



# EMERGENCY MEDICAL CARE COMMITTEE

## CONTRA COSTA COUNTY

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Wednesday, March 13, 2019

4:00 – 5:30 p.m.

Contra Costa County EMS Agency Office  
777 Arnold Drive, Martinez, CA 94553

### Agenda

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|-----------|---|
| 4:00 p.m. | 1. Introduction of Members and Guests   |
| 4:03      | 2. Approval of Minutes from June 13, 2018   |
| 4:05      | 3. Comments from the Public<br>Members of the public may speak up to 3 minutes each on matters either on or not on this agenda. |
| 4:08      | 4. Chair's Report<br>Kacey Hansen, EMCC Chair   |
| 4:10      | 5. Members' Reports   |
| 4:15      | 6. Recognition for Disaster Response: Michael Johnson and Chad Newland, AMR   |
| 4:25      | 7. EMCC Legislative Report: ENA rep   |
| 4:30      | 8. Fire Chiefs' Report<br>Fire Executive Chief Representative   |
| 4:40      | 9. Quarterly Update on Alliance Ambulance Services<br>Chief Terence Carey, Contra Costa County Fire Protection District         |
| 4:50      | 10. EMCC 2018 Annual (Draft) Report Action: Review/Approve for Submission to the Board of Supervisors                           |
| 5:00      | 11. EMS Medical Director's Report<br>David Goldstein, MD, Contra Costa EMS Medical Director                                     |
| 5:10      | 12. Approval of 2018 EMS System Plan Objectives: Action Item<br>Pat Frost, Contra Costa County EMS Director                     |
| 5:15      | 13. EMS Director's Report including Ambulance Ordinance<br>Pat Frost, Contra Costa County EMS Director                          |
| 5:25      | 14. Agenda Items for next meeting: June 12, 2019  |
| 5:30      | 15. Adjournment   |

*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) 608-5454.*

*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 777 Arnold Drive, Suite 110, Martinez, during normal business hours.*



## EMERGENCY MEDICAL CARE COMMITTEE CONTRA COSTA COUNTY

### MEETING MINUTES

June 13, 2018

<u>Members Present Representing</u>	
<b>Chair: Kacey Hansen <i>Trauma Center (CC Contract)</i></b> <b>Vice Chair: Gary Napper <i>Public Managers' Association</i></b> <b>Executive Committee:</b> <b>Ellen Leng <i>Alameda-Contra Costa Medical Association</i></b>  Terence Carey <i>Ambulance Providers (CC Contract)</i> Pat Frost <i>EMS Agency Director</i> David Goldstein <i>EMS Agency Medical Director</i> Denise Pangelinan <i>Communications Center Managers' Assoc.</i> Anthony Rodigin <i>Emergency Dept. Physicians (CC Receiving Hospital)</i> David Samuelson <i>Emergency Nurses Assoc. East Bay</i> John Speakman <i>District II</i> Kelley Stieler <i>District I</i> Allan Tobias <i>District IV</i> Jason Vorhauer <i>Contra Costa Office of the Sheriff</i>  <u>Members Absent Representing</u> Ara Gregorian <i>California Highway Patrol</i> Jon King <i>Police Chiefs' Association</i> Elaina Petrucci Gunn <i>American Heart Association</i>	<u>STAFF PRESENT</u> Rachel Morris <i>Contra Costa County EMS</i>  <u>OTHERS PRESENT</u> Joanny All <i>American Medical Response</i> Jennifer Lucas <i>American Red Cross</i> Chad Newland <i>American Medical Response</i> Jill Ray <i>District II</i> Rebecca Rozen <i>Hospital Council of Northern and Central California</i>

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

1.	<i>Introduction of Members and Guests</i>
2.	<i>Approval of Minutes from March 14</i> Member Speakman motioned to approve the Minutes from March 14, 2018. Member Napper seconded; none opposed. Motion passed. March minutes are approved.
3.	<i>Chair's Report - Kacey Hansen, EMCC Chair</i> No Report
4.	<i>Comments from the Public</i> No Comments
5.	<i>Members' Reports</i> No Reports
6.	<i>American Red Cross Presentation</i> 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.	<i>EMCC Legislative Update</i> No Report

8.	<i>Fire Chiefs' Report</i> No Report
9.	<i>Quarterly Update on Alliance Ambulance Services – Chief Terry Carey, CCCFPD</i> - Member Carey recognized Chad Newland, 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.	<i>Nominations and Election for Executive Committee Vacancy (Action Item)</i> 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.	<i>EMS Medical Director's Report - David Goldstein, MD, Contra Costa EMS Agency Medical Director</i> 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.	<i>EMS Director's Report - Pat Frost, Contra Costa EMS Agency Director</i> - 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. - 2 <sup>nd</sup> 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.	<i>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.</i>
14.	<i>Adjournment at 5:30pm</i>



## EMERGENCY MEDICAL CARE COMMITTEE CONTRA COSTA COUNTY

### Informal Discussion Session

September 12, 2018

#### Members Present Representing

**Chair: Kacey Hansen *Trauma Center (CC Contract)***

**Vice Chair: Gary Napper *Public Managers' Association***

David Goldstein *EMS Agency Medical Director*

Denise Pangelinan *Communications Center Managers' Assoc.*

David Samuelson *Emergency Nurses Assoc. East Bay*

Jason Vorhauer *Contra Costa Office of the Sheriff*

#### Members Absent Representing

##### Executive Committee:

**Jon King *Police Chiefs' Association***

**Ellen Leng *Alameda-Contra Costa Medical Association***

Terence Carey *Ambulance Providers (CC Contract)*

Pat Frost *EMS Agency Director*

Ara Gregorian *California Highway Patrol*

Elaina Petrucci *Gunn American Heart Association*

Anthony Rodigin *Emergency Dept. Physicians (CC Receiving Hospital)*

John Speakman *District II*

Kelley Stieler *District I*

Allan Tobias *District IV*

#### STAFF PRESENT

Jesse Allured *Contra Costa County EMS*

Chad Henry *Contra Costa County EMS*

Geoff Martin *Contra Costa County EMS*

Rachel Morris *Contra Costa County EMS*

#### OTHERS PRESENT

Joanny All *American Medical Response*

Joe Greaves *ACCMA*

David Lopez *ACCMA*

Chad Newland *American Medical Response*

Rebecca Rozen *Hospital Council of Northern and Central California*

Rick Stephenson *Contra Costa County Fire Protection District*

1.	<i>Introduction of Members and Guests</i>
2.	<i>Approval of Minutes from June 13</i> A quorum was not achieved; minutes could not be approved at this meeting.
3.	<i>Chair's Report - Kacey Hansen, EMCC Chair</i> No Report
4.	<i>Comments from the Public</i> No Comments
5.	<i>Members' Reports</i> No Reports
6.	<i>CPR-HD Presentation</i> Presentation from Contra Costa EMS and AMR staff on CPR-HD (Highly Defined) pilot. Pilot initiated to address patient and provider safety issues, initiated CPR-HD pilot to standardize approach of looking at Cardiac Arrest management. This is a system wide approach to improve management of Cardiac Arrest. Presentation covered aim, primary and secondary components, and identified improvements of the pilot. Training consisted of select AMR crews, some CCCFPD crews, and all ECCFPD crews. The process involves use of a script with a stop watch to keep time. CPR-HD can work with as little as two people, including both ALS and BLS personnel. The pilot concluded at the end of July 2018. Effective Jan 1 2019, all providers will be using the CPR-HD method.
7.	<i>Housing and Homeless Services Overview Presentation</i> Jaime Jennet from the Health, Housing and Homeless Services Division gave overview of statistics and services for homeless community in Contra Costa County. Presented the question of how many people encounter homeless people at their jobs and how many people know how to handle them. Currently not enough shelter for those in need, so figuring out a method for who gets in those shelters is key. There is an increase in the senior population. 2017 HMIS Data - 6015 homeless, 1057 at risk, 1022 formerly homeless. Homeless outreach CORE teams - EMS personnel can call CORE team to help provide resources if person doesn't have a medical emergency. HUD created coordinated entry to streamline services offered for the homeless population; it is a way to triage people to connect them with the appropriate resources. Points of entry: call 211 to help

	narrow down how best to move forward.
8.	<p><i>Health Information Exchange (HIE) Update</i></p> <p>Update on the Bidirectional Health Information Exchange, a process of taking info from disparate health records systems so we can connect them back and forth. Transitioning from paper records to electronic records saves crews time and removes roadblocks. HIE allows for immediate information about a patient. How'd We Get Here: AB 1129 mandated (unfounded) that records be electronic by 2016 - CCC brought last provider online two weeks ago so we are now fully in compliance. Next steps - evaluating CMS grant funding opportunity through EMSA - we need to evaluate to see if this funding method is the right fit for us. Chad to send Kacey Hansen criteria for grant from EMSA - stricter than what CMS previously stated. Pilot project would be with the County Hospital.</p>
9.	<p><i>EMCC Legislative Update</i></p> <p>Update on AB 3115 - Community Paramedicine - ENA wanted to be at the table - never came out in support, nor opposition, just wanted to be at the table. AB 3115 proposed to put alternate destination - extend to 2025. EMSAAC, EMDAAC, ENA rallied and now share the seat -trying to get the governor to veto.</p>
10.	<p><i>Quarterly Update on Alliance Ambulance Services – Chief Stephenson, CCCFPD for Chief Carey, CCCFPD</i></p> <ul style="list-style-type: none"> <li>- Amazed what Alliance has done over 2.5 years - well over 95-97% compliance rate in response times.</li> <li>- APOT times: in process of setting up meeting with LEMSA to go over proposal. AMR/CCCFPD staff working with ED staff to recognize challenges and find ways to overcome.</li> <li>- Card 33: getting the right piece of equipment and right personnel to a call - data shows working well so far.</li> <li>- AMR and CCCFPD sent task forces to the Carolinas for Hurricane response.</li> </ul>
11.	<p><i>EMS Director's Report – David Goldstein, Contra Costa EMS Medical Director for Pat Frost, EMS Director</i></p> <ul style="list-style-type: none"> <li>- San Ramon RFP: the Board of Supervisors (BOS) approved a one-year contract extension to allow further exploration of 224 rights and San Ramon has signed the extension. EMS Agency will bring issue back to BOS for further direction, by January 2019.</li> <li>- Ambulance Ordinance: EMS hopes to schedule a special meeting with the EMCC sometime between October and December. The final draft is with County Counsel.</li> </ul>
12.	<p><i>EMS Medical Director's Report – David Goldstein, Contra Costa EMS Medical Director</i></p> <p>AB 3115 – Community Paramedicine – this bill is sitting on the Governor's desk and potentially will become law. Addresses 1. Destination 2. Treat and Release. Mandates training for paramedics that don't exist now, so the regs would need to be written by EMSA. Could create a potential problem with sobering center.</p>
13.	<p><i>Proposed agenda items for December 12, 2018 meeting: Approval of June draft minutes</i></p> <ul style="list-style-type: none"> <li>- The December EMCC meeting will take place at the new EMS office: 777 Arnold Drive, Suite 110, Martinez.</li> <li>- EMS hopes to schedule a special EMCC meeting between Oct-December to share the draft in preparation for the formal ordinance hearing at the BOS in early 2019.</li> </ul>
14.	<i>Adjournment at 5:30pm</i>



## EMERGENCY MEDICAL CARE COMMITTEE CONTRA COSTA COUNTY

### Informal Discussion Session

December 12, 2018

Members Present Representing	
<b>Vice Chair: Gary Napper <i>Public Managers' Association</i></b> <b>Executive Committee:</b> <b>Jon King <i>Police Chiefs' Association</i></b> <b>Ellen Leng <i>Alameda-Contra Costa Medical Association</i></b>  Michele Bell <i>Air Medical Transportation Provider</i> Terence Carey <i>Contra Costa Fire Chiefs' Association</i> John Duggan <i>Ambulance Providers (CC Contract)</i> Mark Forrette <i>District II</i> Pat Frost <i>EMS Agency Director</i> David Goldstein <i>EMS Agency Medical Director</i> Elaina Petrucci Gunn <i>American Heart Association</i> Cameron Metzger <i>EMS Training Institution</i> Jason Vorhauer <i>Contra Costa Office of the Sheriff</i>  <b>Members Absent Representing</b> <b>Chair: Kacey Hansen <i>Trauma Center (CC Contract)</i></b>  Jack Clapp <i>Public Provider Field Paramedic</i> Ara Gregorian <i>California Highway Patrol</i> James Lambert <i>Hospital Council – East Bay</i> David Lilienstein <i>Emergency Dept. Physicians (CC Receiving Hospital)</i> Jennifer Lucas <i>American Heart Association</i> Denise Pangelinan <i>Communications Center Managers' Assoc.</i> David Samuelson <i>Emergency Nurses Assoc. East Bay</i> Karin Schnaider <i>District III</i> Kelley Stieler <i>District I</i> Allan Tobias <i>District IV</i>	<b>STAFF PRESENT</b> Rachel Morris <i>Contra Costa County EMS</i> Lisa Vajgrt-Smith <i>Contra Costa County EMS</i>  <b>OTHERS PRESENT</b> Joanny All <i>American Medical Response</i> Scott Newlin Jr <i>American Medical Response</i> Rebecca Rozen <i>Hospital Council of Northern and Central California</i>

1.	<i>Introduction of Members and Guests</i>
2.	<i>Approval of Minutes from June 13</i> A quorum was not achieved; minutes could not be approved at this meeting.
3.	<i>Comments from the Public</i> No Comments
4.	<i>Chair's Report - Kacey Hansen, EMCC Chair</i> No Report
5.	<i>Members' Reports</i> No Reports
6.	<i>Health Care Coalition Biannual Report to EMCC</i> EMS staff Lisa Vajgrt-Smith from Contra Costa EMS gave a biannual report on the Contra Costa Med-Health Preparedness Coalition (HPP Emergency Preparedness) activities. Covered what the coalition is and provided background on how the Coalition had requested that the EMCC be an overarching structure for the Coalition, and that the Coalition be allowed to pull in the EMCC when system gaps are identified in case of disaster. The biannual report is part of the oversight structure. The report highlights high level activities going on in the Coalition. Lisa went over this year's main goals for Coalition, including dialysis center engagement. The report included an example of a ReddiNet report card and an overview of ReddiNet was given. Lisa gave an overview of the Contra Costa Medical Reserve Corps (MRC), which is a group of dedicated medical volunteers; the MRC went to the Mendocino Complex Fires and a small team went to the Camp Fire in Butte County – there

	was a hand out in packet with more information. Lisa is working with Public Health to add partners to strengthen the Coalition.
7.	<p><i>Presentation: Sandy Hook Promise</i></p> <p>Ilana Israel Samuels, California Region Manager for Sandy Hook Promise (SHP) gave an overview of the program. The program's impact in Contra Costa County is possible through the Contra Costa County Office of Education. The mission of SHP is to prevent gun violence and other forms of violence before they happen. There are four (4) Know The Signs programs: Say Something, Start With Hello, Safety Assessment &amp; Intervention, and SOS Signs of Suicide. A description of each program was given and handouts were provided to the group.</p>
8.	<p><i>EMCC Legislative Update</i></p> <p>No Update</p>
9.	<p><i>Quarterly Update on Alliance Ambulance Services –Chief Carey, CCCFPD</i></p> <ul style="list-style-type: none"> <li>- Reported Fire personnel changes and updates: Fire Chief Lance Maples retiring from El Cerrito Fire Department as of December 31, 2018; Chief Pignoni to take his place. Fire Chief Jeff Carman retiring from Contra Costa County Fire Protection District at the end of March 2019. Fire Chief Paige Meyer will continue as Fire Executive Chair.</li> <li>- May add more units as demand of flu season dictates - looking at spikes in calls. Working with AMR to manage.</li> <li>- Reported six months ago on a trial study looking at Bravo calls - looked to see if the proper resources were being allocated correctly to calls; good findings came from study.</li> <li>- Outliers - working with LEMSA staff on outliers.</li> <li>- APOT / wall times - working with Rebecca Rozen and the Hospital Council. There is a meeting next week with the LEMSA to share ideas.</li> </ul>
10.	<p><i>Staff Report: New EMCC Membership Term; EMCC Annual (Draft) Report Action: Review/Approve for Submission to the Board of Supervisors</i></p> <ul style="list-style-type: none"> <li>- Staff Morris reported on the new membership for the 2018-2020 term. Twenty-one (21) out of twenty-four (24) seats have been filled. Vacant seats are the Contra Costa Health Services Behavioral Health (B13), Private Provider Field Paramedic (C4), and District 5 seat. Staff will continue to work on those appointments.</li> <li>- The 2018 EMCC Annual (draft) Report could not be approved for submission to the Board of Supervisors as a quorum was not achieved. Staff Morris will find out and report how to proceed.</li> </ul>
11.	<p><i>EMS Medical Director's Report – David Goldstein, Contra Costa EMS Medical Director</i></p> <p>In process of adding pain control medications to optional scope. In 2020 treatment protocols, expect to add medications in, some for adult and some for pediatric - will consult fire agency medical directors. Ketamine should be a net positive to the system but will require a good amount of training.</p>
12.	<p><i>Health Information Exchange (HIE) Update – Pat Frost, Contra Costa EMS Director</i></p> <p>Member Frost gave an update on EMS system efforts regarding HIE (update handout in packet). A plan was developed four to five years ago; does not require any providers to buy into a new system. Because EPIC is used in almost all hospitals, the goal is to find opportunities to connect with interfaces on the backend.</p>
13.	<p><i>EMS Director's Report – Pat Frost, Contra Costa EMS Director</i></p> <ul style="list-style-type: none"> <li>- Spent last twelve (12) months in front of finance committee to request additional funding for EMS system - after a lot of education and information sharing, approved by finance committee that EMS system would receive half million dollars additional funding to continue already existing functions. Member Frost will be going to the Board of Supervisors on Tuesday December 18 in hopes to gain support for funding. The system is at the point where future funding is limited - as part of this effort, also in packet is a proposal - thinks additional funding will be approved with approval for County to explore another kind of Measure H regulation. LEMSA has maximized what we can do with increased fees.</li> <li>- Ambulance ordinance: LEMSA received draft copy from County Counsel. LEMSA staff is reviewing draft language. A special meeting can be called with the EMCC executive committee and membership once the review is complete and an executive summary drafted. Timeline for next steps is early 2019.</li> <li>- Finished ePolst pilot report.</li> <li>- No new information on closure of Alta bates.</li> <li>- Hopes for sobering center did not come to fruition – no agreed upon location could be selected.</li> </ul>
14.	<i>Proposed agenda items for March 13, 2019 meeting: Approval of June draft minutes</i>
15.	<i>Meeting closed at 5:45pm</i>

EMCC Attendance 2018-2020

Seats	EMCC Members	12/12/2018	3/13/2019	6/12/2019	9/11/2019	12/11/2019	3/11/2020	6/10/2020	9/9/2020
B 1 Alameda Contra Costa Medical Association	Ellen Leng	Present							
B 2 American Heart Associaton	Elaina Petrucci Gunn	Absent							
B 3 American Red Cross	Jennifer Lucas	Absent							
B 4 California Highway Patrol	Ara Gregorian	Absent							
B 5 Communications Center Managers' Association	Denise Pangelinan	Absent							
B 6 Contra Costa Fire Chiefs' Association	Terence Carey	Present							
B 7 Contra Costa Police Chiefs' Association	Jon King	Absent							
B 8 Emer. Nurses Assoc. East Bay Chapter	David Samuelson	Absent							
B 9 Hospital Council East Bay	James Lambert	Absent							
B 10 Public Managers' Association	Gary Napper	Present							
B 11 Trauma Center (Contra Costa Contract)	Kacey Hansen	Absent							
B 12 Contra Costa Office of the Sheriff	Jason Vorhauer	Present							
B 13 Contra Costa Health Services - Behavioral Health	Vacant	Vacant							
C 1 Ambulance Providers (Contra Costa Contract)	John Duggan	Present							
C 2 Air Medical Transportation Provider	Michele Bell	Present							
C 3 EMS Training Institution	Cameron Metzger	Present							
C 4 Private Provider Field Paramedic	Vacant	Vacant							
C 5 Public Provider Field Paramedic	Jack Clapp	Absent							
C 6 Emergency Department Physicians	David Lilienstein	Absent							
District I (Gioia)	Kelley Stieler	Absent							
District II (Andersen)	Mark Forrette	Present							
District III (Burgis)	Karin Schnaider	Absent							
District IV (Mithoff)	Allan Tobias	Absent							
District V (Glover)	Vacant	Vacant							
E 1 Ex Officio	Pat Frost	Present							
E 2 Ex Officio	David Goldstein	Present							
	Quorum								

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 fails 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.



Contra Costa County  
EMERGENCY MEDICAL CARE COMMITTEE

**Annual Report for 2018**

**Advisory Body Name:** Emergency Medical Care Committee (EMCC)

**Advisory Body Meeting Time/Location:** 4:00 p.m. - 5:30 p.m. on the second Wednesday of March, June, September, and December, unless otherwise noted. Meetings are held at various locations in Contra Costa County.

**Chair:** Kacey Hansen (December 2015 – present)

**Staff Person:** Rachel Morris (January 2017 – Present), Health Services, Emergency Medical Services

**Reporting Period:** January 1, 2018 – December 31, 2018

**I. Activities:**

The EMCC, over four (4) regular meetings in the past year, was involved in or kept its membership informed about the following EMS System issues:

- Received reports on Alliance Service Delivery Model implementation and EMS system benefits.
- Local EMS Agency (LEMSA) establishes optional scope for use of epinephrine and narcan in first responder BLS protocols. Once established, new protocols created an opportunity for all BLS fire first responder agencies to use.
- EMCC informed on process to update the county ambulance ordinance. Draft ambulance ordinance review by County Counsel completed as of December 2018. Informal stakeholder discussion planned through January 2019 prior to submission for BOS public hearing and approval. Updates in ordinance are focused on non-emergency ambulance services and public safety, and integration of emergency and non-emergency transport providers in mass casualty and disaster events.
- LEMSAs participation with CCHS Public Health Department on a county marijuana ordinance and anticipated increased volume and child safety impacts of legalization on EMS System.
- EMS System stakeholders advised of new EMSA ePCR (electronic patient care record) and HIE (health information exchange) requirements to support bi-directional exchange between EMS and hospitals. In January 2018 CCEMS EMS System advisory letter sent to hospitals and EMS providers to prepare to participate for bi-directional exchange.
- The Board of Supervisors recognized May 20-26<sup>th</sup> 2018 as National EMS Week, and May 23<sup>rd</sup> as EMS for Children Day.
- EMCC advised of marked reductions in Hospital Preparedness Program Grant funding and continued unfunded state regulations and mandates.
- EMCC informed of status of potential closure of Alta Bates Hospital, Alameda County and City of Berkeley workgroup, and concerns of impact to West County.
- EMCC provided updates on EMS service delivery in West County remains stable with Lifelong Urgent Care filling the gap for non-emergency care with support of CCHS nurse call lines, and high walk-in volume at Kaiser Richmond ED.
- LEMSAs HIE and EPIC workgroups and strategies to connect prehospital care records with emergency department patient records in the hospital using EPIC Care Everywhere. LEMSAs implementing upgrades of FirstWatch data platform - to include enhanced analytics to improve medical oversight and utilization reporting.
- EMSA released a publication for strategy and data collection evaluation and quality: recent legislation requires EMS will be a conduit for registries, POLST, Stroke registry and others in terms of providing information to the state.
- ePOLST Program: LEMSAs and Alliance participating as pilot partners of EMSA ePOLST registry in collaboration with Alameda and Contra Costa Medical Association (ACCMA).
- Contra Costa EMS System was selected to pilot improvements in California Stroke Registry and Stroke system as part of CMS grant with Stanford Health Services.
- On October 24<sup>th</sup>, EMS hosted the 3<sup>rd</sup> annual Contra Costa County Survivors Reunion Luncheon to show tangible continuum of care, and where survivors meet their rescuers.
- Treatment guidelines and policies updated towards the end of a year are mostly finished for sending out for public comment. Implementation is January 1<sup>st</sup>, 2019.
- Measure H funds distributed to support Fire Service EMS Medical Director and ePCR server to assure Fire paramedic program compliance with EMSA quality, training and data reporting requirements.
- Recognized Prehospital Care Coordinator Bruce Kenagy from the Contra Costa EMS Agency for his many years of service to the Contra Costa County EMS system. Bruce retired in March of 2018.
- The LEMSAs along with other Contra Costa County divisions, stakeholders and outside agencies, all worked together during the July 2018 Mendocino Complex Fires event.
- EMCC members approved serving as the reporting and advisory entity for the Contra Costa Med-Health Coalition to

comply with new Hospital Preparedness Program (HPP) program requirements.

- EMS Authority denied RFP and EMS system plan, alleging LEMSA did not hold fair competitive process; EMCC informed of County decision to appeal.
- EMCC briefed regarding continued adverse impacts on 9-1-1 ambulance providers and patient care associated with prolonged ambulance patient offload delays (APOT).
- EMCC informed of LEMSA reports to Board of Supervisor Finance Committee addressing needs for new EMS System funding to support continuity of operations.
- EMCC briefed as to Medical Reserve Corps and Disaster deployments of ambulance strike teams and fire mutual aid associated with Wildfires associated with Mendocino Fires in August 2018 and Camp Fire in November 2018.
- EMCC briefed on updates associated with Contra Costa Community College Paramedic Program Development.

## **II. Accomplishments**

- Approval of EMCC 2017 Annual Report.
- LEMSA recognized with the Mission Lifeline: Gold Plus Award for their STEMI system, along with AMR Concord, CCCFPD, ECCFPD, El Cerrito Fire Department, MOFD, Pinole Fire Department, Richmond Fire Department, Rodeo-Hercules Fire District, SRVFPD.
- Released updated MCI plan through combined efforts from stakeholders over the last three (3) years.
- Alliance launch first Countywide Paramedic Advance Life Support Inter-facility Transfer (ALS-IFT) Program on March 6, 2018.
- Introduced successful CPR-HD (Highly Defined) pilot. The pilot concluded at the end of July 2018. Effective Jan 1 2019, all providers will be using the CPR-HD method.
- LEMSA worked with the Hospital Council to create a ReddiNet report card and have been distributing it monthly.
- LEMSA moves to new location consolidating EMS System Medical Health/Medical Reserve Corps disaster operations, EMT/EMS stakeholder program training and meeting facilities in one location.

## **III. Attendance/Representation**

The EMCC is a multidisciplinary committee with membership consisting of representation of specific EMS stakeholder groups and organizations plus one (1) consumer member nominated by each Board of Supervisor member. This year there was a high number of retirements resulting in several resignations of member seats mid-term. At the end of the 2016-2018 term on September 30, 2018, there were fifteen (15) filled member seats on the EMCC; nine (9) seats were unfilled. Starting the new 2018-2020 term, there are twenty-one (21) filled member seats and three (3) unfilled member seats. A quorum was achieved at two (2) of the four (4) EMCC meetings in 2018.

## **IV. Training/Certification**

Each EMCC representative was given a copy of the Advisory Body Handbook and copies of the "The Brown Act and Better Government Ordinance - What you need to know as a Commission, Board or Committee Member" and "Ethics Orientation for County Officials" videotapes during their two (2) year term. Responsibilities of County Boards were discussed including the responsibility to view the videotapes and submit signed certifications. For the 2016-2018 term, certification forms have been received from thirteen (13) of the fifteen (15) representatives.

## **V. Proposed Work Plan/Objectives for Next Year**

Report to the local EMS Agency and to the Board of Supervisors as appropriate its observations and recommendations relative to its review of:

- Continue to support and foster Alliance/EMS partnerships to enhance efficiencies and workflows supporting EMS System improvement.
- Explore opportunities and efforts to procure sustainable funding for EMS System emergency communications, dispatch and data infrastructure enhancements to optimize patient care in day to day and disaster conditions.
- Promote and sustain Medical Health Disaster Coalition preparedness and engagement throughout EMS System in accordance with CMS Emergency Preparedness provider requirements.
- Engage stakeholders in supporting Medical Reserve Corps' capability for children and special needs populations.
- Establish stakeholder group to update of County EMS for Children (EMSC) program system of care enhancements.
- Approve new county ambulance ordinance.

- Manage, update and submit to the State EMS Authority the 2018 EMS System Plan, Quality, Trauma, Stroke, STEMI and EMS for Children programs.
- Continue to monitor and report on EMS System impacts due to changing economics and health care reform.
- Receive 2018 Annual EMS System performance report.
- Support exploration on innovative models of EMS service delivery with hospital community.
- Support emergency ambulance provider and community hospitals efforts to reduce patient transfer of care extended delays that impact the availability of ambulances for the next 9-1-1 call.
- Support EMS System program (STEMI, Stroke, Cardiac Arrest, EMSC, Quality/Patient Safety and Trauma) initiatives.
- Continue to support and sustain community education and outreach, e.g. *HeartSafe*, Child Injury Prevention.
- Support appropriate use of 9-1-1, CPR Anytime, and Automatic External Defibrillator (AED) programs through partnerships with law enforcement, CERT, fire first responders and community coalitions.
- Hold 4th Annual Contra Costa Survivors Reunion.
- Continue to monitor West County EMS System associated with closure of Doctors Medical Center and pending closure of Alta Bates Summit.
- Establish regular governance reporting for the Contra Costa Med/Health Coalition as required by the Contra Costa Med/Health Coalition Charter.
- Receive updates on status of Community Paramedic and EMT training programs.
- Receive updates on treatment guidelines and policies for 2019.
- Receive updates on EMS Quality Partnership tool “First Pass” supporting enhanced provider level compliance associated with prehospital patient care workflows.

# 2018 Emergency Medical Services (EMS) System Plan<sup>1</sup>

## SYSTEM PLAN SMART<sup>2</sup> OBJECTIVES

Progress from Last Reporting Period

No.	Standard	Meets State Standard	FY 2017–2018 Objectives	Progress to Date
1.06	Annual system Plan Update	Yes	Annual EMS System Update to State EMS Authority (EMSA)	<b>Progress to Date: Met</b> update due annually
1.07	Trauma Planning	Yes	Annual Trauma System Status Report.	<b>Progress to Date: Met</b> Update due annually.
1.08	ALS Planning	Yes	EMS system integration of emergency ambulance services	<b>Progress to Date: Met</b> Update provided annually
1.10	Special Populations	Yes	Exploration of alternative delivery models to match patient need to resource.	<b>Progress to Date: In Progress</b> 1-5 years. Engaged with Contra Costa Health Services and local Health System partners to explore opportunities.
1.11	System Participants	Yes	Stakeholder participation in update, approval and implementation of new ambulance ordinance	<b>Progress to Date: In Progress</b> Ordinance review by EMCC and BOS with implementation within next 12 months
1.13	Coordination	Yes	Exploration of coordination of EMS Dispatch Centers with Nurse Call centers to support appropriate use of 9-1-1 or specialty dispatch and triage call centers	<b>Progress to Date: Not started</b> Continue to support and engage stakeholders within 1-5 years
1.14	Policy and Procedure Manual	Yes	Annually update of prehospital care policies and procedures based on evidence-based care.	<b>Progress to Date: Ongoing</b> Updated policies and protocols posted on EMS website at <a href="http://www.cccems.org">www.cccems.org</a> .
			Annually evaluate all patient care based on evidence-based care optimizing patient benefit and patient safety. Implement First Pass analytics for support CQI efforts.	<b>Progress to Date: Ongoing</b> Annually. Continue to enhance systems of care policies and practices to support improved patient outcomes.

<sup>1</sup> Approved by the EMCC on XXXX

<sup>2</sup> SMART: Specific, Measurable, Achievable, Realistic and Timely

No.	Standard	Meets State Standard	FY 2016-2017 Objectives	Progress to Date
1.16	System Finances	Yes	Annually review of costs and fees to support sustainable EMS System and EMS Agency oversight and operations.	<b>Progress to Date: Ongoing</b> Monitor and manage current funding effectively to support sustainable programs and activities. Update annual ambulance payor mix report
1.20	DNR (Do Not Resuscitate)	Yes	Pilot site for (POLST) registry with EMS System Stakeholders over 12 months.	<b>Progress to date: Met</b> Member of POLST Conversation Project within county. Pilot project completed December of 2018.
1.27	Pediatric Emergency Medical and Critical Care System	Yes	Pediatric EMS for Children (EMSC) System Program Plan update and regulation implementation within 1-5 years.	<b>Progress to date: In progress.</b> State EMSC regulations not final. Active on EMSC Technically Advisory Committee. Complete update of EMSC Program within 24 months.
1.28	Exclusive Operating Area (EOA)	Yes	Update of county ambulance ordinance within 12-18 months. Review of EOA IV 224 status to determine ambulance exclusivity eligibility. EOA I, II and V in appeals.	<b>Progress to date: In progress..</b> Ambulance ordinance update in progress. ERA IV 224 status exploration in progress. EOA I, II and V in appeals
2.01	Local EMS Agency Staffing and Assessment of Needs	Yes	EMS System Study and Modernization Project review of LEMSA staffing needs and workflows to support statutory requirements every 2 years.	<b>Progress to date: Ongoing.</b> Re-align LEMSA staffing in line with required statutory functions, quality and medical oversight.
2.04	Dispatch Training	Yes	Promote support high quality Emergency Medical Dispatch (EMD) dispatcher training and performance consistent for Center of Excellence Accreditation within 3-5 years.	<b>Progress to date: Ongoing.</b> Dispatch medical oversight policies consistent with Center of Excellence national standards. EMS procurement supports unified and accredited dispatch.
2.06	Response	Yes	Contra Costa EMS (CCEMS) continues ongoing evaluation of sustainability of EMS System partners based on safety, funding and opportunities for health care reimbursement. Annual review	<b>Progress to date: Ongoing</b> Annual review and monitoring coordinated response of ambulance and first responders. Continuing to evaluate impacts to EMS associated with hospital and fire station closures
2.12	Early Defibrillation	Yes	Continued expansion of public access Automated External Defibrillation (AED) and Law AED programs with integration into dispatch. Review and update annually	<b>Progress to Date: Ongoing.</b> Continue to engage community first responders and citizen responders. Using CodeSTAT, CARES, AED registry, PAD and Public training.

No.	Standard	Meets State Standard	FY 2017-2018 Objectives	Progress to Date
5.06	Hospital Evacuation Plan	Yes	Update medical surge and transportation plans for hospitals incorporating standardized training with HICS for all hospital facilities with opportunities for integration of first responders with hospital leadership and incident commanders.	<b>Progress to date: In progress</b> Working with Public Health and Health Care Coalition to review and update. Update of MCI plan completed and Pediatric Surge Toolkit still in progress.
5.10	Pediatric Emergency and Critical Care System	Yes	Continued networking with pediatric emergency care advocates throughout the local, regional and state EMS systems supporting pediatric emergency care best practices.	<b>Progress to date: Ongoing</b> CCEMS and Alameda County (ALCO) EMS have collaborative program of active advocacy for emergency preparedness for children.
5.13	Specialty System Design	Yes	Annual Stroke, STEMI , Trauma and Cardiac Arrest System Evaluation. Exploring partnerships with Contra Costa Health services to reduce 5150 and support appropriate use of sobering centers.	<b>Progress to date: Ongoing</b> Continuous CQI program & participation in California Stroke Registry, Cardiac Arrest Registry for Enhanced Survival (CARES), Trauma Registry and California EMS Information System (CEMSIS).
5.14	Public Input	Yes	Active program of engagement with public including quarterly Emergency Medical Care Committee (EMCC) meetings. EMCC bylaw update	<b>Progress to date: Ongoing.</b> Public and EMCC comment to be included as part of ambulance ordinance review and update process.
6.01	QA/QI Program	Yes	Monthly "live stories" public reporting EMS Hospital transfer of care never event monitoring. Implementation of Quality Review Team (QRT) for review of event reports concerning clinical care concerns.	<b>Progress to date: Ongoing</b> Hospitals public reporting continues. Implementation of first pass tool launch planned support provider level improvement by December 2020.
			Exploring HIE with hospitals to support exchange of patient outcome information. Hospital and ambulance provider electronic Patient Care Record (ePCR) data exchange. Stakeholders informed and advised to support HIE	<b>Progress to date: In progress</b> Exploration continues between EMS agency, American Medical Response (AMR) , Kaiser, California Office of Health Information Integrity (CALOHII ) and EMS Authority.
7.01	Public Education	Yes	Expansion of <i>HeartSafe</i> Communities to include support for CPR, Public Access Defibrillation (PAD), Heart Attack, Stroke and Healthy Lifestyle.	<b>Progress to date: Ongoing</b> Continue countywide expansion of outreach in progress.
7.03	Disaster Preparedness Promotion	Yes	Annual advocacy and implementation of regional pediatric medical surge planning. Develop policies and work with stakeholders for implementation and use of BLS providers to backup 911 system in surge	<b>Progress to date: Ongoing</b> CCEMS participating in National, regional and statewide efforts supporting Med/Health Preparedness.

No.	Standard	Meets State Standard	FY 2017-2018 Objectives	Progress to Date
8.13	Disaster Medical Response	Yes	Sustain Contra Costa Medical Reserve Corp and demonstrate effective deployment Medical Reserve Corps (MRC) for medical health response as needed.	<b>Progress to date: Ongoing</b> Update of MRC program and deployment processes in progress.
8.15	Interhospital Communications	Yes	Address ongoing gaps in emergency communications e.g. ReddiNet, evaluate emergency communication tools and apps. Identify and address gaps in East Bay Regional Communications System (EBRCS) hospital radio system.	<b>Progress to date: Ongoing.</b> Annually monitor, exercise support and upgrade as fiscally able inter-hospital communications. Hospital report cards in place
8.18	Enhanced Level: Specialty Care Systems	Yes	Update of new state regulations for specialty care systems e.g. Trauma, ST Elevation Myocardial Infarction (STEMI), Stroke, EMSC.	<b>Progress to date: Ongoing</b> Annually involved in the development through EMSAAC

## 2018 TIMELINE & ACTIONS TO BE ADDRESSED

All State standards have been met. We plan to address or reassess the following SMART objectives.

No.	Standard	Meets State Standard	2018 Objectives	Time Frame
1.06	Annual System Plan Update	Yes	Update Annually.	Annually
1.08	ALS Planning	Yes	Support successful ambulance provider transition and monitor for system gaps	Annually
1.10	Special Populations	Yes	Exploration of alternative delivery models to match patient need to resource.	Annually
1.11	System Participants	Yes	Stakeholder participation in implementation of ambulance ordinance.	1-2 years
1.13	Coordination	Yes	Exploration of EMS dispatch services, exploration of coordination with Nurse Call centers to support appropriate utilization of 9-1-1 services.	1-5 years
1.14	Policy and Procedure Manual	Yes	Update of prehospital care policies and procedures based on prehospital evidence-based care. Implementation of new American Heart Association Guidelines for ALS.	Annually
			Continue to evaluate policies and standard operating procedures for patient benefit, delay in definite care and patient safety. Revise protocols to control cost while prioritizing patient safety.	Annually
1.16	System Finances	Yes	Review of fees and costs to support sustainable delivery of EMS services.	Annually
1.20	Do Not Resuscitate (DNR)	Yes	Evaluate EMS Pilot of POLST registry project	Dec 2018
1.27	Pediatric Emergency Medical and Critical Care System	Yes	Update of Pediatric EMSC plan and future implementation of State Pediatric EMSC System of Care regulations.	3 years
1.28	Exclusive Operating Area	Yes	Re-evaluation EOA IV (San Ramon Fire Protection District) exclusivity	1 year
2.01	Local EMS Agency Staffing and Assessment of Needs	Yes	Annual review of EMS Staffing needs and workflows to support statutory requirements.	Annually
2.04	Dispatch Training	Yes	Support high quality EMD and dispatcher training for Center of Excellence Accreditation.	Annually
2.12	Early Defibrillation	Yes	Expand and enhance Public Access AED and Law AED programs within fiscal resources	Annually
5.06	Hospital Evacuation Plan	Yes	Update of medical surge and transportation plans for hospitals.	1-3 years
5.08	Trauma Planning	Yes	Update of trauma plan.	Annually
5.10	Pediatric Emergency and Critical Care System	Yes	Continued networking with pediatric emergency care advocates throughout the local, regional and state EMS systems supporting pediatric emergency care best practices.	Annually



No.	Standard	Meets State Standard	2018 Objectives	Time Frame
5.13	Specialty System Design	Yes	Stroke, STEMI, Cardiac Arrest, Trauma, EMS for Children System Program Evaluation.	Annually
5.14	Public Input	Yes	Support EMCC engagement on EMS system issues	Annually
6.01	Quality Assurance (QA) /Quality Improvement (QI) Program	Yes	Evaluate EMS-Hospital data system integration supporting patient safety and prehospital care. Develop Health Information Exchange between EMS ePCR and EPIC (hospital medical record platform)	1-4 years
7.01	Public Education	Yes	Sustain <i>HeartSafe</i> Communities to include support for CPR, PAD, Heart Attack, Stroke and Healthy Lifestyle.	Annually
7.03	Disaster Preparedness Promotion	Yes	Continued advocacy and implementation of regional pediatric medical surge planning. Participation on statewide Pediatric Surge Plan Workgroup	1-2 yrs
8.13	Disaster Medical Response	Yes	Sustain development and recruitment of Contra Costa Medical Reserve Corp volunteers. Effective MRC capability for medical health deployment as needed.	Annually
8.15	Interhospital Communications	Yes	Address ongoing gaps and improvement opportunities for ReddiNet platform to support reliable use by hospitals. Routinely exercise med/health emergency communications	Annually
8.18	Enhanced Level: Specialty Care Systems	Yes	Evaluate new regulations for specialty care system implementation when complete .e.g. STEMI, Stroke, EMS for Children.	1-2 years

## MEMORANDUM

**DATE: 3/13/2019**

**To:** EMCC Members

**FROM:** Patricia Frost, EMS Director

**SUBJECT: February 28, 2019 West County Mayor's Meeting Summary**

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On February 28, 2019 Supervisor Gioia and I presented an update to the West County Mayors on West County EMS System Services. The following is a summary of the key changes and impacts to EMS services since the closure of Doctor's Medical Center (DMC) in 2015. At the time of DMC closure the hospital had 25 emergency department stations (beds); saw approximately 130 emergency department patients per day 22 who arrived by 911 ambulance services. DMC was both a primary stroke center and a high risk heart attack (STEMI) center prior to closure. The cities of Richmond and San Pablo have been more affected than other cities that were not as close to DMC. DMC served that local community in many ways in addition to providing EMS Services.

Contra Costa EMS System had time to pre-plan with EMS, non-emergency and hospital and health care system prior to the closure of DMC. EMS Agency continues to monitor services and impact to this day to assure the community is provided high quality 911 ambulance services.

### **Impact on Community and Ambulance Services:**

- Out of county EMS traffic before DMC 10% after 30%. An increase of 20%
- Major EMS destination changes occurred when DMC closed to ambulance traffic in 2014. Currently Kaiser Richmond sees 45% CCRMC 19-22% Alta Bates 12-13% Summit 3%
- No changes in the percent of patients transported to hospital code 3 lights and siren are unchanged. Same as other parts of the county
- Most EMS transports continue to serve 911 patients that are not unstable.



- Richmond Kaiser sees 180-200 patients per day. 15-18% by EMS per day  
Increased wall time is a countywide problem
- Travel times increased especially for those in Richmond and San Pablo (10 minute to 25-28 minutes on average)
- Average time to definitive care in west county 28-40 minutes (2 minutes more than Central Contra Costa or East County)
- Added several million dollars of ambulance services due to out of county transport volume

**Bed Capacity:** Kaiser Richmond added 13 beds, Contra Costa Regional has added 8. County wide there the EMS system has 2 beds less than when DMC was opened.

**Alternative Urgent Care and Nurse Call Centers:** Lifelong opened across from DMC and serves a significant number of non-emergent care patients from the local community. Contra Costa Health Services Ambulatory Care services were subsequently expanded to serve the community. Contra Costa Health Plan expanded nurse call and advice centers to serve health plan and non-health plan members.

**Specialty Care:** The community is served by Contra Costa, Alameda County and Solano have “mature” systems of care for Stroke, STEMI, Trauma and Cardiac Arrest.

- 95% Primary Stroke patients go to Kaiser Richmond with the rest going to Kaiser Vallejo/Summit and Kaiser Oakland
- High risk heart attack STEMI services benefit from 12 lead transmission system allowing early alert to destinations including Kaiser Vallejo/Summit/Kaiser Oakland/JMMC WC
- Trauma services: West county services unchanged as DMC was not a designated trauma center. Current trauma destinations include Highland, JMMC WC and UCSF Benioff for Children

#### **West County use of Alta Bates:**

- Reasons to go to Alta Bates: 68% patient choice most likely due to being Sutter patients. Remaining 911 transport volume go to Alta Bates due to most appropriate destination for the patient condition or specialty (OB)



## **The Alta Bates Impact Report (September 2018)**

[https://d3n8a8pro7vhmx.cloudfront.net/berkeleydistrict8/pages/181/attachments/original/1544125099/Alta\\_Bates\\_RHIA.pdf?1544125099](https://d3n8a8pro7vhmx.cloudfront.net/berkeleydistrict8/pages/181/attachments/original/1544125099/Alta_Bates_RHIA.pdf?1544125099) was released with the following information.

- As of 2016 Alta Bates Hospital saw 181 patients per day in their emergency department. 18% or approximately 32 patients a day were from West County zip codes. Of those 32 ten of those patients were brought in by EMS.
- There were limitations to the report that were not disclosed. The report did not routinely disclose raw numbers when reporting percentages. Increases in emergency department traffic or volume did not control for population growth. The report also did not distinguish between closure impacts vs chronic health system issues (over-crowding, wait times, use of ED for primary and urgent care)

## **EMS and Health System next steps/opportunities to enhance services.**

- Intra-operability (aka health information exchange) between EMS and Hospital patient records so we as an EMS and Health Care community can better measure impacts and effectiveness of EMS services.
- Improved medical dispatch (consolidated dispatch) estimated by Chief Carman to improve response times by up to 1 minute.
- Options for alternative destination for non-acute EMS patients (requires changes in state law)
- Improved patient access to health care through telemedicine, patient early access to non-medical and non-EMS medical transportation



# HEALTH INFORMATION TECHNOLOGY FOR EMS (HITEMS)



***Daniel Smiley***

*Chief Deputy Director*

***Leslie Witten-Rood***

*Project Manager,  
HIE for EMS Projects*

*California Emergency Medical  
Services Authority  
State of California*

# Health Information Technology for EMS (HITEMS)

**Project Status:** EMSA's funding request was approved by Centers for Medical and Medicare Services (CMS) on July 1, 2018 for \$36 M with a 10 % matching fund requirement

**Project Funding Period:** July 1, 2018 to September 30, 2021

**Match Requirement:** The grant requires a 10% match. EMSA has secured \$1 Million from CARESTARE Foundation and continues to secure an additional \$3 Million

**Grant Funding Request:** EMSA anticipates releasing a GFO for +EMS/SAFR in January of 2019

# HITEMS Project Goals

## **1. +EMS SAFR Model**

Design, development, and implement a interoperable system that EMS providers can on-board with hospitals, Medi-Cal providers, public health entities

## **2. On-Board Community Paramedic**

Use query-based HIE to exchange care plans and enhanced the information available from the public health, social services, or behavioral health

**3. ePOLST** Connect EMS Provider and hospitals to specialized end-of life registries, such as POLST to allow patients wishes to be carried out for end-of-life decisions

**4. PULSE** Build Full Statewide connectivity and access to PULSE to be used in a disaster

**5. Data** Promote the use of data analytics and HIT to improve health care quality for Medicaid patients

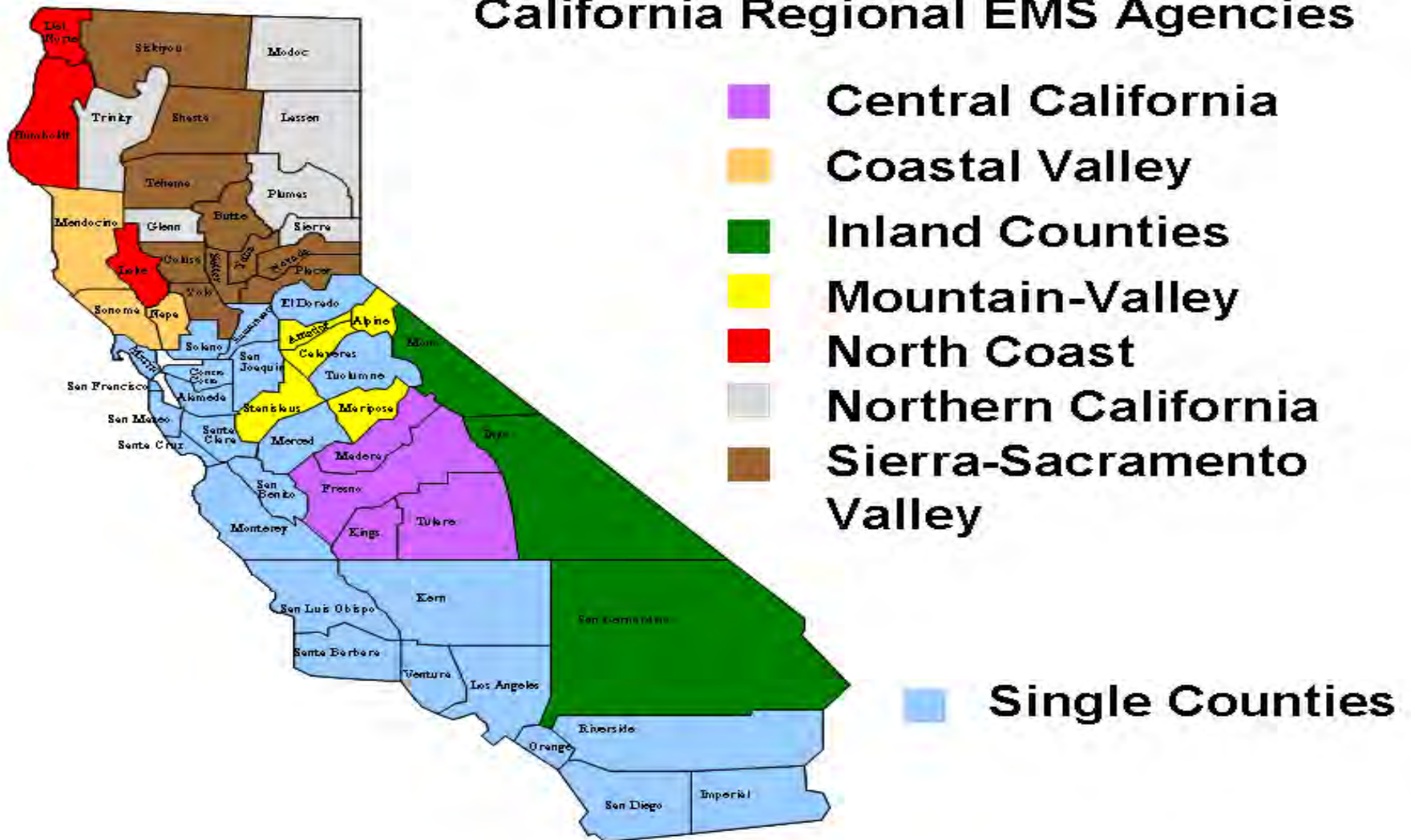
# Patient Unified Lookup System for Emergencies (PULSE)

- Idea/concept originated from experiences during Hurricane Katrina
- April 2014 - ONC published a report that assessed opportunities in CA and Gulf Coast to use HIE to support Disaster preparedness and EMS.
  - 1) EMS data exchange with hospitals
  - 2) disaster response medical history portal (PULSE)
- May 2014 - ASPR and ONC received a \$50,000 grant from HHS IDEA Lab to establish the core technical approach/requirements, scope of work and use cases (scenarios) for PULSE
- July 2015 - California EMSA received funding from ONC to design, build and implement PULSE



# 33 Local EMS Agencies (LEMSA)

## California Regional EMS Agencies



# +EMS Success in Orange County

- Newport Beach Fire Department
- Hoag Hospital
- Orange County Partnership Regional Health Information Organization (OCPRHIO)
- Orange County EMS Agency



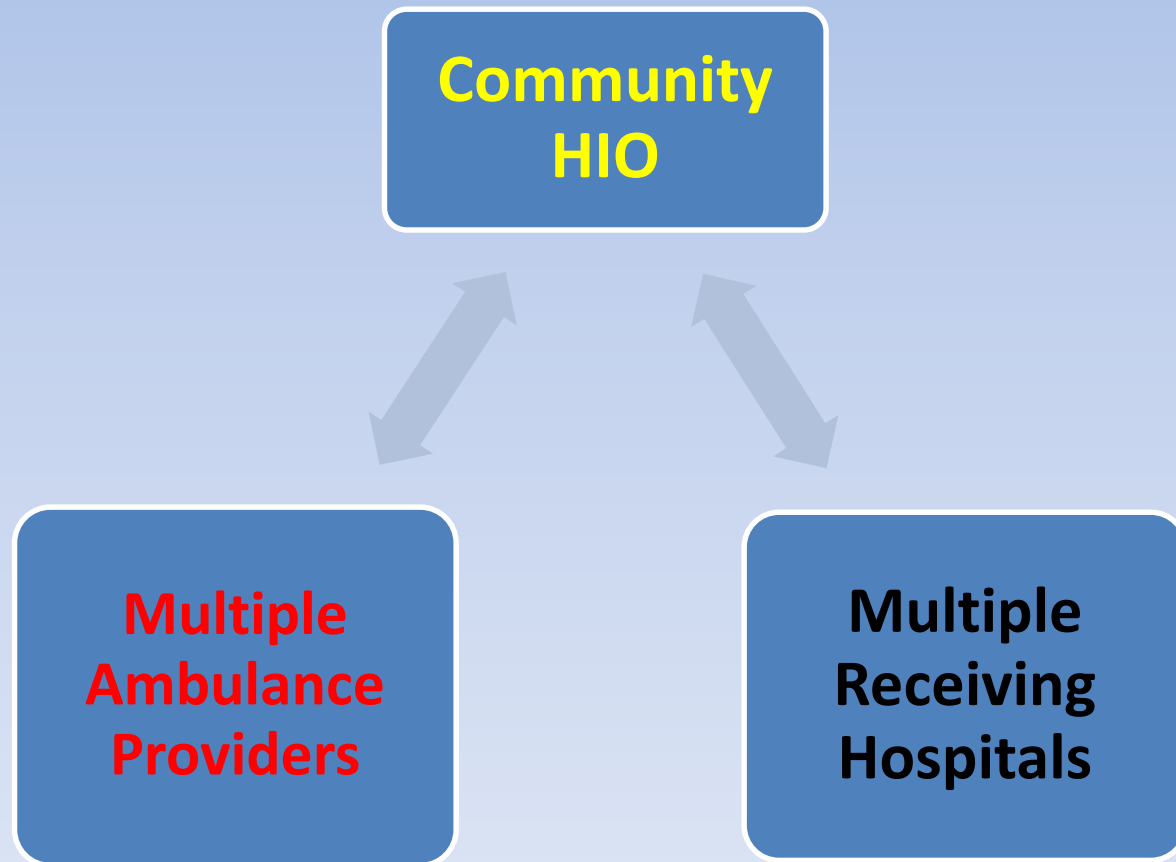
# Electronic Health Record Required for EMS Providers (ePCR):

*Device at Point-of-Service --  
“Gurneyside”*



Required by California Health  
and Safety Code 1797.227  
(Effective January 1, 2016)

# Model for Use of Community HIO to Achieve “Real-Time”, bidirectional, Interoperable connectivity for EMS



# Community Health Information Organizations (HIOs) Regional Scope



- Authority on reliable patient identity
- Home of the most complete patient record
- Hub for efficient connection to the region's hospitals, clinics, long-term care facilities, ancillary services, and public health resources
- Experts in connecting disparate systems using disparate standards
- Coordination for local governance, data quality, realizing priority use cases



# California Trusted Exchange Network (CTEN) Statewide Scope

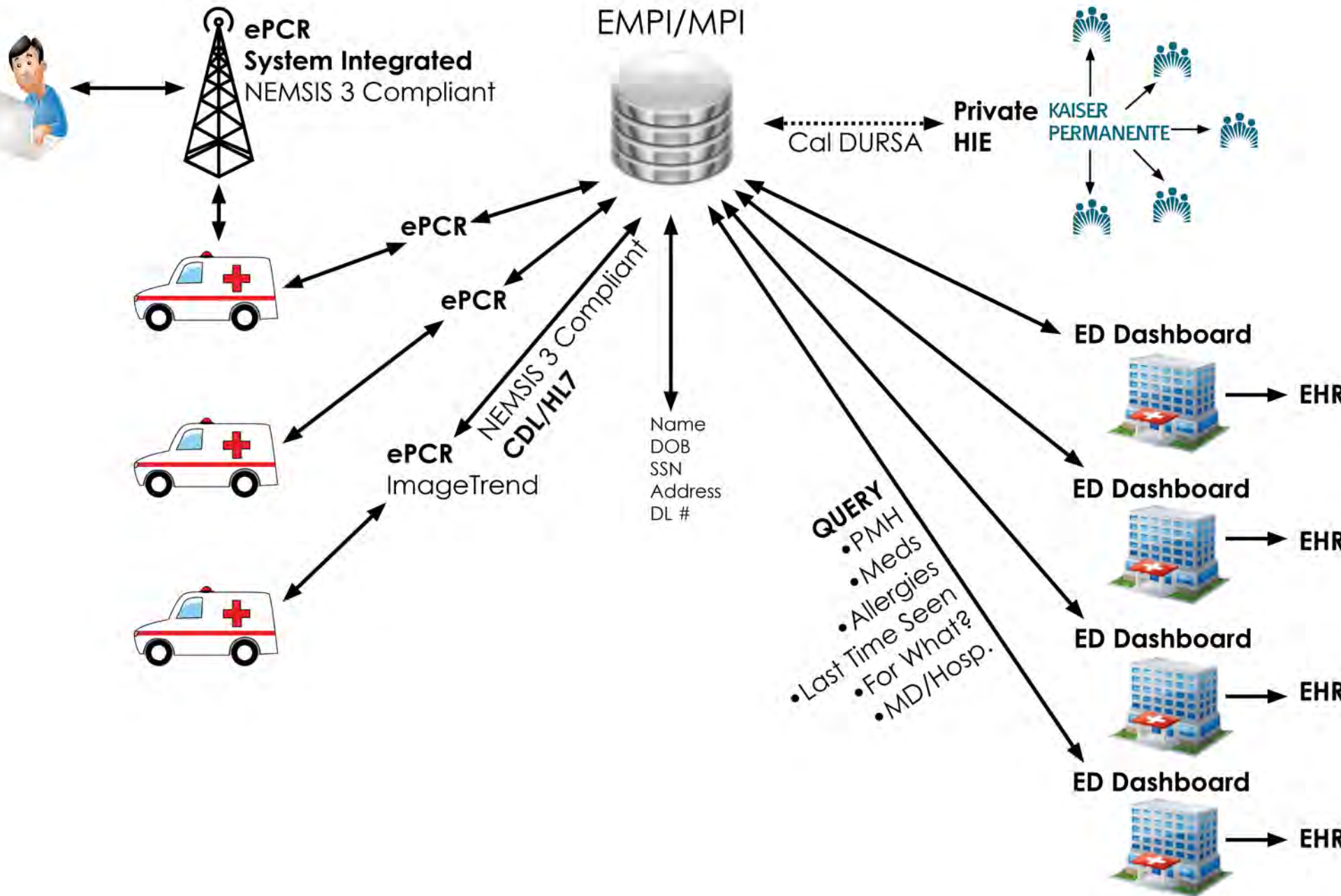


- Establishes trust among otherwise unaffiliated organizations
- Eliminates the need for point-to-point legal agreements through CalDURSA
- Coordinates consensus policies and standards for exchange
- Leverages the advantages of regional community HIO expertise and efficiency
- Preserves local autonomy, freedom to address local priorities and use cases

# Information Organization

CHIO

EMPI/MPI



# SAFR Model

## +EMS

<b>S</b>	<b>SEARCH:</b>	PARAMEDICS and EMTs may look up and display patient problem list, medications, allergies, POLST and DNR in field on ePCR screen	Improve clinical decision making Improve patient care
<b>A</b>	<b>ALERT:</b>	Display patient Information on hospital dashboard at ED to alert and share incoming patient information to assist in time-sensitive therapies	Improve decision support Better transitions of care Improve patient care
<b>F</b>	<b>FILE:</b>	Incorporate ePCR data into hospital EHR in HL7 format (using NEMESIS 3.4 CDA standards)	Build better longitudinal patient record
<b>R</b>	<b>RECONCILE:</b>	Receive patient disposition information from hospital EHR to add to EMS provider patient record	Improve population health



# *eOutcomes*

## UCSD captures & HIE converts

PV1-36
PV1-36
ADT-DG1 segments (where PV2-12="E")
ADT - PV1-44
ADT - DG1 segments
PV1-36 - use for 4317013.
ADT - PV1-45
ADT - PV2-3
ADT-PID-18
MSH

## to NEMESIS equivalent

eOutcome.01	Emergency Department Disposition
eOutcome.02	Hospital Disposition
eOutcome.09	Emergency Department Procedures
eOutcome.10	Emergency Department Diagnosis
eOutcome.11	Date/Time of Hospital Admission
eOutcome.12	Hospital Procedures
eOutcome.13	Hospital Diagnosis
eOutcome.14	Total ICU Length of Stay
eOutcome.15	Total Ventilator Days
eOutcome.17	Outcome at Hospital Discharge
eOutcome.16	Date/Time of Hospital Discharge
eOutcome.06	Emergency Department Chief Complaint
eOutcome.07	First ED Systolic Blood Pressure
eOutcome.08	Emergency Department Recorded Cause of Injury
eOutcome.05	Other Report Registry Type
eOutcome.04	External Report ID/Number
eOutcome.03	External Report ID/Number Type

# Anecdotal Benefits

- **Ambulance**
- Better Patient Information
- Save Time in completing EHR (ePCR)
- Improved billing data
- **Hospital**
- Receive accurate patient information earlier
- Estimated cost savings to UCSD of \$230,000/yr.



# PULSE GOALS

- **Deliver patient health information to healthcare professionals during a disaster**
- **Improve patient care**



# PULSE Steps

- ✓ Design
- ✓ Build
- ✓ Connect
- ✓ Implement
- ✓ Deploy



Patient Unified Lookup System for Emergencies

Document Review: Continuity of Care Document

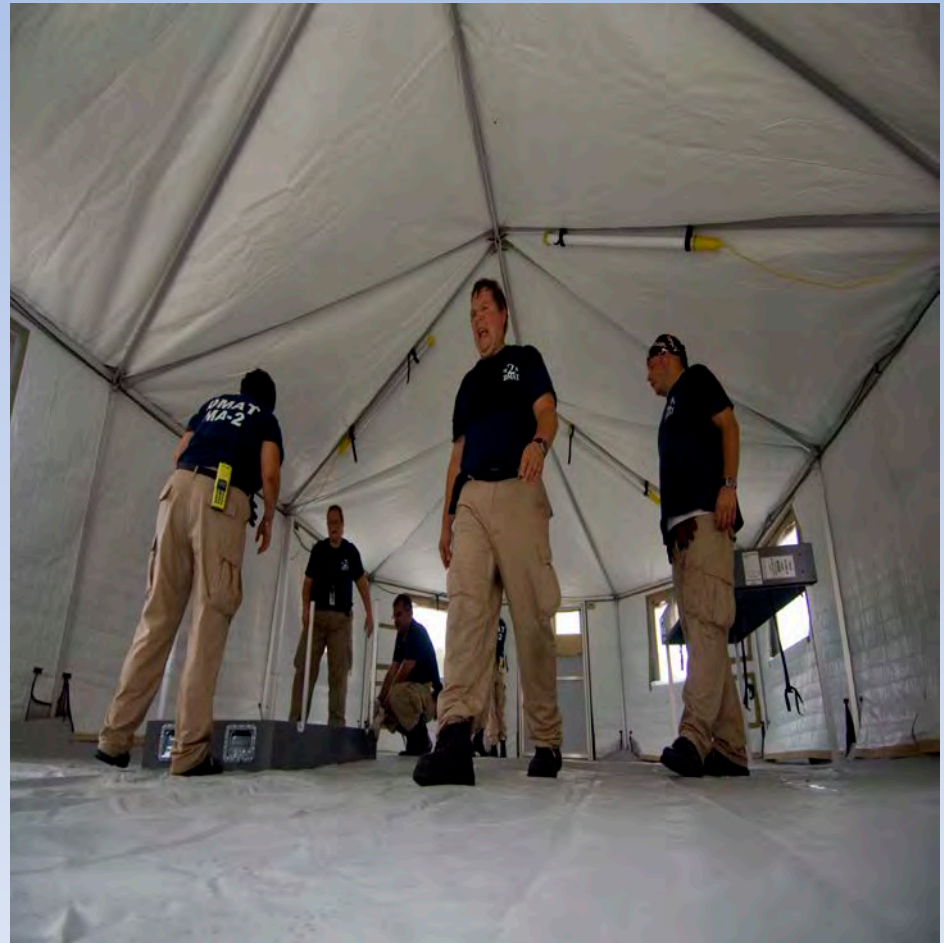
### Clinical Summary

Patient	Daisy Zztest Gm
Language	(JPN)
Date of birth	November 10, 1935
Sex	Female
Race	
Ethnicity	Not Hispanic or Latino
Contact info	Primary Home: 55555 west county Road SAN FRANCISCO, CA 94115, USA Tel: +1-999-888-8888
Patient IDs	SUF9819508 13238505
Confidentiality	Normal
Document Id	
Document Created:	April 5, 2018, 12:44:20, MST
Author	Epic - Version 8.3
Contact info	
Emergency contact (Mother)	zztest, Mom
Contact info	Tel: +1-999-888-9099
Emergency contact (Father)	zztest, Father
Contact info	Tel: +1-999-777-8765

# PULSE DESIGN

## Patient Target Populations:

- Disaster victims who need medical treatment or medication refills
- All victims experiencing a medical or trauma emergency
- Displaced Victims of Disasters outside of their normal health system or geographic area of service



# PULSE DESIGN

## Providers Target Populations:

### Healthcare professionals

Working in a:

- Mobile Field Hospital or Alternate Care site
- Medical Shelter
- EMS setting



# California PULSE Pilot Design

- Emergency or Disaster Occurs
- Request is made to EMSA to Activate PULSE
- EMSA Activates PULSE through the PULSE Operator
- DHV Volunteer can log into PULSE from DHV System (single sign-on through DHV website)
- Access to patient information for 4 Health Information Organizations
- 6 types of Licensed Volunteers can log into PULSE when its activated by EMSA :
  1. Physician
  2. Nurse Practitioner
  3. Pharmacist
  4. Registered Nurse
  5. Physician's Assistant
  6. EMT / Paramedic



# PULSE BUILD

- Audacious Inquiry
- ONC Grant 2015-2017
- Scalable nationwide
- Portal built for access to **SEARCH** for patient health information during disaster situations

The screenshot displays the PULSE web application interface. At the top left is the PULSE logo with the tagline "Patient Unified Lookup System for Emergencies". In the top right corner, the user "Peter Fisher" is logged in. Below the header, there are two main buttons: "Search" (green) and "Review" (blue). The "Search" button is active, leading to the "Patient Query" form on the left. This form contains fields for "First Name", "Last Name", "Gender", "Date of Birth", "SSN", "Street Address", "City", "State", "Zipcode", and "Telephone". Each field has a "Field is required" message. The "Date of Birth" field is split into "Month", "Day", and "Year" dropdowns. The "SSN" field is masked with "XXXXXXXX". The "State" field is a dropdown menu. At the bottom of the form is a green "Search DL" button. To the right of the form is a "Queries (1)" section titled "Queried Patient Information". It contains a table with the following data:

Name	Date of Birth	Gender	Last Updated	Status	Action
Daisy ZZTEST GM	11/10/1935	F	Apr 5, 2018 12:37:04 PM	Unrecorded	<a href="#">+</a> <a href="#">-</a>



# SEARCH for Patient

Required Fields: Name, Gender, DOB,  
(SS# or Address)



Patient Unified Lookup System for Emergencies

Peter Fisher ▶

Search

Review

## Patient Query

**First Name \***

First Name

Field is required

**Last Name \***

Last Name

Field is required

**Gender \***

Choose from the selection

Field is required

**Date of Birth \***

Month Day yyyy

Field is required

Field is required

Field is required

**SSN**

XXX-XX-XXXX

**Street Address**

**City**

**State**

**Zipcode**

State

**Telephone**

Search Q

## Queries (1)

### Queried Patient Information

Name	Date of Birth	Gender	▼ Last Updated	Status	Action
Daisy ZZTEST GM	11/10/1935	F	Apr 5, 2018 12:37:04 PM	1 record found	+ ↺

# CONNECT

Connect HIEs so that providers and emergency responders have a way to access health information across systems

- Respond to disasters
- Improve Clinical Decision Making
- Improve patient health and
- Measure outcomes

## Interoperability



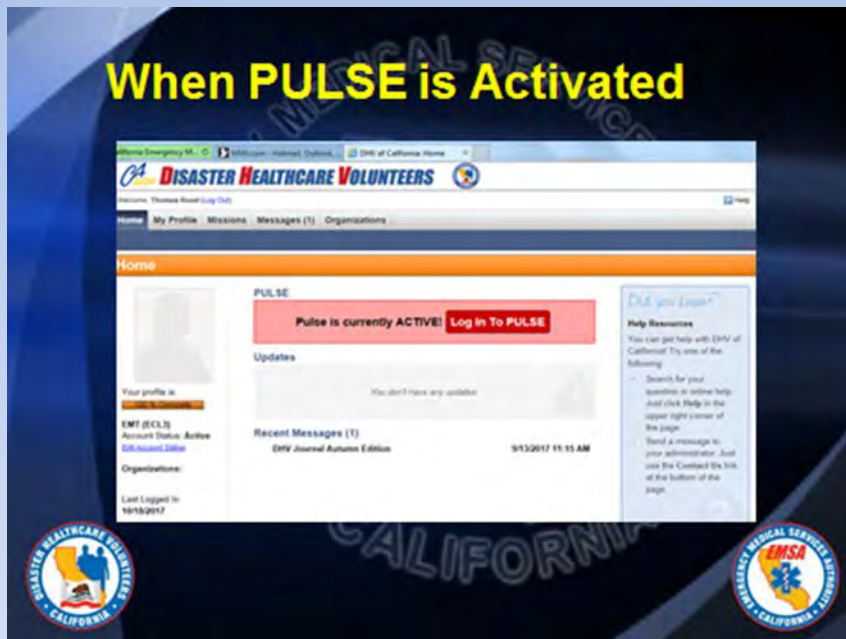
# Next Steps Statewide Coverage

## Current Connections

1. OCPRHIO
2. Santa Cruz HIE
3. Sutter Health
4. UC Davis Health
5. Sacvalley Medshare
6. Dignity Health

- Onboard Additional HIOs
- eHealth Exchange
- Carequality

# Fall 2017 PULSE Implementation



- Roles & Responsibilities
- Develop Workflow
- Update Key Planning & Deployment Documents
- Communication
- Train end users
- Asset Request Process
- Deployment

# Return of Patient Match(es)

## Patient Staging



### Queried Patient Information

Name	Gender	Date of Birth
Daisy ZZTEST GM	F	11/10/1935

### Possible Patient Records

Location	Name	Gender	Date of Birth	SSN	View Details	Select
Sutter Health	Daisy Zztest Gm	Female	11/10/1935			<input type="checkbox"/>

### Combined PULSE Patient

Full Name \*

Daisy ZZTEST GM

Friendly Name

Gender \*

Female

SSN

Date of Birth \*

November

10

1935

Dismiss

Save

# Return of Patient Encounters

Search











Review

Patient: Daisy ZZTEST GM

Daisy ZZTEST GM

[Edit](#) [Discharge](#) [Return to patient list](#)

Gender F  
Date of Birth 11/10/1935  
SSN

Status	Title	Class Name	Confidentiality	▼ Creation Date	Size	Organization
	Hospital Encounter Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Office Visit Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Office Visit OB Est Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Office Visit Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Hospital Encounter Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Office Visit Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Office Visit Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Hospital Encounter Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	Hospital Encounter Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health
	AC Care Management Summary	Progress Note	Normal	Apr 5, 2018	-1.0 B	Sutter Health

# Return of Patient Information



Patient Unified Lookup System for Emergencies

Contra Costa-01

Peter Fisher

Log Out

Show Location Status

Search

Review

Patient: John Smith



## John Smith

1 Edit 1 Discharge 1 Discharge

Gender

M

Date of Birth

Jun 5, 1966

SSN

Status	Title	Class Name	Confidentiality	Creation Date	Size	Location
	Hospital Admission	ALLERGY NOTE	High	May 15, 2008	34.6 kB	St. Sebastian's Hospital
	Hospital Admission	ALLERGY NOTE	High	May 15, 2008	34.6 kB	Santa Rosa Mental Health Institute
	Physical Test	SUMMARIZATION OF EPISODE NOTE	Normal	May 16, 2008	34.6 kB	St. Sebastian's Hospital
	Physical Test	SUMMARIZATION OF EPISODE NOTE	Normal	May 16, 2008	34.6 kB	Santa Rosa Mental Health Institute



# Return of CCD Information



Patient Unified Lookup System for Emergencies

## Document Review: Continuity of Care Document

### Clinical Summary

<b>Patient</b>	Daisy Zztest Gm
<b>Language</b>	(JPN)
<b>Date of birth</b>	November 10, 1935
<b>Sex</b>	Female
<b>Race</b>	
<b>Ethnicity</b>	Not Hispanic or Latino
<b>Contact info</b>	Primary Home: 55555 west county Road SAN FRANCISCO, CA 94115, USA Tel: +1-999-888-8888
<b>Patient IDs</b>	SUF9819508 13238505
<b>Confidentiality</b>	Normal
<b>Document Id</b>	
<b>Document Created:</b>	April 5, 2018, 12:44:20, MST
<b>Author</b>	Epic - Version 8.3
<b>Contact info</b>	
<b>Emergency contact (Mother)</b>	zztest, Mom
<b>Contact info</b>	Tel: +1-999-888-9099
<b>Emergency contact (Father)</b>	zztest, Father
<b>Contact info</b>	Tel: +1-999-777-8765



# Specific Medical Information



## Source Comments

This information has been disclosed to you from records protected by Federal confidentiality rules (42 CFR part 2). The Federal rules prohibit you from making any further disclosure of this information unless further the written consent of the person to whom it pertains or as otherwise permitted by 42 CFR part 2. A general authorization for the release of medical or other information is NOT sufficient for this purpose. The Federal information to criminally investigate or prosecute any alcohol or drug abuse patient. Sutter Health Affiliates and Community Connect Practices - DEV

## Allergies

Active Allergy	Reactions	Severity	Noted Date	Comments
2-Ethoxyethanol			01/09/2018	
A & D	Anaphylaxis	High	01/09/2018	
Bilberry	Cough	High	11/17/2017	
Latex			01/09/2018	
Hydrocodone-Acetaminophen			01/09/2018	
Peanut-Containing Drug Products	Anaphylaxis	High	04/18/2017	

## Current Medications

Prescription	Sig.	Disp.	Refills	Start Date	End Date	Status
PROAIR HFA 108 (90 Base) MCG/ACT Oral Inhaler  Indications: Asthma, unspecified asthma severity, unspecified whether complicated, unspecified whether persistent	Inhale 2 Puffs by mouth every 4 to 6 hours as needed Shake well.	1 Inhaler	0	03/19/2018		Active
furosemide (LASIX) 80mg Tab  Indications: Asthma, unspecified asthma severity, unspecified whether	Take 1 Tab by mouth daily	30 Tab	0	03/19/2018	04/18/2018	Active

# First Activation of PULSE: Wildfires Statewide October through December 2017



- EMSA partnered with the Sequoia Project to increase Geographic Coverage for PULSE
- PLUSE established a temporary connection to eHealth Exchange



Both Kaiser and Sutter Hospital had to be evacuated in Sonoma County



# Second Activation of PULSE: July 2018 in Shasta and Lake County



EMSA partnered with Sequoia and CAHIE to onboard additional patient records for affected areas



- Sacvalley Medshare
- Dignity Health

# July and August 2018 Wildfires

- Northern California Medical Reserve Corps (MRC) supported local medical and health operations at the shelter.
- Contra Costa County MRC provided care in Lake County



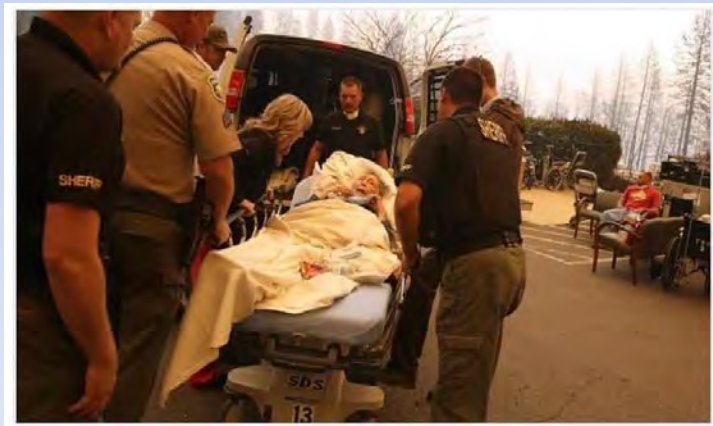
Norovirus outbreak at evacuation center



# Third Activation of PULSE: November 2018 in Butte County



EMSA realized that use by medical personnel needed active deployment procedures



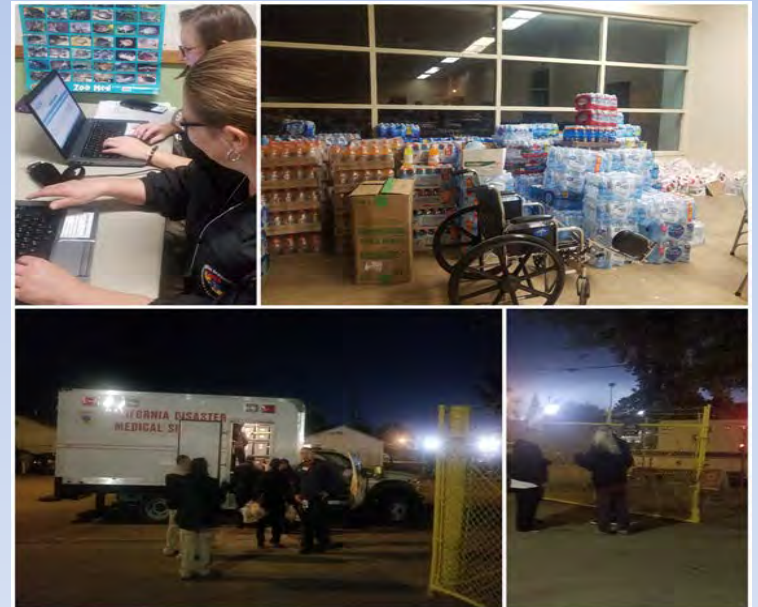
EMSA deployed a 3 member team to initiate PULSE and train personnel



# Deploy PULSE

- Use in Camp Fire
- 13 Shelters
- Medical Component of Shelter
- EMSA sent team to initiate use

- CAL-MAT Team Members used PULSE for:
  - Patient History
  - Medical Refills



# Just-In-Time Training

132 Medical Staff  
provided just in time  
training on PULSE  
deployed to Butte County



CALMAT, DHV, MRC's  
Scripts Medical Team,  
California Air National  
Guard 143rd and 144th &  
California Army National  
Guard's 297<sup>th</sup>

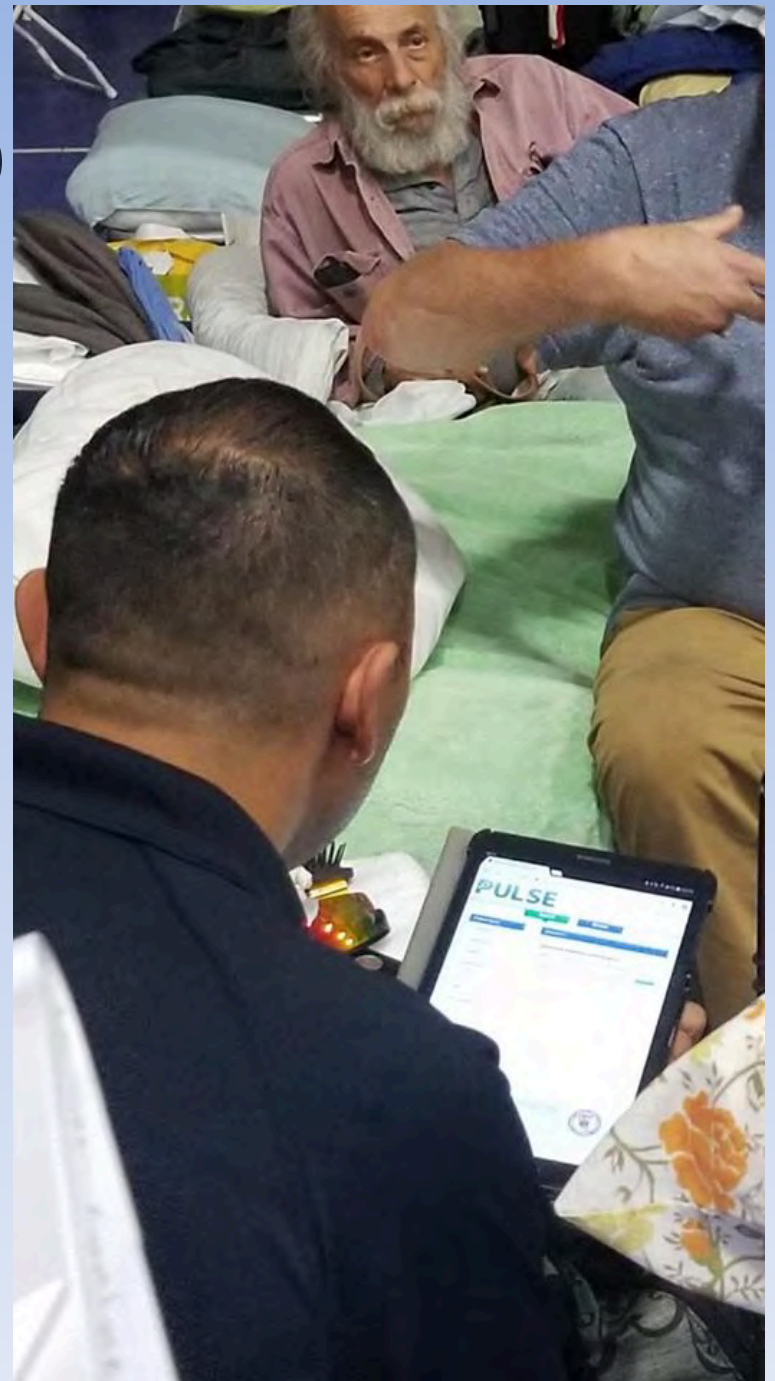




# Patient Info Lookup

## Continuity of Care Document (CCD) Info:

- Problem List
- Medications
- Allergies
- Help with Treatment
- Medication Refills



# Provisional PULSE Usage Data

- PULSE was deployed for 31 days to Butte County
- 13 Medical Alternate Care Facilities
- 132 health care personnel (health professionals) were trained to use PULSE
- 326 patient searches were done in PULSE for a estimated 39% usage



# Top 5 Goals from Lessons Learned

1. **Statewide Coverage for PULSE**
  2. **Just-in-Time User Registration**
  3. **Deployment Team**
  4. **Stable Internet Connections**
  5. **Sustainable Funding**
- Consolidate all requested documents into a single report with provenance to improve review time
  - Highlight within, or parse, C-CDA documents those data elements or fields most appropriate or more urgent for use in an emergency (most likely allergies, medications, problems, perhaps immunizations)





# Next Steps

- **Medi-Cal (Medicaid) 90/10 Funding provided for PULSE Phase II identify contributors for matching funds**
- **Expand Care Plan Exchange for Disaster response adding additional HIE/HIOs**
- **Onboard to eHealth Exchange & Carequality**
- **Expand Capabilities of PULSE**
- **Expand DHV users to include hospital and EMS staff**
- **PULSE will stay in active state and the access control will be with the DHV Single Sign On (SSO)**
- **Enhance Deployment Capabilities**



# Contact Information

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