets, a meal and a pack of necessities including toiletries. The students and parents of Lower Lake High School were busy preparing breakfast for the evacuees (whom we often refer to as “clients”) and numerous ARC volunteers continued to register people, set up cots, feed, clothe, direct, comfort and fulfill a plethora of clients’ needs.

The MRC set up a medical station in an office off one of the gyms. Our first task was to set up emergency medical supplies, first aid equipment and a myriad of over-the-counter drugs. Soon people were waking up and realizing the impact of their quick exodus from their homes. One of the first realizations was that they left their medications at home and/or did not have sufficient refills to get them through their stay at the shelter. Few of the clients that we saw from the fires had a list of their medications and/or had saved any information in “the cloud” and could not remember the names and doses of their prescriptions.

Many residents of the area used independent pharmacies (rather than chain stores) that were now closed and evacuated along with their employees. Also, many of their doctors and their medical offices were closed and evacuated. This is a common occurrence in a disaster. As a result, MRC nurses and local pharmacies are allowed emergency powers to case manage, order and provide emergency dosing of prescriptions for a 3–5-day supply. The task is much more complicated than one would assume. Many clients were still in PTSD and had great difficulty remembering names of drugs, doses, and scheduling. Many were on public assistance and we had to arrange payments for some meds. Several did not have transportation and we had to arrange delivery and dispensing, once their meds arrived at the shelter.

A majority of the clients at the shelter were elderly or the disabled, and several were dependent on in-home caregivers to administer their medications and to assist in their activities of daily living, such as toileting, eating, dressing, getting in and out of bed or a chair, etc. When the resident is forced to evacuate, so is the caregiver. In most cases, the caregivers themselves were forced to evacuate to a family member’s or friend’s home outside of the region, thus leaving the clients at the shelter with little help. While stretched to their limits, the Red Cross nurses and volunteers filled in this gap and did a remarkable job.

As the days progressed, we saw waves of people come and go as communities evacuated. Empty registration lobbies swelled with dozens of evacuees within minutes. As they filtered in, we bandaged multiple cuts, scrapes and blisters. We administered breathing treatments via a nebulizer for asthmatics and COPD patients. We held hands and comforted during anxiety attacks. We searched pharmacies for special infant formulas for newborns. We rushed juice and candy to diabetics who were hypoglycemic. We identified clients with behavioral health issues and/or the chemically dependent and addressed their issues by getting them their medications, meeting with our staff of professionals, or transporting them to facilities that could provide better assistance.
Several calls to 911 were made for seizures, chest pains and other critical issues that required medical attention that we were not equipped to handle. We also provided education to clients about their medications, health issues, diseases and resources that they could use during the evacuation and once they returned home.

The fires progressed so fast that we had to remain adaptable at all times. On my first day at the shelter, we sent a team to a newly opened shelter in Kelseyville. Within an hour of arriving at the shelter, an evacuation order was given for the town and the shelter. The team had to assist with the evacuation of the shelter and get them resettled at the Middletown shelter. As the nights progressed, we became experts in smelling smoke and assessing if the fires were progressing or regressing from our area.

One night, after a 15-hour shift, my team lead and I had just finished eating dinner when she received a call from our command. We were warned that the winds and the fire had suddenly changed and were heading to the city of Clear Lake. We were to be prepared for a highly probable call later in the evening for orders to evacuate the town and the shelter. I watched as a look of alarm flushed across her face as the complexity of evacuating hundreds of people, animals and a medical unit (via buses and ambulances) ran through her head.

We went to bed that night not knowing what the following hours would bring, hoping we could steal enough sleep to be functional once the call came. As the night progressed, I would open my eyes, check my phone log to make sure that I hadn’t missed “the call,” sniff the air to assess the smoke and direction of the fire, and drift back off to sleep. In what seemed like merely 15 minutes, my 5 am alarm was sounding, waking me for my day shift. I smelled the air and looked up to see blue sky. Overnight prayers were answered, winds shifted and the fire changed direction once again. We proceeded to head down to the shelter for our usual shift.

As the day progressed, smaller communities around the lake were evacuated. In the late afternoon, though, the evacuation orders for the largest community of the north shore, Lakeport, were removed, and the majority of the evacuees in our shelter returned home. By the end of my shift, the shelter seemed empty in comparison. I was able to return home that evening.

As an oncology nurse, I am accustomed to working with patients who have suddenly had to deal with life-changing events. The newly discovered lump, the positive test result, or the doctor’s office visit confirming a diagnosis can bring turmoil to the soul and change a life in an instance. In almost all circumstances, however, there is always home to retreat to from the storm: home to retreat, home to regroup, home to shelter and hide away from the world and its problems at least for a moment.

The innate need for a sense of home is one of the basic foundations we each use to cope with life’s greatest struggles to accomplishing even the most mundane tasks. This past week I’ve been immersed in a sea of people caught in the frustration of not being able to return home and the fear of losing that home to fire. I’ve had to perform major nursing interventions like administer CPR and assist an epileptic during a seizure while calling 911.

It’s the little tasks, though, that can be the most satisfying at the shelters, like helping an elderly lady open a pill bottle because she was too stressed and confused from evacuation to twist the lid, rubbing the back of someone listening to fire updates and hearing spot fires are sighted on the ridge above their house, walking a caged pet because the owner can’t, and holding a crying child because her mom is too exhausted and needs a quick respite.

As we have seen all too often this past year, home and all of the tangible and intangible security it provides can disappear in a matter of minutes. While we house, walking a caged pet because the owner can’t, and holding a crying child because her mom is too exhausted and needs a quick respite.

As of this writing, the rest of our local MRC team is returning to their homes and another county’s MRC is coming to assume the medical responsibilities at the shelter. We will be busy restocking our emergency response bags, the oxygen tanks and medical supplies so that we are ready for the next crisis. No one looks forward to another disaster, but I can’t wait to meet up again with the fantastic people I’ve met and worked with at my local MRC!

Kurt Bilse is a Bay Area-based registered nurse specializing in oncology. Before volunteering with the American Red Cross and the Medical Reserve Corps, he provided medical services to underserved communities in Nicaragua with the non-profit humanitarian organization Global Medical Training.

About the Medical Reserve Corps

The Medical Reserve Corps (MRC) is a national network of volunteers, organized locally to improve the health and safety of their communities. The MRC network comprises approximately 190,000 volunteers in 900 community-based units located throughout the U.S. and its territories.

MRC volunteers include medical and public health professionals, as well as other community members without healthcare backgrounds. MRC units engage these volunteers to strengthen public health, improve emergency response capabilities and build community resiliency. They prepare for and respond to natural disasters, such as wildfires, hurricanes, tornados, blizzards and floods, as well as other emergencies affecting public health, such as disease outbreaks. They frequently contribute to community health activities that promote healthy habits.

Examples of activities that MRC volunteers participate in and support include emergency preparedness and response trainings, emergency sheltering, responder rehab, disaster medical support, disaster risk reduction, medical facility surge capacity, first aid during large public gatherings, veterinary support and pet preparedness, health screenings, obesity reduction, vaccination clinics, outreach to underserved community members, heart health, tobacco cessation and much more.

For additional information: https://mrc.hhs.gov/HomePage

How to Prepare for a Natural Disaster and Staying in a Shelter

Prepare a “Go Bag” filled with emergency items that you will need. Store it in a closet near the door that you will likely use for your exit. Keep the following in mind as you put your “Go Bag” together:

**Tailor it to the weather in your area.**

Here in the Bay Area, we rarely need an ice scraper, but you might want a battery-powered fan. Add or subtract items from the list that you know you’ll need where you’re evacuating from.

**Include items that suit your family.**

If you have kids or pets, you can add things like diapers, dehydrated food, dog treats or a water bowl.

**Water**

It’s recommended to have one gallon of water per day per person or pet. You should keep at least three gallons each per person or pet at home. The shelter will have plenty of water, but have water to sustain you until you get to a shelter.

**Food**

You should have at least three days' worth of food. Concentrate on non-perishable food that doesn’t require refrigeration or much prep and water. Consider cereal, ready-to-eat canned fruits (or canned veggies, juice and meat), or energy-rich snacks like trail mix and granola bars. Remember to have vitamins and special supplies around for anyone with special needs, such as pets, babies and the elderly.

**Medication**

Have some extra medication on hand for times when disaster strikes and you can’t leave your home to refill your prescription. Remember to also store over-the-counter medication like painkillers, antihistamines, calamine lotion, Alka-Seltzer, laxatives, anti-diarrhea medication, sterile eyewash and contact lenses (if you use them).

If you are dependent on medications, type out a list of them, the dose and how often you take them. Include the name and number of the prescribing doctor. Print this list and include it in your Go Bag. Then email it to yourself and/or a family member as a backup. Take a digital photo of the list and/or photograph the label of each of your medications. Email them to yourself and/or save them to “the cloud” so that you can access them from a computer in an emergency.

Make a list of the pharmacies (mail order or local) and your doctor's contact information that you use and back them up as you would your medications.

If you are a diabetic, pack shelf stable juices, packed meals and hard candies in your Go Bag in the event you become hypoglycemic. Remember to evacuate with your meds and the necessary needles and testing equipment.

**First Aid Kit**

It should have latex gloves, gauze pads, a thermometer, sterile bandages, Band-Aids, petroleum jelly, salve for burns, antibiotic ointment, adhesive tape, towelettes, hand sanitizers, sunscreen, and instant cold packs. (The shelter may or may not have these.)

**Tools and Supplies**

This includes items such as candles, matches in a waterproof container, scissors, tweezers, a sewing kit, a flashlight, extra batteries, a small fire extinguisher, a manual can opener, a knife, a hand-crank or battery-operated radio (with batteries) and a wrench to turn off the gas and water. Be sure to also have a map of the area in case you need to look for a shelter.

**Hygiene Products**

Include toilet paper, feminine products and toiletries.

**Cleaning Products**

Consider packing garbage bags, dish soap, bleach and disinfectant.

**Clothing**

Rain gear, at least one outfit, work boots or durable sneakers, and thermal underwear should all be included.

**Important Documents and Related Items**
You should bring cash, your driver’s license, passport, social security card, family records, bank account numbers and a list of important and emergency phone numbers. Make sure you have a copy of your will, insurance policies, and other contracts and deeds.

**Miscellaneous Items**

These may include blankets, sleeping bags, paper cups, paper plates and plastic utensils.

Remember that you are evacuating for a time period of 24 hours to two or more weeks. Consider the everyday items you use that you will need that aren’t stored in your Go Bag. These are the items often forgotten in the rush to evacuate. Think of the 7 to 10 most important items that you need to function and to remain sane in the shelter or hotel. Prioritize them and type them out in a list. Tape this list on the door frame of the door you will evacuate from or the closet you store your Go Bag in. This will be your final check list that you can quickly check before you flee to make sure you have everything. It might look something like this:

- Go Bag
- Pet, pet bed, leashes
- Medications
- Tablet, Laptop, Kindle, Cell phone
- Charging cables
- Glasses, sunglasses, hat
- Therapeutic pillows, cushions
- Any needed mobility equipment

**Assess Your Home Insurance (If Applicable), Research Hotels**

Frequently, home insurance will pay for policy owners to stay in hotels while they are evacuated. Assess your policy to determine your coverage. If you have special needs like pets, ADA accessibility or the like, research what hotels in the area can accommodate your needs.

Hotels fill up instantly in a disaster and very, very long lines develop. Identify three or four hotels you would prefer to evacuate to and put their phone numbers or their app on your phone. As soon as you know that you are evacuating from your home and are in a safe location, call ahead and make a reservation for the room(s) you need. Do not wait until you arrive at the hotel, as rooms will probably already be gone. If rooms are already booked at most locations, look for casinos, conference centers and resorts outside of the immediate area.

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**Top 10 Lessons Learned While Volunteering at a Shelter During California's Largest Wildfire**

1. If you or a loved one depends on a caregiver, you need to have a discussion about what the expectations are during an evacuation. Is the caregiver expected to follow the client to the shelter? To where will the caregiver evacuate?

2. If the caregiver does not go to the shelter, disaster agencies will attempt to assist evacuees once they are settled into a cot. It is not guaranteed that they will have the manpower, resources or expertise to provide the same level of care that an in-home caregiver can provide.

3. Family or friends should be prepared to assist the evacuee at the shelter and/or host them in their own homes. In preparation to do this, family members should assess equipment needs, like renting hospital beds, commodes, lifts, etc., and locate providers in their area prior to a disaster event.

4. The American Red Cross (ARC) provides flat, very firm cots. If medically necessary, they can provide head and leg tilting cots with a thin pad. If you anticipate joint, back or general discomfort sleeping on cots, consider adding cushions, pillows or pads to your emergency bags to bring to the shelter.

5. Shelters will generally have first-aid supplies. If the Medical Reserve Corps is present, they will have a limited number of over-the-counter drugs like aspirin, TYLENOL, anti-diarrhea meds and the sort. They will not stock prescription medications or painkillers, and are not allowed to administer them. Nurses on the team will be able to authorize emergency refills of non-controlled drugs once the governor declares an emergency. If a medical doctor is onsite with the team, he will be able to authorize emergency prescriptions of controlled medications as needed.

6. If you have a pet, it is advisable to store a collapsible pet cage along with a blanket and bowls in your car trunk if you are able. ARC will provide these items, but in the first hours and days of the crisis, they may be limited. Many pets are brought to the shelters and it is very stressful for them. It is much easier on them if they are caged and comfortable.

7. Usually there are grounds around a shelter and you are allowed to stay in your own tent if you have one. Consider including one if you are claustrophobic or feel stressed in large crowds.

8. If you are chemically dependent or on psychiatric medication, the middle of a disaster is not the time to quit cold turkey.

9. If you are chemically dependent, now is the time to deal with it instead of finding yourself in withdrawals in the middle of a disaster. If you find yourself as an evacuee and separated from your source, find a medical volunteer as soon as you are registered at the shelter. The volunteer will be able to assist you in seeking appropriate medical and/or social attention before a crisis occurs.

10. If you have psychiatric or behavioral health issues, the shelters usually have trained staff available to help in getting you medical or county service assistance.