

**EMERGENCY MEDICAL SERVICES AUTHORITY**

10901 GOLD CENTER DR., SUITE 400  
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(916) 322-4336 FAX (916) 322-1441



September 20, 2017

Mr. Travis Kusman, Director, Emergency Medical Services  
Alameda County EMS Agency  
1000 San Leandro Boulevard, Suite 200  
San Leandro, CA 94577

Dear Mr. Kusman:

This letter is in response to Alameda County's 2016 EMS Plan Update submission to the EMS Authority on August 31, 2017.

**I. Introduction and Summary:**

The EMS Authority has concluded its review of Alameda County's 2016 EMS Plan Update and is approving the plan as submitted.

**II. History and Background:**

Alameda County received its last full plan approval for its 2014 plan submission, and its last annual plan update for its 2015 plan submission.

Historically, we have received EMS Plan submissions from Alameda County for the following years:

- 1995
- 1999
- 2004
- 2007
- 2009
- 2010
- 2011
- 2014
- 2015

Health and Safety Code (HSC) § 1797.254 states:

*"Local EMS agencies shall **annually** (emphasis added) submit an emergency medical services plan for the EMS area to the authority, according to EMS Systems, Standards, and Guidelines established by the authority".*

The EMS Authority is responsible for the review of EMS Plans and for making a determination on the approval or disapproval of the plan, based on compliance with statute and the standards and guidelines established by the EMS Authority consistent with HSC §1797.105(b).

### III. Analysis of EMS System Components:

Following are comments related to Alameda County's 2016 EMS Plan Update. Areas that indicate the plan submitted is concordant and consistent with applicable guidelines or regulations, HSC §1797.254, and the EMS system components identified in HSC §1797.103, are indicated below:

- |    | Approved                            | Not Approved             |  |
|----|-------------------------------------|--------------------------|--|
| A. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>System Organization and Management</u>  |
| B. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Staffing/Training</u>   |
| C. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Communications</u>  |
| D. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Response/Transportation</u> <ol style="list-style-type: none"><li>1. Ambulance Zones<ul style="list-style-type: none"><li>• Based on the documentation provided by Alameda County, please find enclosed the EMS Authority's determination of the exclusivity of Alameda County's ambulance zones.</li></ul></li></ol> |
| E. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Facilities/Critical Care</u> <ol style="list-style-type: none"><li>1. Emergency Department<ul style="list-style-type: none"><li>• 5.11 – Excellent review and explanation with appropriate documentation to support the self -assessments.</li></ul></li></ol>  |
| F. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Data Collection/System Evaluation</u> <ol style="list-style-type: none"><li>1. Thorough review and explanation for each item; comprehensive explanations that provided context, history, steps taken, and objective. Excellent EMS Plan!</li></ol>  |
| G. | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>Public Information and Education</u>  |

H.   Disaster Medical Response

**IV. Conclusion:**

Based on the information identified, Alameda County's 2016 EMS Plan Update is approved.

Pursuant to HSC §1797.105(b):

*"After the applicable guidelines or regulations are established by the Authority, a local EMS agency may implement a local plan...unless the Authority determines that the plan does not effectively meet the needs of the persons served and is not consistent with the coordinating activities in the geographical area served, or that the plan is not concordant and consistent with applicable guidelines or regulations, or both the guidelines and regulations established by the Authority."*

**V. Next Steps:**

Alameda County's next annual EMS Plan Update will be due on or before August 31, 2018. If you have any questions regarding the plan review, please contact Ms. Nancy Steiner-Keyson, Acting EMS Plans Coordinator, at (916) 431-3688.

Sincerely,



Howard Backer, MD, MPH, FACEP  
Director

Enclosure





ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY

Rebecca Gebhart, Interim Director

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**Emergency Medical Services District**

1000 San Leandro Blvd, Suite 200  
San Leandro, CA 94577

**Travis Kusman, MPH, EMS Director**

**Karl Sporer, MD, Medical Director**

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August 25, 2017

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

Dear Dr. Backer,

Attached please find the 2016 Alameda County EMS Plan Update (Update) as requested in your correspondence dated August 5, 2016. This Update depicts those changes which have transpired within the Alameda County EMS system since our most recent submission. The California Emergency Medical Services Authority (EMSA) approved the Alameda County EMS Plan submitted in November of 2014 as well as the update submitted last year. This Update combined with those documents describes our EMS system at the present time.

Alameda County's EMS system continues to be impacted by changes associated with broader healthcare reform. In particular, changes in payer mix and reimbursement have adversely affected providers of 911 emergency ambulance services including the contractor that provides the majority of transports within our system. This has in turn challenged the financial construct of the current system design.

Alameda County EMS accordingly enacted stabilizing measures and continues its change process to ensure that the EMS system is poised to adapt prudently to the changing healthcare environment. Alameda County EMS' principle objective in this regard continues to be ensuring the financially sustainable provision of high quality emergency medical services that are efficient and effective both clinically and operationally.

The team at Alameda County EMS looks forward to ongoing collaboration with the EMS Authority. As you are aware, Alameda County EMS is actively engaged with EMSA with respect to the competitive process to be completed by June 30, 2019 involving the Exclusive Operating Area currently served by Paramedics Plus. As always, please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Travis Kusman".

Travis Kusman, MPH, Paramedic  
Director, Emergency Medical Services

Attachment

cc: Rebecca Gebhart, HCSA Interim Director



# **ALAMEDA COUNTY EMERGENCY MEDICAL SERVICES**

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## **2016 ALAMEDA COUNTY EMS PLAN UPDATE**



**AUGUST 2017**

ALAMEDA COUNTY EMERGENCY MEDICAL SERVICES AGENCY  
1000 SAN LEANDRO BOULEVARD, SUITE 200  
SAN LEANDRO, CA 94577  
(510) 618-2050



# ALAMEDA COUNTY EMERGENCY MEDICAL SERVICES EMS SYSTEM PLAN 2016-17

## EXECUTIVE SUMMARY

AUGUST 24, 2017

**Executive Summary** - Provide a brief overview of the plan. It should identify the major needs which have been found and a summary of the proposed program solutions. Include any changes which have occurred in your system, such as a change in providers, the designation of new centers, a change in key personnel, etc.

## SECTION 1 – EMS SYSTEM / PLAN OVERVIEW

### EMS SYSTEM PLAN

EMS PLAN - Division 2.5 of the California Health and Safety Code, Section 1797.254 states “Local EMS agencies shall annually submit an emergency medical services plan for the EMS area to the Authority, according to the EMS Systems, Standards, and Guidelines established by the Authority.”

The Alameda County EMS System Plan provides a comprehensive report with the required documentation for compliance with the California EMS regulations and guidelines. The EMS standards are met and in most cases exceeded relative to the requirements to ensure a quality EMS system. The responsibility of Alameda County EMS (ALCO EMS) for planning, implementing and evaluating the local EMS system is documented in this annual update report. Many of our responsibilities, and the authority needed to carry out our oversight role, are derived from Division 2.5 of the California Health and Safety Code, and related chapters of Title 22 of the California Code of Regulations.

### EMS SYSTEM VISION

#### ALAMEDA COUNTY EMS VISION

- **VISION** Alameda County EMS will explore new frontiers while creating an environment where collaboration and consensus building thrive among staff and stakeholders.
- **MISSION** Alameda County EMS ensures the provision of quality emergency medical services and prevention programs to improve health and safety in Alameda County.
- **VALUES** Alameda County EMS values a caring environment sustained by empowerment, honesty, integrity and mutual respect. We embrace excellence through innovation, teamwork and community capacity building.

Alameda County EMS has adopted and continues to strive towards the National Highway Traffic Safety Administration (NHTSA) vision described in the “EMS Agenda for the Future.” Refer to the vision below:

- *“Emergency Medical Services (EMS) of the future will be community-based health management that is fully integrated with the overall health care system. It will have the ability to identify and modify illness and injury risks, provide acute illness and injury care and follow-up, and contribute to treatment of chronic conditions and community health monitoring. This new entity will be developed from redistribution of existing health care resources and will be integrated with other health care providers and public health and public safety agencies. It will improve community health and result in more appropriate use of acute health care resources. EMS will remain the public’s emergency medical safety net.”*

- A decade ago, the Institute of Medicine (IOM) released a report titled “*EMS at the Crossroads*” which accurately identified that “EMS operates at the intersection of health care, public health and public safety.” Given the above vision and this reality, ALCO EMS leverages partnerships to attain effective outcomes.
- Alameda County EMS facilitates collaboration with stakeholders and partners propagating a flexible system that continuously adapts to the changing healthcare environment. Alameda County EMS strives to deliver services that are consistent with the Institute for Healthcare Improvement’s “*Triple Aim*” of:
  - Improving the patient experience of care (including quality and satisfaction)
  - Improving the health of populations; and
  - Reducing the per capita cost of healthcare

### **EMS LEADERSHIP – TEAM OF EXCELLENCE, VISION, INNOVATION, AND INCLUSIVENESS**

The Alameda County EMS system has an innovative, highly skilled, and competent professional staff that demonstrates leadership and innovation with leading edge models, projects and programs that have enhanced prehospital care throughout California and the nation. Alameda County EMS has an integrated and collaborative team that recognizes the need for inclusive partnerships to leverage improvements and growth within the system. Alameda County EMS staff collaborates closely with EMS providers system-wide and with National experts to continually improve the EMS system by ensuring policy and program changes based on the analysis of the data submitted to ALCO EMS by the providers; and on the evidence-based findings of current research studies. ALCO EMS continues to be a visionary leader and champion in local, regional and national EMS organizations. ALCO EMS provides oversight for all aspects of the EMS system in the county; to include monitoring dispatch centers, first responder paramedic services, transporting ambulances, and receiving hospitals.

### **ORGANIZATION**

Alameda County Emergency Medical Services (ALCO EMS) is a division of the Alameda County Health Care Services Agency. ALCO EMS is recognized by the California Emergency Medical Services Authority as a “Local EMS Agency,” or LEMSA. Many different constituent groups make up the ALCO EMS System, including dispatch centers, fire departments, health care facilities (hospitals), private ambulance providers, and specialty centers for the emergency care of victims of major trauma (including children), stroke, and certain types of cardiac conditions. ALCO EMS facilitates the coordination of 911 medical responses through its contracts with EMS provider organizations, as well as through the development of policies and procedures for prehospital care.

The Alameda County EMS system responds to approximately 160,000 patients annually for medical emergencies. The majority of 911 emergency medical calls in the County are responded to with the configuration of an Advanced Life Support (ALS) fire department first responder unit and a Paramedics Plus ALS ambulance. The fire departments of the cities of Alameda, Albany, Berkeley and Piedmont provide primary ALS ambulance transport services and first response within their respective incorporated areas. The Lawrence Livermore National Laboratory contracts with the Alameda County Fire Department for emergency medical services including ambulance transport.

### **EMERGENCY AMBULANCE SERVICES - CONTRACTS**

Alameda County EMS is responsible for the procurement and provision of emergency ambulance services that includes contracts with Paramedics Plus and the cities of Alameda, Albany, Berkeley, and Piedmont for Advanced Life Support (ALS) services in Alameda County. The cities referenced above provide ambulance as well as first response ALS service. These cities have opted not to contract for an outside ambulance services provider and provide ambulance services through their respective city fire departments. The terms of these contracts extend through October 2017



except Paramedics Plus. Fire Department agreements are currently in negotiation for extension. ALCO EMS will conduct an RFP process, select and implement a contract for services to the Exclusive Operating Area (EOA) currently served by Paramedics Plus prior to June 30, 2019, the end date of the current agreement.

### **COMMUNITY PROJECTS, COALITIONS, AND PARTNERSHIPS**

Consistent with the Alameda County Health Care Services Agency mission, ALCO EMS prioritizes promoting health equity and results based accountability in our ALCO EMS programs. For example, projects include:

- **STROKE RECEIVING CENTERS** - Alameda County EMS ensures that patients who are experiencing a possible cerebral vascular accident (Stroke) on scene, detected by clinical assessment, are transported to an EMS designated hospital (MOU in place) for specialty diagnostics and treatment: CT / CTA and if needed, IV fibrinolytic and or transfer to a comprehensive capable center for IR services.
- **STEMI / CARDIAC ARREST RECEIVING CENTERS** - Alameda County EMS ensures that patients who are experiencing a possible ST-elevation myocardial infarction (STEMI) on scene, detected by clinical exam and 12-lead electrocardiogram, are transported to an EMS designated hospital (MOU in place) for specialty diagnostics and treatment: coronary angiogram and if needed a Primary Percutaneous Coronary Intervention (PCI). Alameda County EMS also ensures that patients who were pulseless on scene or in transport that received attempted resuscitation and experience return of spontaneous circulation (ROSC) or presented with recurrent VF/VT are transported to the same EMS designated hospitals (MOU in place) that the above STEMI patients are, since these patients frequently need some of the same interventions. These specialty receiving facilities provide appropriate use of Targeted Temperature Management, Primary Percutaneous Coronary Intervention, Metabolic and Circulatory support as well as other diagnostic tests and therapies that are specific to post cardiac arrest patients.
- **TRAUMA RECEIVING CENTERS** – The Alameda County EMS Agency ensures overall trauma system design, monitoring and quality improvement, including trauma center designation and administration of the associated contracts. The Trauma quality benchmarks include: 1) Maintenance of a trauma registry to track trauma system and trauma center performance on a case-by-case basis using the Lancet Trauma 1 database; 2) A bi-county Trauma Audit Committee (TAC), that’s purpose is to facilitate the quality assurance and improvement process by including outside experts for performance review of both the trauma centers and system on a quarterly basis; 3) Full participation in CEMESIS Trauma and EMS data sharing with the intent to improve patient outcomes; 4) Representation / participation at the State designated Regional Trauma Coordinating Committee (RTCC); 5) Representation / participation at internal Trauma Center Process Improvement and Clinical Oversight meetings.
- **HEARTSAFE PROJECT** - With a need to increase Sudden Cardiac Arrest (SCA) survival rates in Alameda County, the HeartSAFE Project goal was envisioned to provide 185 AEDs with training, oversight, and maintenance in high risk / high traffic locations. Alameda County EMS ensures this project remains sustainable and campaigns to promote community AEDs with the message: “When AED’s are available and used within 3 minutes, the survival of someone suffering from Sudden Cardiac Arrest (SCA) outside of a hospital will increase from 5% to a survival rate of up to 70%. Ensuring timely access to an AED, will strengthen the links in the chain of survival in the county. Because nearly half of cardiac arrest events are witnessed, efforts to increase survival rates focus on timely and effective delivery of interventions by bystanders and EMS personnel.”

- **CPR 7** - is a program developed for public school 7th graders in Alameda County. In our 6<sup>th</sup> and 7<sup>th</sup> year (2015-2017 school years), 17 middle schools in Alameda County participated. ~14,000 - 7<sup>th</sup> graders were trained (incomplete data at this time) in cardiopulmonary resuscitation (CPR) and in turn trained their families and friends, multiplying (x4) the impact of their own participation in the program. As of the conclusion of the 2016-2017 school year, Alameda County EMS estimates that it will have facilitated training in over 10% of the Alameda County population in CPR. The CPR 7 program was featured in a past edition of the Journal of Emergency Medical Services. As recently passed state legislation requires ninth graders that take health science be trained in CPR as a graduation requirement, Alameda County EMS will transition towards supporting CPR 9 in a multi-year process as of the up-coming 2017-18 school year.
- **EMS CORPS** is a full-time Alameda County EMS program designed to change the trajectory of Boys and Men of Color (BMOC) and create career opportunities for participants in EMS, public safety, and/or health care services. ALCO EMS facilitates the instruction of the EMT training component of the EMS Corps program, realistically preparing graduates for future success in the work environment.

NEXT PAGE

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## SECTION 2 – SYSTEM CHANGES

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### NEW STATUS, UPDATES, & MODIFICATIONS

#### 2016-17 HEALTH CARE SYSTEM AND EMS POLICY

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The Alameda County EMS agency has consistently adapted to on-going changes influencing the health care delivery system throughout the United States over the years. Ambulance system economics remain under considerable strain, not only in Alameda County, but in many California counties and across America due to a marked decline in private and public reimbursements for services. With the evolving health care system changes, the Alameda County operational area EMS system has remains effective and committed to excellence. The Health Care Services Agency and EMS, along with our hospital, clinic, Medi-Cal managed care plan and other system stakeholders and community partners continue to work together to remain informed at the national, state, regional and local levels regarding the implications of ongoing healthcare reform, collectively mitigating risks and acting upon opportunities to ensure the overall stability of the County's healthcare system.

Alameda County hospitals and health systems continue to merge and reorganize. Alameda County EMS has the "pulse" on monitoring the changing landscape and continues to identify and act upon opportunities to strengthen the system in 2016-17. Alameda County EMS has and will continue to adapt with preemptive readiness and priority planning efforts to ensure continuity of overall system performance including the effective management of potential and real prehospital / emergency department patient overload.

ALCO EMS also continues to contingency plan for and respond to continuously evolving threats including those related to unrest associated with the current national political climate, domestic and international terrorism, natural and human-caused disasters.

#### EMS SYSTEM EVALUATION, REQUEST FOR PROPOSALS (RFP), CONTRACT EXTENSIONS ENSURES SYSTEM SUSTAINABILITY AND CONTINUITY

In July 2015, the Alameda County EMS Agency began preparing to release a RFP for 911 emergency ambulance services for the Exclusive Operating Area currently served by Paramedics Plus, with the goal of ensuring an EMS System that is clinically and operationally excellent as well as financially solvent:

- **OVERARCHING GOALS**
  - Sustain and improve quality of clinical care the patient receives
  - Stabilize or reduce the cost of EMS services (financial stability)
  - Improve patient satisfaction
- **SIX FUNDAMENTAL TENANTS**
  1. Preserving a high level of emergency medical response throughout the County
  2. Producing a system that is cost-effective while preserving a high level of response and care
  3. Designing a system that is County-wide (ie. Current Exclusive Operating Area (EOA) allowing for consistency of service throughout all areas and jurisdictions of the County)
  4. Maintaining and supporting the current workforce
  5. Producing a system that is sustainable for the long term
  6. Maintaining appropriate regulatory and oversight functions between local EMS agency (LEMSA) and chosen provider(s)

The RFP was initially issued in October 2016 but was suspended by the Health Care Services Agency. At the present time, ALCO EMS is updating its system evaluation including performing additional clinical, financial and operational data



analysis due to the time lapse associated with the suspension. ALCO EMS remains committed to the tenants above and has submitted a modified RFP to the California Emergency Medical Services Authority for approval with release for bidding occurring by the end of 2017.

Alameda County EMS continues to sustain and strengthen 911 emergency ambulance services system through EOA contract management. As previously noted, Paramedics Plus's contract was extended through June 30, 2019 and ALCO EMS intends to implement successor ambulance agreements with the cities of Alameda, Albany, Berkeley and Piedmont.

## RE-ORGANIZATIONS – SYSTEM IMPACT AND BENEFITS

### **EMS ORGANIZATION**

- Alameda County (ALCO) EMS recently became a division of the Alameda County Health Care Services Agency (HCSA). Transitions continue to occur within HCSA leadership and EMS Director, Travis Kusman, MPH, Paramedic, currently reports directly to HCSA Interim Director Rebecca Gebhart. As the Director, Travis Kusman is responsible for ensuring the ongoing planning, implementation and evaluation of the local EMS system, and ensures the local / regional medical coordination during a disaster.
- The EMS Deputy Director, EMS Medical Director and EMS Prehospital Care Coordinator (PHCC) team provide essential support to the Director. Finance, Budget, and Administrative leadership staff support at the HCSA level to EMS continues to evolve. ALCO EMS continues to reorganize based upon the core functional areas of Finance and Administration, System Operations and Regulatory Compliance, Emergency Preparedness and Response, and Injury Prevention. ALCO EMS also continues to support health care Career and Workforce Development programs.

### **HOSPITAL MERGERS**

- Although significant Alameda County hospital reorganizations occurred in 2015-16, the EMS provider community continues to accommodate to their evolving changes. Alameda County EMS continues to have 13 receiving hospitals. Some of the system hospitals continue to reorganize and transition through the process of building expansions, structural improvements, mergers, and leadership changes. Hospital landscape changes that occurred in 2015 and 2016 are as follows:
  - ValleyCare is part of Stanford. The new name is Stanford Health Care – ValleyCare Hospital.
  - The Oakland Children's Medical and Research Center is a partner with the University of California San Francisco (UCSF). The new hospital name is UCSF Benioff Children's Hospital in Oakland.
  - The Kaiser Permanente Hayward Hospital has relocated to San Leandro. The new hospital name is Kaiser Permanente San Leandro. Kaiser Oakland Hospital has expanded with consolidated pediatric services in Oakland including the addition of pediatric beds in the pediatric intensive care unit.
  - The Alameda Health System has expanded and now includes Alameda and San Leandro Hospitals.

### **HOSPITAL CONSOLIDATION AND RELOCATIONS – PLANNED**

- Alta Bates Summit Medical Center is planning to relocate and consolidate by 2030. The Alta Bates Regional Task Force is meeting to address proactive strategies to mitigate and plan for potential closure of the Berkeley hospital campus. Preliminary meetings have occurred in preparation for a system-wide Impact Analysis Report which will be coordinated by the HCSA Director.



**TRAUMA HOSPITALS – NEW DESIGNATIONS/CERTIFICATIONS**

- American College of Surgeons (ACS) initial verification was completed at all Alameda County Trauma Centers in May 2013. At that time verification was as follows: UCSF Benioff Children’s Hospital Oakland - Level 1 Pediatric Trauma Center (TC), Alameda County Medical Center (Highland) – Level 2 Adult TC and Sutter Eden Medical Center – Level 2 Adult TC. ACS Verification is now a requirement of the Alameda County Trauma Center MOU (next contract renewal July 2018). All three Trauma Centers completed their first re-verification in April 2017 with verification as follows: UCSF Benioff Children’s Hospital Oakland - Level 1 Pediatric (TC); Sutter Eden Medical Center – Level 2 Adult TC; and Alameda Health System’s Highland– changed status to Level 1 Adult TC.

**PARAMEDICS PLUS – BLS UNITS**

- Paramedics Plus continues to add BLS unit hours (ambulance coverage) into the system. BLS units continue to respond preferentially to ALS units to 5150 and low acuity (Alpha and Omega level) calls, primarily in Zone 2 which is the Oakland metro area.

**FIRE DEPARTMENT LEADERSHIP TRANSITIONS**

- Public safety leadership in Oakland remains in flux. Numerous changes have occurred in the Fire and Police Department. Fire Chiefs from several other jurisdictions including, Alameda, Berkeley, Fremont and Piedmont have planned retirements occurring in the near future.

**POLICY CHANGES – NEW AND PLANNED****2016-2017 EMS SYSTEM ANNUAL POLICY UPDATES:**

- Training conducted in 2016 for the 2017 new policy implementation.
- Initiated 2017 and 2018 EMS Policy Update Process with internal and external stakeholders

**2017 NEW POLICIES****ADMINISTRATION – OPERATIONS**

- TRAUMA RE-TRIAGE PROCEDURE (ADULT)** - NEW JANUARY 2017
- TRAUMA RE-TRIAGE PEDIATRIC (PEDIATRIC)** – NEW JANUARY 2017
- EMS DUTY OFFICER NOTIFICATION POLICY** – NEW JANUARY 2017 - has been finalized and implemented by Alameda County Regional Emergency Communications Center to improve EMS system performance through notification of and action by EMS Agency Duty Officers.
- MCI POLICY** – UPDATED POLICY – strengthened to clarify patient triage, transport, and tracking; SALT or START triage can be used for pediatric patients.
- FIRELINE POLICY** – NEW MAY 2016 -Establishes procedures for FIRELINE Paramedic operations by Alameda County Accredited Paramedics at locations outside of the jurisdictional area of the Alameda County Emergency Medical Services Agency when requested through the Statewide Fire and Rescue Mutual Aid System, to respond to and provide ALS care on the fire line at wildland fires.
- ASSAULT / ABUSE / DOMESTIC VIOLENCE**- UPDATED POLICY – Per updated policy, DV lethality screen and hotline call may be performed; ALCO EMS is amongst the first EMS systems in the US to implement an EMS Lethality Assessment Program (LAP); studying impact of LAP implementation in the interest of improving navigation of DV patients to resources.
- TRANSPORT GUIDELINES** - UPDATED POLICY – Per revised policy, “reasonable transport time” should be considered.

## EXECUTIVE SUMMARY - SECTION 2: SYSTEM CHANGES

- **ACUTE STROKE** - UPDATED POLICY – Facilitates communication of vital stroke witness information; update planned for 2018 with addition of assessment gaze
- **ASYSTOLE / PEA** - UPDATED POLICY – Aligns with AHA ACLS guidelines
- **EPINEPHRINE** - UPDATED POLICY – Simplifying the epinephrine concentration
- **DEATH IN THE FIELD** – UPDATED POLICY – Clarifies patient treatment and withholding resuscitation
- **ADVANCED AIRWAY MANAGEMENT** - UPDATED POLICY – definition of “attempt” as “insertion of laryngoscope blade”

### **CLINICAL PATIENT CARE** – POLICY UPDATES

- **“CARDIAC ARREST”** – Aligns with 2015 AHA Guidelines
- **“EARLY NOTIFICATION OF SPECIALTY CENTERS”**
- **“FALL RISK ASSESSMENT”** – Consistent with CDC “Stopping Elderly Accidents Deaths and Injuries” (STEADI)
- **MODIFIED VALSALVA MANEUVER**
- **TXA INDICATORS** – Early evidence from the Cal-PAT trial 2016 – feasibility of pre-hospital identification and administration of TXA by paramedics has been demonstrated.
- **TRANSFER OF CARE (TOC) GUIDELINES** (Updated & Clarified) – Policy initially developed in 2015.
  - Transfer of Care to emergency department personnel of patients arriving by 911 emergency ambulance requires a “Time Standard” of no greater than 30 minutes. In Alameda County, it remains the expectation of the EMS Agency that transfer of care of patients from 911 ambulances to EDs transpires at the earliest opportunity and not later than 30 minutes following the arrival of the ambulance.
  - **Ambulance Patient Offload Time (APOT)** reports are provided to EMS receiving hospitals by the EMS Agency on a monthly basis to assist in tracking performance. Clarifying and enforcing ALCO EMS expectation (hospital, field and ACRECC):
    - Ambulance Patient Offload Time (30 min or less for transfer of care to hospitals) and implementing process control measures. EMS Director provides clarifications and meets with hospital executive leadership to drive positive change. Significant APOT AND Ambulance Patient Offload Delay (APOD) improvements have been realized and sustained.
  - Duty Officer assists in resolving associated issues; ALCO EMS expectation that hospitals find a suitable location for patients arriving by 911 ambulance and release the crews within 30 minutes.

### **SELECT POLICIES** - CONTINUED FROM 2016-17 EXECUTIVE SUMMARY

- **BYPASS POLICY** – A new ALCO EMS “Extended Wait Times” and “Bypass Policy” was added in May 2015 to mitigate ambulance patient offload delays. This policy was added in the EMS Field Manual 2016 Update.
- **AMBULANCE REROUTING POLICY** – was updated in 2015.
- **ED CLOSURE POLICY** – is required for hospitals downgrading status and / or closures
- **EMERGENCY RE-TRIAGE AND TRANSFERS** is a new policy in 2015.
- **SUSPENSION OF THE DIVERSION** policy was implemented.
- **OUT-OF-COUNTY HOSPITAL CLOSURE** - Effective August 1, 2014, Alameda County EMS suspended the use of ED Saturation and Critical Patient Overload (CPO) diversion indefinitely due to the potential impact of the closure of emergency services at Doctor’s Medical Center, San Pablo (DMC). The prehospital impact of this “out-of-county” hospital closure increased ALCO patient transports and “walk-ins” to ALCO hospitals especially in North County. ALCO EMS met with stakeholders throughout the Bay Area to plan for the potential surge of

## EXECUTIVE SUMMARY - SECTION 2: SYSTEM CHANGES

patients in the emergency departments. The ED status is monitored closely and continually assessed to determine the impact.

### PENDING POLICY UPDATES - PLANNED FOR 2018

- **ASSAULT/ABUSE/DOMESTIC VIOLENCE** – If patient is not transported and if safe, appropriate and feasible, perform a DV Lethality Screen
- **BURN PATIENT CARE** – Remove Base contact requirement
- **CPR** - Update CPR Matrix to 2015 guidelines
- **CRUSH SYNDROME** – Removed Base Contact Requirement
- **HYPERKALEMIA** – Add Albuterol
- **LOCAL OPTIONAL SCOPE** – Pulse Oximetry, Glucometer, ASA, Epinephrine Adult/Pediatric Auto Injectors, Naloxone training and supplies required for BLS 911
- **RESPIRATORY DEPRESSION** – Simplified treatment algorithm
- **BRADYCARDIA/ROSC/SEPSIS/SHOCK POLICIES** – Add Push Dose Epinephrine. Remove Dopamine
- **NEONATE** – Add “In healthy full-term newborns, routine bulb syringe suctioning is not indicated”
- **INTRAOSSUEOUS INFUSION** – Add Humeral EO route

### NEW CONTRACTS, AMENDMENTS, & REQUIREMENT UPDATES - 2016- 2018

- PREVIOUS CHANGES CONTINUED FROM 2016-17

- **ALAMEDA COUNTY BASE HOSPITAL - SUBSIDY**
  - Alameda Health System - Highland (previously Alameda County Medical Center) – Amendments 2016
- **TRAUMA CENTERS** – Master Contract Amendments July 2015-June 2018
  1. Alameda Health System – Highland (previously Alameda County Medical Center)
  2. UCSF Benioff Children’s Hospital Oakland
  3. Sutter Health Eden Medical Center

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  - Contract / MOUs - Master Contract amendments for the 3 Trauma Centers approved for July 2015-16.
  - ACS Certification continues as a requirement of the Alameda County Trauma Center MOU.
  - In May 2016, Alameda County EMS facilitated the American College of Surgeons (ACS) “Trauma Consultation,” survey at the Alameda Health System – Highland Hospital. The completed consultation will assist in creating a roadmap for movement towards Level 1 certification.
  - NEW - Trauma ACS verification in 2017 - Planned for reverification and reverification visits by the American College of Surgeons for the County’s 3 trauma centers. All trauma centers had scheduled ACS visits in 2017.

NEXT PAGE



**ALCO EMS MOUS/CONTRACTS/AMENDMENTS**

**911 SERVICES**

- On May 23, 2017, Alameda County Board of Supervisors authorized the second amendment to the EMS Ambulance Transport Provider amended agreement with Paramedics Plus, extending the contract for two years to June 30, 2019.
- On March 7, 2017, the Alameda County Board extended 911 services by Paramedics Plus, fire department first responder and transport agencies and the Alameda County Regional Emergency Communications Center through October 31, 2017.
  - Extensions of the Alameda County Regional Emergency Communications Center (ACRECC) emergency medical dispatch, First Responder Advanced Life Support (FRALS) as well as 4 fire department based successor ambulance transport agreements are in process.

**FIRST RESPONDER ADVANCED LIFE SUPPORT (FRALS) AND FIRE DEPARTMENT BASED AMBULANCE TRANSPORT**

- Amendments to Agreements provide for services through October 2017.

○ Alameda County Fire	○ City of Alameda *	○ City of Albany *	○ City of Berkeley *
○ City of Dublin	○ City of Emeryville	○ City of Fremont	○ City of Hayward
○ City of Livermore	○ City of Newark	○ City of Oakland	○ City of Piedmont *
○ City of Pleasanton	○ City of San Leandro	○ City of Union City	

\* Provides Ambulance Transport

**ALAMEDA COUNTY REGIONAL EMERGENCY COMMUNICATIONS CENTER**

- (ACRECC) Amendment provides for services through October 2017. An option for extension through October 2021 upon mutual agreement is also contained therein.

**REDDINET**

- ReddiNet MOU renewed June 2016 with EMS and FRALS Transport providers. Alameda County EMS assigned a new ReddiNet Coordinator Cynthia Frankel. ReddiNet contracts were renewed with FRALS transport. NEW - ReddiNet training and exercise conducted on-site for City of Alameda, Piedmont, and Albany Fire Departments in 2017.

**CARDIAC ARREST, STROKE, AND STEMI**

- STEMI/CARDIAC ARREST, STROKE RECEIVING CENTER - MOU RENEWALS:
  - Renewed three year MOU's for Washington Hospital (STEMI/Cardiac Arrest and Stroke Receiving Center), Kaiser Fremont (STEMI/Cardiac Arrest Receiving Center), Highland (STEMI/Cardiac Arrest Receiving Center), Summit Medical Center (Stroke Receiving Center).
- STEMI/CARDIAC ARREST RECEIVING CENTER – NEW MOU:
  - New STEMI receiving hospital Kaiser Permanente Oakland. Established new MOU for Kaiser Permanente Oakland ((STEMI/Cardiac Arrest Receiving Center) went “LIVE” January 1, 2017.
- PROGRAM ADMINISTRATION AND ENHANCEMENTS:
  - October 2015 Cardiac Arrest Registry to Enhance Survival (CARES)
  - January 2016 Primary Stroke Receiving Center MOU (Renewals)
  - January 2016 STEMI Receiving Center MOU (Renewals) - updates including Cardiac Arrest Receiving designation



**ePCR – DEFINITIVE NETWORKS INCORPORATED HOSTING / Training Services**

- (Refer to 2016-17 Progress Update form for additional information) - April 2016 through October 31, 2016. Definitive Networks Incorporated Data Hosting / Training Services contract extension to October 2017. ALCO EMS is currently extending the contract.

**PEDIATRIC READINESS PROJECT - STRENGTHEN PEDIATRIC READINESS**

- Contract with UCSF Benioff Children’s Hospital – Emergency Department (ED) Pediatric Readiness Project Site Visits and follow-up reports with recommendations for improvement conducted between April 2016-2018

**MPDS**

- ALCO EMS rectified a situation that materialized as a result of Version changes in the MPDS system which produced substantially more ECHO level respiratory responses in our system and other large systems which didn’t correspond to patient acuity. ALCO EMS partnered closely with ALCO ACE Accredited EMD centers (Oakland Fire Department and ACRECC) as well as the International Academies of Emergency Dispatch (IAED) to prudently and in an evidence based manner implement changes to resolve the issue.

**ALCO EMS BLS PERMITTED PROVIDERS MOUS – ENSURE SYSTEM OVERSIGHT, COORDINATION AND DISASTER SURGE CAPACITY**

- **BASIC LIFE SUPPORT (BLS) EMS AMBULANCE** – EMS Transport permits in Alameda County listed in table below:

AMR San Francisco	Arcadia Ambulance	Bay Medic Transportation	Bayshore Ambulance
Falck Northern California	Norcal Ambulance	Pro Transport-1	Royal Ambulance
Rural / Metro Ambulance	Westmed Ambulance	Falcon Critical Care Transport	

**CRITICAL CARE PARAMEDIC (CCP)**

- The State EMSA allows Critical Care Paramedic (CCP) inter-facility transport of patients and requires that Alameda County EMS monitor and regulate all paramedic prehospital care. Inter-facility transport is used to transport patients who have been medically stabilized at one facility and need to be transferred to another facility. EMS has adopted the use of state and national inter-facility transport standards to monitor and regulate this program. The CCP Inter-facility Transport Agreement with American Medical Response incorporates County EMS guidelines and standards, patient transfer protocols, data collection and reporting requirements that ensure patient safety.

**FY 2016-2017 - EMS CONTRACTS, PROCUREMENTS, AND MOUS - SUMMARY**

<b>EMS MASTER LIST OF MOUS</b>	<b>PROGRAM LEAD</b>	<b>TYPE</b>
Alta Bates Summit Medical Center Campus	Mike Jacobs	Stroke and STEMI MOU
Kaiser Permanente Oakland	Mike Jacobs	Stroke and STEMI MOU
Alameda Health Systems, Highland	Mike Jacobs	STEMI MOU
Alameda Health Systems, Alameda City Hospital	Mike Jacobs	Stroke MOU
Kaiser Permanente San Leandro	Mike Jacobs	Stroke MOU
Kaiser Permanente Fremont	Mike Jacobs	Stroke and STEMI MOU
St. Rose Hospital	Mike Jacobs	STEMI MOU
Washington Hospital , Fremont	Mike Jacobs	Stroke and STEMI MOU
Stanford Valley Care, Pleasanton	Mike Jacobs	STEMI MOU
Eden Castro Valley	Mike Jacobs	Stroke MOU

FY 2016-2017 - EMS CONTRACTS & PROCUREMENTS				
Program	PARTNERS / PROVIDERS			
EMS	Target Solutions			
EMS	Youth Alive			
SIPP	City of Fremont, Afghan Health & Med Safety			
SIPP	Daybreak Adult Care Centers			
SIPP	Senior Support Program of Tri Valley			
SIPP	St. Mary's Center, Medication Safety Pilot			
SIPP	United Seniors of Oakland & Alameda County			
EMS	RDMHS State			
EMS	Zoll Data Systems			
EMS	First Watch			
EMS	ACRECC Ambulance Dispatch Services			
FRALS	City of Berkeley, FRALS only			
FRALS	City of Alameda, FRALS /Ambulance			
FRALS	City of Albany, FRALS /Ambulance			
FRALS	City of Berkeley, Ambulance Transport only			
FRALS	City of Emeryville, FRALS			
FRALS	City of Fremont, FRALS			
FRALS	City of Hayward, FRALS			
FRALS	City of Livermore, FRALS			
FRALS	City of Newark, FRALS			
FRALS	City of Oakland, FRALS			
FRALS	City of Piedmont, FRALS /Ambulance			
FRALS	City of Pleasanton, FRALS			
FRALS	City of San Leandro, FRALS			
FRALS	Alameda County Fire Dept., FRALS			
FRALS	City of Dublin, FRALS			
FRALS	City of Union City, FRALS			
EMS	Definitive Networks, Incorporated			
EMS	Beyond Lucid Technologies			
EMS	Office of Administrative Hearings (DGS)			
EMS	UCSF Fellowship			
Trauma	Alameda Health System, Adult Trauma			
Trauma	Alameda Health System, Adult Trauma Dispro			
Trauma	Alameda Health System, Base Hospital			
Trauma	Sutter Health Eden Med Center, Trauma			
Trauma	Sutter Health Eden Med Center, Trauma Dispro			
Trauma	UCSF Benioff CHO Pediatric Trauma			
Trauma	UCSF Benioff CHO Pediatric Trauma Dispro			
EMS	Hospital Assn of So Cal (HASC) ReddiNet			
EMS	UCSF Benioff CHO, ED Pediatric Readiness			
EMS	Physio-control/Pulse-point			
EMS	City of Alameda, Community Paramedicine 2017			
EMS	AHS MOU Community Paramedicine			
EMS	Base Hospital Contract			

## SECTION 3: 2016-17 PRIORITY QUALITY IMPROVEMENT/EXPANSION PROJECTS

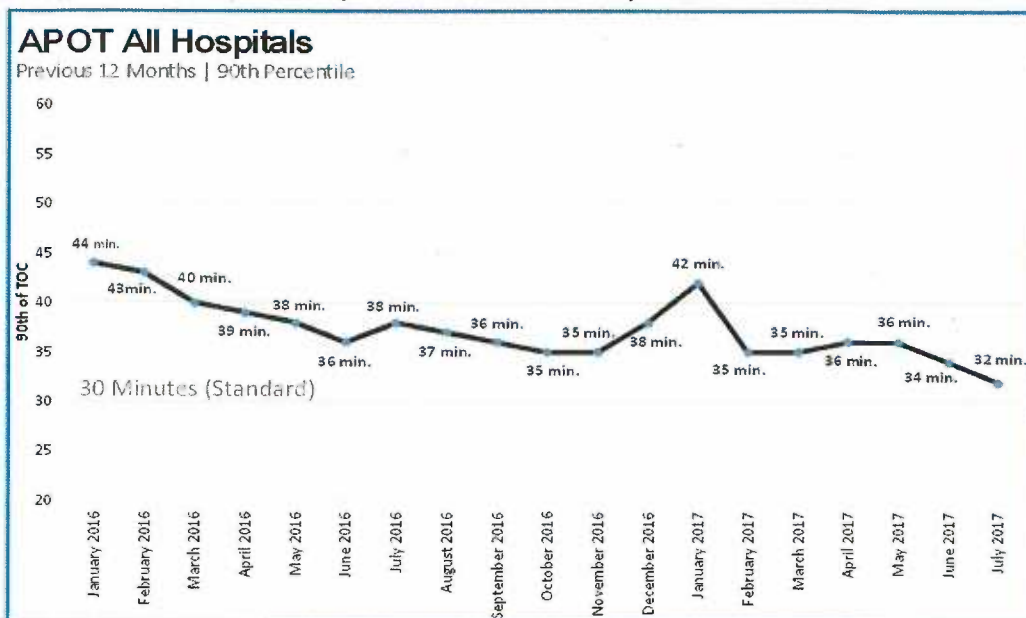
### - PRIORITY ACTIVITIES AND PROGRESS - SUPPORT WORKPLAN GOALS AND SOLUTIONS -

#### QUALITY IMPROVEMENT - BENCHMARKS AND PROGRESS UPDATES

- Continued work on development and implementation of a county wide health information exchange that enables sharing of clinical data between hospitals and the prehospital system.
- Implemented developed plan to reduce ambulance patient offload times at emergency departments (time from ambulance arrival to hospital staff assuming care of patients) in conjunction with EMS provider agencies, hospitals and ACRECC.
- Worked with Paramedics Plus to continue to improve response time performance and address system issues.

#### QUALITY IMPROVEMENT - PROCESS - NEW

- Attained notable reduction system-wide in Ambulance Patient Offload Time (APOT) with process and reporting recognized as best practice by California EMS Authority. Refer to chart below.



- **CQI DATA COLLECTION:** Data update implementation and report dissemination provided as follows:
  - APOT Report
  - Change in Wall time- control chart
  - QI Reports = Stroke, STEMI, trauma reports and behavioral health services reports
  - First Watch
- **PARAMEDICS PLUS AND RESPONSE TIME MONITORING:** Active monitoring of fluctuations in performance by Paramedics Plus and corresponding planning/implementation of corrective procedures related to system operations.
  - Alameda County EMS is aggressively working with Paramedics Plus to continue to improve response time performance and address issues in the system.
  - Clarifying our expectation (hospital, field and ACRECC) regarding ambulance patient offload time (30 min or less for transfer of care to hospitals) and implementing process control measures. Dr. Sporer, EMS Medical Director, and Travis Kusman, EMS Director, continue to meet with hospital executive leadership regarding this issue to ensure positive results are sustained.
  - Alameda County EMS expects hospitals find a suitable location for patients arriving by 911 ambulance and release the crews within 30 minutes.



**QUALITY IMPROVEMENT – INCLUDING TRAUMA CENTERS**

- **QUALITY IMPROVEMENT – “PATIENT CENTRIC” SYSTEM PERFORMANCE** - Clinical / Operational Performance, Policy Compliance and Patient Centric Analysis - Alameda County EMS employs business intelligence software to analyze system participants' compliance with system policies. Operationally, Alameda County EMS ensures that system participants are compliant with response time requirements. Clinically, Alameda County EMS analyzes system data to ensure that patients are receiving appropriate prehospital medical care. Alameda County EMS not only measures compliance with clinical care policies, but also ensures that the measurements and analyses are patient centric. Since all Alameda County system participants are utilizing one single data collection system, Alameda County EMS has unprecedented access to a comprehensive and cohesive picture of the clinical and operational performance of our system. Working closely with its Trauma Centers (TC's), Alameda County EMS participates in the scheduled internal TC system and clinical oversight committee meetings (ALL TC's). This helps to ensure inclusive representation from the stakeholders involved with care of the trauma patient. The Trauma Program Manager for Alameda County works closely with all TC program Managers and their facilities Trauma Process Improvement Coordinator to facilitate timely case closer regarding any EMS related clinical and or operational issues that may impact patient outcomes.
- **QUALITY IMPROVEMENT - DATA MANAGEMENT SYSTEM – “SINGLE ENTRY POINT”** - FRALS and transport agencies report on one data management system for patient care which provides a streamlined data reporting process for the Alameda County EMS system. Our system with a single electronic patient care reporting platform allows for unprecedented QI and a comprehensive overview of our EMS System.
- **EMS DATA ANALYSIS** – Alameda County EMS is expanding data sharing and analysis capability within the system. Currently, ALCO EMS is in the early stages of developing a bi-directional data exchange with Alameda County specialty receiving centers and other system hospitals. All specialty receiving facility MOUs beginning May 2016 will include language requiring participation in a bi-directional data exchange.
  - NEW 2017 - Discussions ongoing with Kaiser Permanente leadership concerning the implementation of a bidirectional data exchange project
- Completed data for the Cardiac Arrest Registry to Enhance Survival 2016 national report. Alameda County EMS has accomplished its first complete year with CARES and the first to be included in the national data.
- **NEMSIS 3.4** – Implementation of NEMSIS 3.4 is scheduled in June 2017. ALCO EMS implemented the CEMSIS data elements (“primary impression” and other elements) in 2016. NEMSIS 2.2.1 data used to run core measure reports for 2016.
- Initiated active participation in quality improvement meetings at ALL Trauma Centers - UCSF Benioff Children's Hospital, Highland Hospital (Alameda Health System), and Eden Hospital.

**DISPATCH SYSTEM AND QUALITY IMPROVEMENT**

- Alameda County has two International Academies of Emergency Dispatch (IAED) Centers of Excellence. Oakland Fire Department (OFD) provides Emergency Medical Dispatch (EMD) services for the City of Oakland. ACRECC (Alameda County Regional Emergency Communications Center) provides EMD services for the remainder of the county. The EMD Centers provide pre-arrival instructions and facilitate Medical Priority Dispatch Systems (MPDS) based prioritization.
- Alameda County has 18 Public Safety Answering Points (PSAPs) that receive 911 calls.



- In an effort to coordinate and standardize emergency medical dispatch functions throughout the County, Alameda County EMS has established a Medical Dispatch Review Committee (MDRC) that is comprised of representatives from ACRECC and the Oakland Fire Department Dispatch Centers as well as the ALCO EMS Director, ALCO EMS Medical Director and provider agency leadership.
- The establishment of this committee has assisted in standardizing EMS resource assignment to incidents throughout the county. Establishing cross-center dialogue has improved our data collection with respect to MPDS activities. This improved data collection has provided us the means to more accurately assess the effectiveness of our MPDS implementation.

### **SPECIALTY CENTERS - STRENGTHEN AND SUSTAIN SPECIALTY CENTERS**

- GOAL: Continue to foster and improve collaborative relationships with all specialty emergency medical care system stakeholders, with the overarching goal to improve patient outcomes by strengthening continuity of care from dispatch to discharge: STEMI, Cardiac Arrest, Stroke and Trauma.
  - Assist Stroke Receiving Centers in Joint Commission re-accreditation for those that need it.
  - Assist Trauma Centers in American College of Surgeons re-verification for Level I and II status including UCSF Benioff Children’s Hospital, Highland Hospital (Alameda Health System), and Eden.

### **COMMUNICATIONS AND INFORMATION MANAGEMENT – “DAY TO DAY” AND MCI/SURGE EVENTS**

- **REDDINET**– REDDINET ACCESS AND UTILIZATION - expanding “users” beyond existing partners including fire departments with hospitals and prehospital providers (ALS transport and BLS), clinics and skilled nursing facilities.
  - REDDINET - Facilitating ReddiNet Upgrades with new modules and permissions for system disaster response partners in 2017-18; ensuring training and exercises for all Alameda County ReddiNet Users including FRALS transport and BLS
- **EBRCSA RADIO COMMUNICATIONS** – The EMS system has transitioned onto the East Bay Regional Communications System Authority (EBRCSA) platform. Current EBRCSA system capabilities include redundant and interoperable communications with common radio frequencies between fire and ambulance providers, hospitals and law enforcement. Portable EBRCSA radios have been procured by EMS and distributed to hospital emergency command personnel at all receiving facilities with training in their use for emergency management purposes also provided.
  - EBRCSA - ALCO Permitted BLS providers to have EBRCSA radio in each permitted ambulance by year end 2017.
- **CALIFORNIA HEALTH ALERT NETWORK (CAHAN)** – ALCO EMS staff - Adele Pagan, IT, Cynthia Frankel, RN, and Roberto Vallejo, Administrative Support, have completed the required CAHAN Administrator training. California quarterly exercises are conducted with the Operational Area EMS system providers.
- **LOCAL ALAMEDA COUNTY MASS NOTIFICATION SYSTEM** – Everbridge – ALCO Office of Homeland Security has acquired a new mass notification system. The ALCO EMS Staff - Adele Pagan, IT, (Lead) and Cynthia Frankel, RN, are also the points of contact for the EMS notification components. EMS contact updates verified in CAHAN system.
- **INFORMATION MANAGEMENT UPGRADES - WEBEOC** – Alameda Operational Area has transitioned from RIMS to the new WEBEOC information management system. Medical Health Branch – HCSA DOC linkage to possibly be augmented with Veoci

## EXECUTIVE SUMMARY – SECTION 3: PRIORITY QUALITY IMPROVEMENT PROJECTS

- **EMS RESOURCE DIRECTORY/METRICS** – has been updated in 2016-17 with Health Care System points of contact for disaster events. Facility Surge and Resource Capability information is also included in the directory.

### **BLS AND QUALITY IMPROVEMENT**

- **NON-911 PROVIDER COMMUNICATIONS:** Developed and implemented plan to enhance emergency radio communications / interoperability with permitted non-emergency ambulance provider agencies.
- Began a weekly EBRCSA radio test with the ALCO BLS providers
- **BLS INSPECTIONS** - Re-inspected the ALCO Permitted BLS providers
- **NON-911 PROVIDER TRAINING:** Initiated and continued quarterly permitted non-emergency ambulance provider coordination meetings and training.
- **AMBULANCE STRIKE TEAM / MEDICAL TASK FORCE LEADER TRAINING: Multiple courses led by ALCO EMS offered throughout Region II.**

### **CERTIFICATIONS / INVESTIGATIONS**

- **PROVIDER/CERTIFICATION INVESTIGATIONS:** Continued work on several active provider investigations / certification actions.

### **EMS ADMINISTRATION / IT**

- Developed and received internal and HCSA approval of EMS Website redesign proposal
- Complete upgrade to Office 2014 from Office 2010. EMS staff upgrade from Office Suite, 2010 to 2013. Secured BPO with Saitech for IT equipment. Continue work on EMS update and website redesign in 2017.

### **PUBLIC SAFETY FIRST AID PROGRAMS – NEW PROGRAM**

- Implemented credentialing program as required by state regulation for Public Safety First Aid programs in 2017.

### **PARAMEDIC PRECEPTOR PROGRAM**

- Oversight, and regulation of paramedic preceptors. Outcomes: 121 approved preceptors across 3 transport providers; 6 preceptor renewals; Series of 3 preceptor meetings ( one Tuesday meeting and one Friday meeting to accommodate work schedules and discuss same topics); 2<sup>nd</sup> Annual Paramedic Preceptor Seminar (also one Tuesday meeting and one Friday meeting to accommodate work schedules)



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## SECTION 4 – 2016-17 DISASTER PROGRAM

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– PREPAREDNESS PROJECT HIGHLIGHTS AND ACTIVITIES -

### **SURGE / DISASTER READINESS**

#### **ALAMEDA COUNTY EOC MEDICAL/ HEALTH BRANCH & ALTERNATE LOCATIONS**

– OPTIMIZE FUNCTIONALITY

- **OPERATIONAL AREA EOC** – ALCO EMS is collaborating with the Sheriff's Department Office of Emergency Services and Homeland Security to upgrade the operational area EOC Medical/Health Branch with improved physical space functionality and technology assets. Finalized plans and vendors to conduct work to upgrade the medical health branch at the EOC physically and technologically in conjunction with the Sheriff's office. Conducted RFP and planning to upgrade Medical Health Branch of the County Emergency Operations Center.
- **MOBILE OFF-SITE OPERATIONAL CAPABILITY**- EMS Director, EMS Deputy Director and EMS Coordinators have new mobile laptops with extended life batteries and enhanced connectivity to ensure operational self-sufficiency, reliable communications and information management capability. Additional satellite based voice and data communications technology procured and implemented. Each EMS Duty Officer provided with EBRCSA / VHF capable portable radio.

#### **HPP PROGRAM – DISASTER GRANT PROJECT**

- **HPP ADMINISTRATIVE CHANGES** - The administration of the Hospital Preparedness Program (HPP) grant continues under the Alameda County Public Health Department. The HPP EMS Coordinator Cynthia Frankel continues to coordinate the HPP workplan deliverables with the HPP Coordinator in Public Health.
  - ALCO EMS staff support activities of the HPP workplan (such as the 700 megahertz radio programs and the annual statewide exercise). Cynthia Frankel is the co-project lead for the statewide exercises in 2016 and 2017.
  - ReddiNet coordination facilitated by Cynthia Frankel, ReddiNet Coordinator, remains essential program component
- **DISASTER PREPAREDNESS HEALTH COALITION (DPHC)** - The EMS HPP EMS Coordinator – Cynthia Frankel, RN, continues to support the DPHC Steering Committee and Workgroups to leverage system-wide partners and to facilitate effective planning and exercises. EMS Director and Prehospital Care Coordinators support the DPHC as needed. Regional Disaster Medical / Health Specialist – Kelly Coleman resides within Alameda County EMS and provides on-going state/ regional updates, training and planning activities for DPHC.
- **2016-17 HPP WORKPLAN** – Development and implementation of 2016-17 work plan; prepared 2017-18 work plan

#### **DISASTER / SURGE PLAN PROJECTS – HPP DELIVERABLES**

- **MEDICAL SURGE PROJECTS** – The priority EMS benchmark in the HPP deliverables is to strengthen medical surge capability and capacity in a disaster. The focus is to clarify the health care system response for a surge of patients that exceeds the system's routinely available existing resources. The goal is to strengthen the plan for medical surge bed expansion/decompression, patient tracking, patient movement, and effective pediatric response. In 2015, Alameda County started its Phase 1 - Medical Surge project with a focus on health care facility assessments to identify their medical surge capabilities and needs. In Phase 2 - the focus was on prehospital BLS medical surge capability assessment and development of hospital bed expansion/decompression options for critical patients



- **MEDICAL SURGE PLAN** – In 2016, the medical surge framework for hospital bed expansion was revised with bed expansion options for expanding ICU and PICU capacity. In 2017, the plan is to develop a process for planning and implementing a team to ensure bed expansion is feasible. Alameda County EMS will leverage critical care experts from Alameda County hospitals (ICU and PICU) to clarify realistic disaster response expansion methodology for teams to mobilize for bed expansion. The medical surge workgroup will continue to develop the hospital bed expansion / decompression framework for a surge of critical patients
- **PEDIATRIC MEDICAL SURGE PLAN** - Alameda County EMS has adapted the National Association of State EMS Officials (NASEMSO) Emergency Medical Services Domestic Preparedness Improvement Strategy (January 2015). Specifically to evolve EMS systems, organizations, and personnel to provide optimal care to pediatric patients during medical disaster situations. Pediatric considerations addressed in medical surge plan.
- **CALIFORNIA CHILDREN'S DISASTER CONOPS DRAFT FRAMEWORK**
  - Developed and disseminated to California EMSA and CDPH. Draft Framework Poster developed to with the CONOPs benchmarks and recommended requirements.
- **EMS AND CLINIC FIELD TREATMENT SITE CO-LOCATION Project**
  - Developed EMS and Clinic Field Treatment Site Co-location feasibility study design in conjunction with Public Health and HPP grant steering committee.
  - Planned assessment/matrix in 2017-18: Community Health Center disaster medical surge plans; side by side medical operations for autonomous medical entities; and develop matrix of key components required for coordination of efforts
- **MHOAC GUIDE** – Plan to develop MHOAC Guide customized to Alameda County in 2017-18
- **CALIFORNIA PATIENT MOVEMENT PLAN** – ALCO EMS participated in state tabletop 2017; provided input to plan

#### RDMHS PROJECTS

- **REGIONAL DISASTER MEDICAL HEALTH SPECIALIST (RDMHS) POSITION** - ALCO EMS continues to provide regional disaster medical health coordination services to the California EMS Authority under contract. The Regional Disaster Medical Health Specialist (RDMHS) position is the component of the Regional Disaster Medical and Health Coordination Program that directly supports regional disaster preparedness, response, mitigation, and recovery activities. .
- **REGIONAL DISASTER MEDICAL HEALTH SPECIALIST PROGRAM** - The RDMHS – Kelly Coleman, EMT-P, manages the program which includes: 24/7 response to Region II emergencies; emergency mutual aid coordination for medical and health including processing situation reports and resource requests from the Region II Operational Areas; management of the Alameda county MHOAC directory including the metrics resource directory; participation in Urban Shield including the organization of the Ambulance Strike Team mass casualty scenario. The RDMHS also leads the regional Ebola and Infectious Disease Transportation project. EMS Director Travis Kusman provides support and assumes RDMHS duties when Mr. Coleman is unavailable.
- **EBOLA / INFECTIOUS DISEASE TRANSPORTATION PROJECT** - RDMHS manages the workplan for HPP Supplemental Ebola funding for EMS transport; inclusive collaboration with Region II MHOAC's; drafted Ebola transport ConOps, training, and collaborated with the Alameda Hospital Command Center (HCC) to purchase Ebola/ID Personal Protective Equipment and other supplies.

- **PLANS/TRAINING:** RDMHS Region II coordinated and attended an EMS/Ebola unit training offered in conjunction with Kaiser Permanente Oakland and served on the work groups for several different statewide plans including the Statewide Patient Movement Plan and the Emergency Operations Manual revision. Participation in “operation Ecocide” with FBI WMD, Cal Guard 95<sup>th</sup> CST, and local Hazmat/Fire/EMS responders in 2016. Taught Medical/Health EOM training in Pleasant Hill August 23, 2016. Taught EOM class March 16, 2017 in Marin County. Instructed EOM training class in Alameda County on May 25, 2017. Conducted Ambulance Strike Team exercise as part of Urban Shield September 9-12, 2016 in Alameda County. Conducted Ambulance Strike Team Leader class trainings on October 29, 2016 and April 18, 2016. Participated in 2016 and 2017 upcoming statewide medical/health exercises. Participated in Planning Workgroup for Health Care Services Agency Emergency Operations Leadership Team which is co-chaired by the County Health Officer and EMS Director.
- **MUTUAL SUPPORT AGREEMENTS:** RDMHS facilitated the signed agreements for Region II operational areas.

#### **DISASTER PLANNING PARTNERSHIP – TEAM PROJECTS**

- **HEALTH CARE SERVICES AGENCY (HCSA) EMERGENCY OPERATIONS LEADERSHIP TEAM**
  - Co-chaired by the County Health Officer and EMS Director
  - Integrating HCSA leadership including Behavioral Health, Public Health, Environmental Health with EMS to strengthen understanding and clarity of disaster response roles and functions
  - Overseeing and guiding public health and medical preparedness strategies and priorities; ensuring agency-wide coordination of Medical Health Operational Area Coordination (MHOAC) program; clarifying leadership roles
  - Establishing internal HCSA and external disaster communications system (including Mass Notification System)

#### **REGIONAL AND STATE PLANNING COMMITTEES – ALCO EMS PARTICIPATION**

- Alameda County EMS staff – EMS Director, MHOAC and HPP EMSA Coordinator support emergency planning projects;
- Providing recommendations and decisions on an ad-hoc basis to mitigate and support disaster response events
- **MEDICAL HEALTH OPERATIONAL AREA COORDINATOR (MHOAC) REGION 2 COMMITTEE**
  - Facilitated by RDMHS. Conducted Region II quarterly meetings in 2016 and 2017.
- **CA CHILDREN’S DISASTER CONOPS PLANNING COMMITTEE**
  - EMS for Children Coordinator supports CDPH/EMSA to develop EOM annex
- **ASSOCIATION OF BAY AREA HEALTH OFFICERS (ABAHO)** – Participated in developing Multi-Agency Coordination (MAC) Guide, Medical Shelter Project, and Incident Response Guides (IRG)
- Participated on the work groups for several different statewide plans including the Statewide Patient Movement Plan and the Emergency Operations Manual revision. Refer to other regional projects above in RMHS section.

#### **DISASTER TEAMS**

- **AMBULANCE STRIKE TEAMS** - Started and maintained the quarterly Region 2 RDMHS Ambulance Strike team leader course: 08/25/2016; 09/29/2016; 01/18/2017; and 04/18/2018
- **TEMS TEAM** - Continued the maintenance program of the ALCO TEMS team and training Conducted Tactical Emergency Medical Services (TEMS) Training with Paramedics Plus, San Leandro Police, Oakland Police and the Alameda County Sheriff’s Department in 2017. Continued the maintenance program of the ALCO TEMS team and training.



## EXECUTIVE SUMMARY – SECTION 4: DISASTER PROGRAM

- **TACTICAL MEDICAL TECHNICIAN (TMT):** Initiated and continued program development of a 40 hour tactical. Medical Technician (TMT) course submitted to the State EMS Authority and approved.

### **STATEWIDE MEDICAL/HEALTH MCI EXERCISES**

- The Alameda County EMS Director, RDMHS Region II and all PHCCs participated in the Statewide Medical Health Exercise planning and event at the Emergency Operations Center (EOC), and Regional EOC. The Alameda County EMS HPP EMSA Coordinator was the co-project lead for the planning of the table-top and functional exercises in 2016 and 2017. The terrorism MCI table-top is scheduled for September 26, 2017 and the functional is scheduled for November 16, 2017.

### **MCI/SURGE/DISASTER TRAINING – INCLUDES ACTIVE SHOOTER AND TERRORISM**

- **AMBULANCE STRIKE TEAM LEADER (ASTL)** Led 2 Ambulance Strike Team Leader (ASTL) training courses open to California Mutual Aid Region II provider agencies credentialing approximately 50 leadership personnel.
- **AMBULANCE STRIKE TEAM:** Trained several fire departments and EMS providers regionally in Ambulance Strike Team / Medical Task Force operations – approximately 50 field leadership personnel trained.
  - Started and maintained the quarterly Region 2 RDMHS Ambulance Strike team leader course
- **TACTICAL MEDICINE TECHNICIAN COURSE** - Developed, refined, gained local and Law Enforcement (POST) approval for a 40 hour Tactical Medicine Technician course. Designed curriculum and received state level law and EMS approval to conduct 40 hour Tactical Medical Technician (TMT) course
- **TACTICAL EMERGENCY MEDICAL SERVICES (TEMS) TRAINING:** Provided Tactical Emergency Medical Services (TEMS) training to Paramedics Plus and Union City Police Department. Conducted Tactical Emergency Medical Services (TEMS) Training with Paramedics Plus, San Leandro Police, Oakland Police, Alameda County Sheriff's Department
- **ACTIVE SHOOTER TRAINING** - Conducted active shooter training for Union city PD 08/2016 and Berkley City PD 04/2017. Trained several fire department, EMS and law enforcement groups in medical response to active shooter incidents. Conducted active shooter training for ALCO Fire, Union City PD, Berkeley PD
- **URBAN SHIELD TRAINING**
  - Organizer for Urban Shield Mass Casualty Incident full scale exercise 9/2016 and planning for 9/2017
  - Alameda County EMS effectively managed EMS Branch and trained more than 200 medical professionals over the 48 hour event on mass casualty terrorism response in 2016; Participated in Board of Supervisors' Urban Shield Task Force
  - Planning for 2017 Urban Shield Mass Casualty Incident full scale exercise
  - EMS Director Travis Kusman participated in Alameda County Board of Supervisors Urban Shield Task Force.
- **EBOLA/INFECTIOUS DISEASE TRAINING:** RDMHS Region II coordinated and attended an EMS/Ebola unit training offered in conjunction with Kaiser Permanente Oakland. Conducted an Ebola/Infectious Disease training for Regional stakeholders July 14, 2016. Conducted an Ebola Exercise with Kaiser Permanente Oakland and a Regional EMS team from Solano County November 2, 2016.
- **BLS TRANSPORT SURGE TABLETOP** - Conducted first annual non-emergency permitted ambulance provider system surge table top exercise. Continue developing robust plan to more smoothly integrate these providers into the emergency response network in disaster and surge situations.



## EXECUTIVE SUMMARY – SECTION 4: DISASTER PROGRAM

- **CHILD CARE EMERGENCY PLAN “TRAIN THE TRAINER”**- EMS for Children Coordinator designed, developed, and disseminated curriculum to Alameda and Contra Costa County Safety and Injury Prevention Committees

### **DISASTER RESOURCES – EQUIPMENT AND SUPPLIES**

- **MCI/MASS CASUALTY DEPLOYMENT MODULES/TRAILERS** – Purchasing 6 mass casualty deployment modules in 2017-18 for existing MCI trailers with POW response kits and DMS command supplies

## EMERGENCY DISASTER EVENTS AND DEPLOYMENTS

### - EFFICIENT TIMELY DISASTER READINESS AND RESPONSE -

### **DISASTER RESPONSE “REAL EVENTS:”**

#### 2017

- **WARRIORS PARADE** – JUNE 15, 2017 - EMS was involved in supporting the preparation for and coordination of medical response associated with the Warriors celebration in Oakland which was attended by in excess of a million people. EMS planned and prepared for the worst given recent terrorist activity world-wide. This included the pre-deployment of a mass-trauma State EMS Authority Disaster Medical Support Unit at the venue. EMS coordinated with multiple ambulance providers, fire departments, local and federal law enforcement agencies including the FBI, hospitals and EMS Agencies in neighboring counties, facilitating the delivery of highly efficient and effective emergency medical care.
- **OROVILLE DAM** - FEBRUARY 13, 2017 – ALCO EMS led the Region 2 ambulance strike team to Oroville spill way incident; Deployed and provided leadership for the Region 2 ambulance strike team to Oroville spill way incident
- **WOMEN’S MARCH** – JANUARY 21, 2017 – ALCO EMS Duty Officers monitor situation
- **POST ELECTION CIVIL UNREST** – 2016 / 2017 – EMS monitoring situations with potential civil unrest as needed
- **UC BERKELEY PLANNED AND UNPLANNED DEMONSTRATIONS**. APRIL 27, 2017 - Mass Gathering Plan initiated for potential for large crowds and civil unrest in the City of Berkeley due to a visiting political speaker. Due to media significant coverage and violent protests at similar events in the past the City of Berkeley, activated additional police, fire and EMS resources to provide for the safety and security of residents and visitors.

#### 2016

- **“GHOSTSHIP” WAREHOUSE FIRE** – DECEMBER 2, 2016 - Alameda County EMS responded to scene and remotely managed medical health aspect of the “Ghostship warehouse fire” tragedy. Regional Disaster Medical Health Specialist (RDMHS Region II) helped to coordinate response and recovery efforts including the use of behavioral health resources. ALCO EMS recognized for response by the Alameda County Board of Supervisors.
- **CLAYTON FIRE** - AUGUST 2016 – RDMHS responded to support regional medical coordination needs
- **WINTER STORMS 2016** - Alameda County Proclamation of a Local Emergency by the Director of Emergency Services for 2016 winter storms

- **SUPER BOWL** – FEBRUARY 7, 2016 – ALCO EMS participated in Bay Area wide pre-planning and response to support Santa Clara County. EMS staff participated in partial activation of the Alameda County EOC. Deployment of tactical medical teams at the event site included members of the ALCO EMS team. EMS Director Travis Kusman served as the Alameda County EOC Medical Health Branch Director. Additional ALCO EMS staff provided support including: Kelly Coleman, RDMHS, and ALCO EMS Coordinators (Jim Morrissey, Elsie Kusel, Cynthia Frankel, Lee Siegel, and Joshua English).
- **ACE COMMUTER TRAIN DERAILMENT RESPONSE** – MARCH 7, 2016 - EMS Director Travis Kusman served as the Alameda County EOC Medical / Health Branch Director and was supported by: MHOAC Jim Morrissey; RDMHS Kelly Coleman; EMS Coordinator Elsie Kusel at the Operational Area EOC; and Michael Jacobs at the scene of the incident. The incident was stabilized with the transport of approximately 200 injured and non-injured persons accomplished in conjunction with multiple fire and law enforcement agencies and other emergency responders and management teams. ALCO EMS was honored for the role by the Alameda County Board of Supervisors.

2015

- **ROCKY FIRE, LAKE COUNTY; VALLEY FIRE-LAKE COUNTY; WRAGG FIRE- NAPA / SOLANO COUNTY** - SEPTEMBER 2015 – Kelly Coleman, RDMHS coordinated situation reporting and mutual aid resource requests -
- **VALLEY FIRE AND CALISTOGA SHELTER RESPONSE, NAPA** – SEPTEMBER 12 –OCTOBER 2015 - Cynthia Frankel, HPP EMSA Coordinator deployed for the EOC Medical Relief Team at the Calistoga Fairground from September 19-20, 2015. Kelly Coleman, RDMHS provided the regional mutual aid coordination from September 12 through October 2015 to support recovery efforts.

## SECTION 5 – 2016-17 INNOVATION HIGHLIGHTS

### TECHNOLOGY

#### **PATIENT CARE – TECHNOLOGY / SERVICE**

- Mechanical CPR devices are available on all first responder fire engines as well as EMS Supervisor vehicles.
- Fully functional cardiac monitor / defibrillators including 12 lead EKG acquisition and transmission, capnography, noninvasive blood pressure monitoring, quantitative and waveform end-tidal CO2 measurement, pulse oximetry and pacing capability are available on all ALS units
- System Status Management of the County EOA contractor's ambulances is guided by an evidence based posting plan and MARVLIS analytic technology.
- Hydraulic stretchers are available on all of the County EOA contractor's ALS and BLS transporting units
- Four field based and ALS capable and equipped EMS Supervisors are available 24/7 and actively involved in the system, responding to all ECHO as well as other high priority level incidents, providing real-time clinical guidance and feedback to other providers.
- In conjunction with the County EOA Contractor, ALCO EMS has implemented and continues to develop an active Tactical Emergency Medical Support (TEMS) program including 80 hours of training via a California EMS Authority approved curriculum and Level IIIA ballistic protection for Tactical Paramedics.

### PERSONNEL

#### **EMS & DISASTER MEDICINE FELLOW**

- Alameda County EMS has a contract with the University of California, San Francisco (UCSF) Department of Emergency Medicine for the provision of emergency medicine focused lectures and other services by a Medical Fellow. UCSF has appointed a half-time Medical Fellow, who is a qualified physician in the field of emergency medicine to educate and train EMS staff. The Fellow also assists in the development of appropriate training materials for the annual paramedic update trainings and presents at Bay Area Paramedic Journal Club meetings. The new EMS fellow Melody Glen began in July 2016 and will leave the EMS agency in June 2017. EMS Fellow contributions include: Book Club Sessions: "Evicted, Poverty and Profit in the American City" by M.Glenn, MD. A new EMS fellow will begin in June 2018.

### INCLUSIVE PARTNERSHIPS AND INTEGRATION

#### **"WHOLE PERSON" CARE METHODOLOGY IMPLEMENTATION**

#### **BI-DIRECTIONAL EXCHANGE OF HEALTH INFORMATION**

- HEALTH CARE SERVICES AGENCY CROSS SECTOR PLANNING: Continue to actively engage in discussions with the "Whole Person" Care team at the Health Care Services Agency (HCSA) level to identify and act upon collaborative opportunities relating to bi-directional exchange of health information.

#### **FREQUENT 911/EMERGENCY USERS**

- Alameda County EMS is involved in "Hope Center Partnership" and "Whole Person Care" Project.
  - These programs strive to develop and provide comprehensive care to those in need, ultimately decreasing their dependence on and use of the 911 system
  - Hope Center Partnership; finalized BAA to share data.
  - Initial reports sent, analyzed by HOPE team
  - Program discontinued due to duplicative work with Whole Person Project application efforts



**BEHAVIORAL HEALTH CARE PARTNERSHIP – INCLUSIVE LINKAGE WITH EMS:**

- VISION - Continued collaboration with BHCS and AC3 team in the interest of delivering the right care to the right Patient at the right cost at the right time for the right outcome \*\*
- LEADERSHIP - Engaged at multiple levels with County Behavioral Health Care System (BHCS) partners.
  - HCSA has hired a BHCS Director of Crisis Services (Kate Jones) who is hiring / forming a team to support her efforts.
  - Facilitated collaborative efforts of HCSA Emergency Operations Leadership Team to include BHCS
- INITIATIVES - Developed new mental health initiatives. Initiated numerous Measure A associated initiatives including contract renewals and generation of request for funding for collaborative work with BHCS
- 5150 RESPONSE
  - Continued developing strategies in conjunction with BHCS leadership to better manage 5150 individuals, reducing corresponding impact on the 911 emergency response system and enhancing service level to patients.
  - BHCS and EMS together will drive forward momentum on multiple fronts including how our healthcare system as a whole meets the needs of the 5150 population. Dr. Melissa Valas (Psychiatrist) hired by Whole Person Care program as crisis services liaison to BHCS and EMS.

**FUNCTIONAL NEEDS AND AT RISK – OTHER PROGRAMS**

- INTELLECTUAL AND DEVELOPMENTAL DISABLED POPULATION (IDD) PROJECTS
- IDD FORENSIC TEAM - initiated 2016.
  - Alameda County EMS is a member of the Alameda County Multi-Discipline Forensic Team (MDFT) started in 2016
- Mission statement developed: IDDFTE is an inclusive and collaborative team assembled to improve services for individuals with intellectually & developmentally disabilities who require forensic support in the East Bay
- Three meetings conducted with representation from the Development Disabilities Council (DDC), board and care homes, SMEs with professional experience dealing with this population, and parents
- Co-held a meeting with the Health & Wellness group with the DDC
- Plans started to have training for first responders (LE, Fire, EMS)
- Applied for grant through Autism Speaks for autism awareness training
- PATIENTS WITH MENTAL HEALTH ISSUES - Progress:
  - Attended MDFT meetings- networking with local LE, BHCS, probation, DA, veterans programs, BH advocates, multiple social services CBOs; Provided reports for transported patients on 5150 holds to various stakeholders; Worked with JGP and Telecare for specific high utilizer; emergency services utilization reduced considerably by end 2016
- DOMESTIC VIOLENCE PROJECT
  - Domestic Violence - DV Policy update in development; Established partnership with Family Violence Law Center (FVLC) to take DV referrals from the field; Obtained license with Maryland Network Against Domestic Violence (MNADV) for use of Lethality Assessment Protocol (LAP) for First Responders. LAP - evidence-based program that identifies lethality risk; connects victims of DV to services; Partnership with EMS Chiefs to bring in representative from MNADV for training
  - Train-the-trainer for LAP conducted; Discrepancy with previous interpretation of mandatory reporting requirements and procedures identified; Early data collection for DV incidents

INFORMATION DISSEMINATION

**EMS MOBILE FIELD MANUAL**

- In an effort to modernize the delivery of our local field treatment protocols, ALCO EMS has developed a Mobile Field Manual that runs as a native application on both Android and iOS handsets and tablets. By digitizing the delivery of the ALCO EMS field manual, Alameda County EMS is better able to disseminate minor corrections mid-year relative to the previous dependence on a hard copy of the manual.
- The EMS Mobile Field Manual application also provides several useful drug calculators that can assist clinicians at the point of care; this is especially useful for weight based pediatric drug dosages. Another feature that the application provides is a GPS enabled mapping system that can assist clinicians at the POC to make destination decisions for specialty care (STEMI, stroke, trauma, etc.) based on real-time traffic conditions. This will facilitate decision making during peak traffic hours when the closest hospital destination is not always the fastest one to get to.

**WEB-BASED INFORMATION**

- **ALAMEDA COUNTY EMS WEBSITE / BLOG** - The EMS Agency established an online blog, "ALCO EMS Blog," in December 2013. ALCO EMS highlights new and changed policies, happenings within the EMS system, provider updates, news about upcoming conferences and continuing education events, injury prevention news, staff updates, and stories of EMS in action. There is a subscribe button on the site. This blog will be transitioned into updated EMS website in 2017.

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## SECTION 6 – MODEL PROGRAMS AND PROJECTS AT THE FOREFRONT

### SPECIAL POPULATIONS - REGISTRY AND DATA COLLECTION

- **CARDIAC ARREST REGISTRY** - to Enhance Survival (CARES Registry) – August 2014
- Alameda County EMS provided complete data for the Cardiac Arrest Registry to Enhance Survival 2016 national report. This was Alameda County EMS' first complete year with CARES and the first to be included in the national data.
- **SEPSIS ALERT PROGRAM** – Screening tool designed to identify potential sepsis patients with EMS providing “sepsis alert” to Receiving Hospitals in advance of patient arrival, thereby facilitating initiation of critical interventions in the ED at the earliest opportunity.

### SPECIALTY CENTERS - STROKE AND STEMI / CARDIAC ARREST

- Primary Stroke Receiving Center (PSRC)
- STEMI / Cardiac Arrest Receiving Center (SRC / CARC)
- **Alameda County Stroke Centers** - MOUs

• Kaiser Permanente Oakland	• Alta Bates Summit Campus - Oakland
• Alameda Health System – City of Alameda	• Kaiser Permanente – San Leandro
• Kaiser Permanente Fremont	• Washington Hospital - Fremont
• Sutter Eden – Castro Valley	

- **Alameda County STEMI Receiving / Cardiac Arrest Centers**

• Alameda Health System – Highland	• Alta Bates Summit Campus – Oakland
• Kaiser Permanente Fremont	• Stanford ValleyCare
• Kaiser Permanente Oakland	• St. Rose
• Washington Hospital – Fremont	

\* Kaiser Permanente Oakland became a STEMI Receiving / Cardiac Arrest Center in January 2017.

- Alameda County EMS has positive patient outcomes for Alameda County specialty centers (Stroke and STEMI Receiving Centers) who have embraced performance improvements as follows:
  - The percent of Patients with Acute Ischemic Stroke who receive TPA. - This has hovered around 7-9% but we now have centers that have achieved rates greater than 40%. All Stroke Centers are trending positively.
  - The door to balloon time for TPA administration. The national standard is for this to occur in less than 60 minutes. The average of 60 minutes has been achieved by all of our hospitals and many of them are moving toward a new standard of 45 minutes or less at the 90<sup>th</sup> percentile.
  - Kaiser Permanente has developed a unique system using dedicated gurneys that can weigh the patient, teleneurology to assist in clinical decision-making, and multiple other process improvements that are improving both of these indicators.
  - Numbers of patients transported to Comprehensive Stroke Center remains low at less than 1-2% of stroke alert patients.

### TRAINING

#### **AMBULANCE STRIKE TEAM LEADER (ASTL)**

- Led 2 Ambulance Strike Team Leader (ASTL) training courses open to California Mutual Aid Region II provider agencies; provided credentialing for approximately 50 leadership personnel.



### **URBAN SHIELD**

- Tactical EMS / Mass Casualty hi-fidelity training event – Alameda County EMS plans and leads the EMS Operations component of the Urban Shield event held September 9-11, 2016 and scheduled for September 2017. ALCO EMS staff – Elsie Kusel, Paramedic, and Jim Morrissey, Paramedic, were the medical operations leads in September 2015 and 2016. Urban Shield has grown into a comprehensive full-scale regional preparedness exercise. Urban Shield provides the opportunity to assess and improve the overall Bay Area UASI Region’s response capabilities in a high-threat, high density, urban area.

### **EMS CORPS**

- EMS Corps is a completely in-house program that provides life coaching, mentoring, case management, counseling and EMT training to create opportunity for careers in healthcare and public safety for young men of color and change the statistical trajectory of their lives.
  - Most recent 2017 cohort graduated with 73% National Registry passage rate which is above the national average
  - Recruitment for upcoming cohort completed
  - Initiated process with Merritt College to enable granting of academic credit for EMS Corps participants
  - Initiated process to secure apprenticeship certification for EMS Corps with California State Board of Apprenticeships
    - Implemented MOU with San Mateo County EMS and Social Services to enable participation of students in the 12<sup>th</sup> EMS Corps Cohort.
    - 11<sup>th</sup> EMS Corps cohort. - Graduates have been successful obtaining employment. The outcomes are as follows: 7 EMT’s; 11 graduates are employed in the medical field; 1 Alameda County firefighter; 2 Oakland firefighters; 1 San Francisco firefighter; 1 Bart Police Officer; 1 Oakland Police Officer; 1 enlisted in the United States Navy; and 1 is in his third year at Howard Medical School

### **CPR 7**

- CPR 7 is a program developed to train public school 7<sup>th</sup> graders in Alameda County in CPR. The goal is to increase the percentage of sudden cardiac arrest victims who receive effective bystander CPR. Alameda County EMS in the fifth school year (2014-15) of the program during which 31 middle schools participated. Alameda County EMS estimates that as of the end of this school year it will have facilitated training nearly 10% of the Alameda County population in CPR. The project model is now being considered for high school students.

### **OTHER CUSTOMIZED COURSES**

- Human Trafficking Service Providers Course
- Autism Awareness Course in 2017

## **PEDIATRIC PLANS AND PROJECTS**

### **ED PEDIATRIC READINESS PROJECT**

- UCSF Children’s Hospital and Alameda County EMS conducts ED site visits to strengthen the capability of Alameda County hospitals to care for children. The site visit provides customized training and a follow-up report with recommendations for improvement prepared by the UCSF Children’s Hospital Oakland Site Visit Team (ED Medical Director; ED Nursing Director, and Emergency Planner).

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- The pediatric site visits emphasize pediatric medical surge readiness. The overall goals include the following: 1) to conduct a pediatric mock code demonstration; 2) to conduct an assessment for ED pediatric capabilities (“Day-to-Day” and Emergency / Medical Surge Events); 3) to review the site-visit self-assessment tool from the California Pediatric Readiness Project; 4) to provide an ED on-site training with expert feedback and a post site visit hospital specific customized report which includes recommendations on strategies for improvement; and 5) to facilitate on-going collaboration and future training with UCSF Benioff Children’s Hospital. April / June 2016 and March 23, 2017, ED Site Visits were held at Alameda Hospital, Alta Bates Berkeley, Highland, Kaiser Permanente Oakland, Kaiser Permanente San Leandro, San Leandro Hospital, St., Rose Hospital, and Valley Care Medical Center.
- Promote the Triage by Resource Allocation for In-patients (TRAIN) project in 2017-18. Support Sutter Hospital TRAIN implementation project in Alameda County
- Update Pediatric Medical Surge Plan in 2018 and test in 2017 and 2018 exercises

**ALAMEDA COUNTY CHILDREN’S DISASTER CONOPS ANNEX - TO COUNTY EMERGENCY OPERATIONS PLAN**

- The Emergency Medical Services for Children (EMS-C) Coordinator Cynthia Frankel supported the development of the ALCO Children’s Disaster Annex. This Annex is now in the final review stages in the ALCO Operations Council for submission and approval by the Alameda County Board of Supervisors.

**CALIFORNIA CHILDRENS DISASTER CONOPS - ANNEX to EOM**

- Draft framework proposed by the EMS-C Coordinator to support CDPH and EMSA Pediatric Medical Surge project.

**CA NEONATAL/PEDIATRIC DISASTER COALITION**

- Cynthia Frankel, RN, ALCO EMS is the project co-chair for the CA EMSA EMSC-Technical Advisory Committee (TAC) Workgroup and the CA Neonatal/Pediatric Disaster Coalition which provides current pediatric medical surge / disaster readiness resources and conference information via a Googlelist serve.

**PROGRAM INNOVATIONS -**

**COMMUNITY PARTNERSHIPS / EDUCATION**

**COMMUNITY PARAMEDICINE PROGRAM:**

- Alameda County EMS’ two year Community Paramedicine Pilot Project continues in conjunction with the Alameda City Fire Department and the California EMS Authority. Alameda County is one of thirteen sites statewide. The initial term of the pilot terminated at the conclusion of 2016. The evaluation of the Community Paramedicine Pilot Project is a three phase process.

- Phase I was focused on the collection of baseline data that illustrated details of the two targeted populations: patients discharged from the hospital with one of six diagnoses (congestive heart failure, chronic obstructive pulmonary disease, acute myocardial infarction, pneumonia, diabetes, and sepsis); and frequent utilizers of the 911 system and partner hospital emergency department.
- Phase II was focused on the training of the Community Paramedics (CP) and program infrastructure development. After completion of Phases I & II, Alameda County EMS was authorized as of July 1, 2015 to move into Phase III of CP 007's Post-discharge Patients and Frequent 911 User Pilot Projects, which focuses on CP Intervention and is contingent upon:
  - Conformity with Alameda County EMS Agency Approved Community Paramedicine Medical Protocols, Operations Manual, and all addendums and appendices.
  - Conformity in participating with the Local CP Steering Committee in conducting retrospective audits of Community Paramedicine Patient encounters.
  - Conformity with the requirement to report any and all adverse patient outcomes to the EMSA Pilot Project Manager within 24 hours of occurrence.
  - Conformity with the collection and submission of Implementation Data to UCSF on a quarterly basis as required by California Code of Regulations.
- Continued Community Paramedicine Pilot Program work in conjunction with Alameda City Fire Department.
- Extended term of Community Paramedicine Pilot Program with Alameda City Fire Department through November 2017 which includes new partnership with Alameda Health System providing significant funding as well as participation on the local steering committee.

**AED/PAD PROGRAM - HEARTSAFE**

- The Alameda County Project HeartSAFE became a reality in 2012. The project placed 185 AEDs in County and community buildings. To accomplish the aggressive plan, Alameda County EMS partnered with Ice Safety Solutions of Fremont for the site assessments, set-up and installation of the AEDs, CPR/AED training/recertification, and data management in a five year plan. The Contract "Project HeartSAFE" MOU between the County of Alameda EMS and Ice Safety Solutions began in January 21, 2012 and was written to conclude no later than July 18, 2018. The scope of work included: 1) purchase and install 185 Philips Fx AEDs in county agencies/departments, and community locations recommended by the Board of Supervisors 2) conduct AED placement site assessment; 3) provide CPR/AED initial/recertification training every 2 years, 4) ensure AED maintenance with PAD/Battery replacement every 2 years; 5) identify and communicate with AED location site coordinators for training scheduling; and 6) utilize an information management system for project management. The Alameda County AED Coordinator is pursuing an extended contract for the HeartSAFE project with the County Administrator's Risk Management Department. ALCO EMS has collaborated with Alameda County Risk Management which intends to fund maintenance of the Project HeartSAFE AED's located in County owned and leased facilities.



**ALAMEDA COUNTY HEALTH PIPELINE PARTNERSHIP (ACHPP)****SPECIAL POPULATIONS – YOUTH COMMUNITY OPPORTUNITY PROGRAMS**

- **PIPELINE PROJECT** - The Alameda County Healthcare Pipeline Partnership is a collaboration between Alameda County EMS and Berkeley Youth Alternatives (BYA) to build more health care internship positions for youth in Alameda County. BYA acts as the fiscal agent to oversee grants awarded to expose youth to hands-on-internship activities leading to employment in the health industry August 2015 to June 2016.
- **INDUSTRY ADVISORY COUNCIL**: In 2016, ACHPP hosted its Biannual Industry Advisory Council convening, which brought together over 40 community and industry members to discuss barriers in diversifying the health field. In 2017 ACHPP hosted its Biannual Industry Advisory Council Convening, which brought together over 60 community and industry members to discuss barriers in diversifying the health field. At this meeting, multiple action-oriented subcommittees were developed to leverage a collective voice to influence change.
- **ALAMEDA COUNTY HEALTH COACH PROGRAM** - With the support of the Robert Wood Johnson Foundation's Workforce Development Program, Alameda County EMS enables young adults with a passion for health education to work with patients at Alameda Health System-Highland Hospital.

**EMS PARTNER RECOGNITION:**

- Alameda County EMS planned and held the 2016 Alameda County EMS System Provider Recognition event on December 7, 2017 to honor providers and civilians for their heroic efforts and contributions to our EMS System and reunite survivors of critical medical events with their rescuers. Over 200 attendees participated in the event. Alameda County EMS hosted its first annual EMS Week Field Recognition Event with catered meals for fire department and ambulance providers on May 24, 2017. The annual EMS Recognition events to honor system field providers will be held in May, 2018 for EMS Week.

**INJURY PREVENTION**

## COMMUNITY PARTNERSHIPS / EDUCATION

- The Injury Prevention Program consists of two components which target distinct populations, childhood and seniors (60+)

**CHILDHOOD INJURY PREVENTION PROGRAM (IPP)****CHILDHOOD INJURY PREVENTION****PARTNERSHIPS**

- **ALAMEDA SAFE KIDS COALITION**: Facilitated by Alameda County EMS Injury Prevention Program (IPP) staff, the Coalition focuses on prevention of unintentional injuries to children/youth. Coalition members include: East Oakland Health Center, Brighter Beginnings, Alameda Health System (Highland Hospital), Sutter Eden Hospital, Oakland Police Department, California Highway Patrol, Children's Hospital Oakland, Asian Health Services, Alameda County Lead Program, Safe Routes to School, Habitat for Humanity and numerous non-profit and community based organizations.
  - The Safe Kids Coalition meets monthly to share expertise, invites guest speakers and coordinates/participates in 22 car seat check-up events and inspection event. Seven health fairs and the following annual events i.e., Safe Kids International Walk to School Day (October) and World's Largest Swimming Lesson (June) and Safe Kids Day (April); IPP with assistance of other EMS staff and designated partners annually coordinates the EMS Week Kids Day event in May.
- In 2015, Alameda County EMS partnered with National Highway Traffic Safety Administration (NHTSA) to develop video public service announcement on proper car seat installation.

**INJURY PREVENTION TRAINING AND SPECIAL EVENTS**

- Continued conducting monthly car seat Inspection Station (instruct community members on proper car seat installation).
- Continued planning 2017 injury prevention events including Safe Kids Day at the Alameda County Fairgrounds and car seat safety event in conjunction with Alameda County Supervisor Haggerty.

**CAR SEAT BOOSTER COMMUNITY EVENT** was held March 19, 2016 in Oakland. At this event, 500 booster seats and 150 bicycle helmets were distributed to the community. 29 community organizations provided injury prevention/healthy living information and conducted participant activities. The Fremont Booster Distribution event was held April 16, 2016 - 300 Boosters were distributed to the community. The City of Alameda Bike Festival was held April 9, 2016 - 90 helmets, 100 safety vests, and 20 bike locks were distributed to the community at this event and 550 youth participated in a concussion/goggle exercise and education was conducted on helmet usage. The 2017 event took place in June 10, 2017. At this event, 500 booster seats and 500 helmets were distributed to the community.

- **Bike/HELMET SAFETY:** - ALCO EMS staff participated in (4) bike rodeos; fitted/distributed helmets at 7 health fairs.
  - **CHILD PASSENGER SAFETY TRAININGS (CPST):** With the support of certified instructors, ALCO EMS hosted and facilitated Child Passenger Safety Technician (CPST) certification classes in September 2015 and April 2016 and facilitated and hosted one continuing education class in October 2015.
  - **EVERY FIFTEEN MINUTES:** in May 2015 and 2016 ALCO EMS collaborated with Alameda Health System, Sutter Eden Hospital and local law enforcement to provide the program. Assisted with planning and execution of Every 15 Minute Program (i.e. designed to remind teens about how their decisions about drinking and driving impact their lives.

**GRANTS**

- American Automobile Association awarded IPP 350 car seats in 2015 and 2016 for distribution to ALCO EMS community partners - Safe Kids World Wide: Local coalition established in the early 1990's; National organizations routinely provides printed educational materials; updates on best practices, updates on policies and laws; grants and technical assistance.

**RECOGNITION EVENTS**

- Planned and conducted December recognition event for members of Safe Kids Coalition.

**STAFF DEVELOPMENT AND TRAINING / EDUCATION**

- Two EMS Agency staff members attended Public Information Officer training hosted by the Bay Area Urban Security Initiative (UASI).
- Hosted Child Passenger Safety Technician Training Preparation Course.
- MATTER OF BALANCE (MOB) - Partners In Care Foundation grant - Matter of Balance is an evidence-based fall prevention program designed to reduce elderly falls and the fear of falling by cognitive restructuring and exercise. STEADI is a fall risk assessment tool developed by the CDC to identify level of fall risk of individuals. Both programs have been implemented in the County in effort to reduce elderly falls and mitigate injuries.
- Staff were trained as leaders for two evidenced based programs: Master Trainer for Matter of Balance and for Stepping-On; Injury Prevention Staff attended USC Leonard Davis School of Gerontology, Morton Kesten Summit 2016: Aging in Homes and Neighborhood Today; Injury Prevention staff attended California Healthier Living Coalition Meeting.
- Conducted MOB training for newly recruited coaches



**SENIOR INJURY PREVENTION PROGRAM (SIPP) - OLDER POPULATIONS (60+)**

- **SENIOR INJURY PREVENTION PARTNERSHIP:** - Facilitated by Alameda County EMS staff, SIPP focuses on prevention of unintentional injuries to seniors, age 60 plus. SIPP Partnership entities include: Alameda County Area Agency on Aging, Vital Link, United Seniors Oakland-Alameda County, Alameda Health Systems, Sutter Eden Hospital, Spectrum, Senior Support Services of the Tri-Valley, Sutter Health Systems; City of Fremont, St. Mary's Health Center, and other community based and non-profit organizations.
- Participates in "Older Adult Internal Work Group" – a group composed of representatives from County Departments (ie. Health Care Services Agency, Behavioral Health Care and Social Services for the purpose of assisting and improving the provision of services to older adults in Alameda County.
- Conducted community based injury prevention presentations i.e. Falls Prevention, Drive Smart, Emergency Preparedness. Secured senior services partners for STEADI fall risk referrals initiated by EMTs and Paramedics. 5 senior services partners identified to take referrals based on STEADI assessments done in the 911 system; produced online training for field personnel to perform STEADI assessments
- Continued implementation of grant funded evidenced based Matter of Balance (MOB) program. 3 Matter of Balance Coach Training classes have been conducted; 9 Matter of Balance workshops have been completed
- Continued conducting educational classes targeting seniors including Falls Prevention Discussion Group and fall prevention services via two year grant from Partners in Care Foundation 2015-16, Drive Smart and Emergency Preparedness.
- **SIPP CONFERENCE** - In addition to networking and advocacy, SIPP plans and facilitates an annual statewide Senior Injury Prevention Forum. In its 16<sup>th</sup> year, the 2016 forum was held May 25, 2016 in Emeryville, CA. The theme of the Forum was "Growing Bolder." 165 people attended the day-long event. The 2017 event took place in June 2017.
- **DRIVE SMART:** a collaboration with California Highway Patrol (CHP) - 3 to 4 hour Office of Traffic Safety (OTS) sponsored sessions have been conducted 4 times during FY 2016/17.
- **EMERGENCY PREPAREDNESS:** Conducted quarterly in response to outreach to programs serving seniors.
- **HEALTH FAIRS:** Assist with planning and participates in the Healthy Living Festival sponsored by Alameda County Board of Supervisor Nate Miley annually. Alameda County EMS IPP participated at seven (7) community based fairs primarily during April and October.
- **ADVOCACY:** Alameda County EMS staff serve on Alameda County Medication Coalition and Internal Work Group
- **EMS WEEK:** Host the May meeting of the Alameda County Round Table which is comprised of member organizations serving seniors.
- **GRANTS:** California Department of Public Health for the second year awarded funds to Alameda County EMS to implement two evidenced based programs—Stepping On and Tai Chi and the annual SIPP forum. Stepping On consists of 8 week sessions and Tai Chi consists of 12 week sessions held throughout the year. Partners In Care Foundation in September 2015 awarded Alameda County EMS a two-year grant to implement Matter of Balance (MOB) and STEADI, two evidence based programs. Alameda County Measure A funds were awarded to ALCO EMS to establish community based medication management programs. The following organizations were awarded the funds and have successfully accomplished the terms of their respective contracts:
  - AFGHAN HEALTH PROMOTER PROJECT - City of Fremont; Daybreak Adult Centers; Senior Support Program of Tri Valley; St. Mary's Center; United Seniors of Oakland/Alameda



## SECTION 7 – 2016-17 WORKPLAN NEW

### IDENTIFIED MAJOR NEEDS:

1. Update EMS System Evaluation and release RFP for 911 emergency ambulance services to County Exclusive Operating Area (EOA). Implement successor contracts for fire department based ambulance services in Alameda, Albany, Berkeley and Piedmont. Extend agreement with Alameda County Regional Communications Center (ACRECC) for Emergency Medical Dispatch (EMD) services. Implement successor contracts for First Responder Advanced Life Support (FRALS) services.
2. Continue to facilitate reductions system-wide in Ambulance Patient Offload Time (APOT), Ambulance Patient Offload Delays (APOD) and the number of avoidable ambulance transports
3. Adapt to on-going hospital transitions and prepare for reorganizations/consolidations including the possible closure / relocation of Alta Bates Summit Berkeley Campus at some time prior to 2030.
4. Continue to monitor and ensure contract compliance - Paramedics Plus, fire based first responder and transport providers, and Alameda County Regional Communications Center as priorities
5. Continue to develop / seek to participate in county-wide health information exchange. Strengthen Medical Surge Plans for hospital bed expansion, patient tracking, and patient movement with focus on mass casualty events.
  - o Leverage cross sector partners to participate in medical surge / MCI preparedness and exercises including: health care facilities (hospitals, clinics, and skilled nursing facilities); 911 and non-911 ambulance providers; local jurisdictions (ie. City of Oakland); and Alameda County Departments and Agencies including the Alameda County Office of Emergency Services, Health Care Services Agency (EMS, Public Health, Behavioral Health, and Environmental Health)
  - o Further develop Ambulance Strike Team Program and conduct training
  - o Support Regional and State projects – Community Paramedicine, Ebola and Infectious Disease patient; California Patient Movement Plan, California Children’s Disaster CONOPs project, and California Child Care Disaster plan projects.
6. Strengthen redundant and interoperable communication systems and customize training for ReddiNet, EBRCSA, and CAHAN
7. Facilitate ongoing Quality Improvement in conjunction with Specialty Receiving Centers - Continued data collection and process improvement for cardiac, stroke and trauma centers
8. Enhance Electronic Patient Care Reporting (ePCR) system with support for users including quality improvement data extracts and analysis and transition to electronic transfer of information to receiving hospitals.
9. Conduct Pediatric Readiness “Day to Day” and Medical Surge Hospital Emergency Room Site Visits
10. Promote retention and further development of existing specialty care centers including trauma centers: UCSF Benioff Children’s, Highland (Alameda Health System), and Eden Hospitals
11. Develop and implement alternative resources for care and transportation of behavioral health clients on 5150 Welfare and Institutions Code holds.
12. Seek to identify funding enabling continuation of the Community Paramedicine Pilot Program should an extension be offered.

**GOALS:**

1. Update EMS System Evaluation and release RFP for 911 emergency ambulance services to County Exclusive Operating Area (EOA). Implement successor contracts for fire department based ambulance services in Alameda, Albany, Berkeley and Piedmont. Extend agreement with Alameda County Regional Communications Center (ACRECC) for Emergency Medical Dispatch (EMD) services. Implement successor contracts for First Responder Advanced Life Support (FRALS) services. Goal: ensure an EMS System that is clinically and operationally excellent as well as financially viable.
2. Decrease Ambulance Offload Time (APOT); transfer of care of patients from 911 ambulances to emergency departments transpires no later than thirty (30) minutes following the arrival of the ambulance; Monitor First Watch Hospital Offload Dashboard and further develop analytic tools for Ambulance Patient Offload Delays (APOD)
3. Monitor and evaluate 911, FRALS, ACRECC and hospital contract compliance
4. Strengthen system-wide MCI/disaster/surge capability and capacity; ensure robust planning, training and risk mitigation
5. Strengthen emergency medical surge plans, communications, and information management infrastructure. Conduct exercises with focus on health care facility, first responder, BLS and ALS integration. Maximize partnership with Alameda County Health Care Services Agency Divisions - Behavioral Health Care, Public Health and Environmental Health.
6. Continued enhancement of quality improvement programs including those associated with cardiac, stroke and trauma specialty care systems
7. Engage in community partnerships facilitating intervention and more comprehensive service delivery to at-risk populations to include Children, seniors, as well as those with functional and / or behavioral health care needs
8. Continue to participate in and host the Regional Trauma Care Committee
9. Continue to lead (host) and/or participate in the State, Regional and local Disaster Committees to include:
  - o Regional: - Lead (host) Region 2 MHOAC Committee; participate on Association of Bay Area Health Officers (ABAHO), and UASI Emergency Management and Medical Surge Workgroup; lead Ebola/ Infectious Disease Workgroup
  - o State – Participate in the Patient Movement, California Medical / Health Emergency Operations Manual Committee and Workgroups; California Child Care Disaster Plan Committee; and Children’s Disaster CONOPs Workgroup
10. Continue TXA pilot study.
11. Enhance preparedness to respond to multiple casualty incidents given reality of Hybrid Targeted Violence, Active Shooters, terrorism, and multi-site coordinated attacks.
  - o Strengthen triage, patient tracking, and patient movement functions while simplifying workflow for responders.
  - o Deploy Point of Wounding / Triage response packs across system. Continue development of Tactical EMS and Rescue Task Force programs. Continue to design and implement Public Access Hemorrhage Control program.
  - o Enhance ReddiNet capabilities and facilitate training for all EMS system partners
  - o Strengthen Medical Surge Hospital Bed Expansion Capability and process for a surge of patients



12. Provide opportunities for EMS training to high risk communities
  - o EMS Corps - Short term plan: improve follow-up with and support of alumni
  - o EMS Corp - Long term plan: Develop alumni to regularly assist in EMT training; develop EMT refresher and skills classes to be available for a nominal fee; develop program to include young women of color; develop ongoing mentorship program.
13. Provide Domestic Violence (DV) Awareness, Policy, and Training
  - o Domestic Violence – Short Term: Improve EMS awareness of DV and impact on community health; Evaluate and adjust DV policy to be in alignment with current interpretation of penal code related to DV reporting; Evaluate and adjust procedures for telephone referrals; Improve EMS provider documentation related to DV; Improve data collection related to DV;
  - o Domestic Violence - Long-term: Increase EMS identification of DV victims (through data collection); Increase referrals from the field to DV services (through data collection); Receive regular, appropriate feedback related to referrals; and decrease incidents of death and disability from DV
14. Strengthen EMS Paramedic Preceptor program: Short term plan: Implement policy details, acknowledging expected confusion and delays associated with new standards; Improve communication with preceptors, providers and paramedic training programs; Long term plan: Improve paramedic preceptor performance; Improve paramedic preceptor professionalism; and Improve paramedic preceptor accountability

**MAJOR PROGRAM SOLUTIONS:**

Changes and enhancements that will strengthen the EMS system are outlined below.

VISION

- Identify and continue to implement solutions consistent with the Triple Aim of the Institute for Healthcare Improvement
- Promote “Whole Person Care” approach within Alameda County EMS system; continue to collaborate with and integrate services provided by the County Behavioral Health Care Services Agency

911 CONTRACTS

- Ensure system sustainability and continuity
- Facilitate EMS system evaluation, contract extensions, and conduct RFP for the County’s Exclusive Operating Area
- Facilitate implementation of successor agreements- EOA emergency ambulance service contracts – Alameda, Albany, Berkeley, Piedmont

QUALITY IMPROVEMENT

- Strengthen continuous quality improvement program on an ongoing basis.

DATA SOLUTIONS

- Enhance Bi-Directional Data Sharing Capabilities - amongst Dispatch Centers, First Responder, Transport Providers and hospitals – Leverage HL7 compliant software systems to get EMS data into hospital data systems and get outcome data out of hospital systems.

QUALITY IMPROVEMENT & TRAINING - PEDIATRICS

- Emergency Department Pediatric “Readiness” - Conduct Site Visits, customized evaluations, and follow-up visits for hospitals in 2016 and 2017
- Update Pediatric Medical Surge Plan