

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Care Committee (EMCC)
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

EMERGENCY MEDICAL CARE COMMITTEE (EMCC)

**Thursday, February 20, 2020
2:00 pm – 4:00 pm**

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

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

Purpose of the Emergency Medical Care Committee (EMCC)

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

1. Ambulance services operating within the county.
2. Emergency medical care offered within the county, including programs for training large numbers of people in cardiopulmonary resuscitation and lifesaving first aid techniques.
3. First aid practices in the county.

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

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

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

AGENDA

1. **Call to Order / Roll Call of Voting Members**  
Elinor Stetson, Co-Chair and Health Advisory Commissioner
2. **Introductions and Announcements**
Elinor Stetson, Co-Chair and Health Advisory Commissioner
3. **Public Comment**
Elinor Stetson, Co-Chair and Health Advisory Commissioner

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

Consent Items

Introduction of Items Scheduled for Consent

Patricia Natividad, Sr. Management Analyst

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

4. **Approval of November 14, 2019 Meeting Minutes**  (Page 6)
5. **Items Approved by the Board of Supervisors and/or Board Committees** 
(Page 13)
Copies of Board and Board Committee approved reports are provided for reference and information purposes.
6. **EMS Trust Fund Status Report**  (Page 84)
Accept written report on the financial status of the EMS Trust Fund
7. **Santa Clara County Exclusive Operating Area Report**  (Page 85)
8. **Non-911 Ambulance Services Report**  (Page 90)
9. **HHS Facilities Report**  (Page 91)

Regular Items

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

Receive verbal report from Elinor Stetson, Co-Chair and Health Advisory Commissioner

11. EMS System Initiatives: Personnel

- A. Receive report on EMT Certification, Paramedic Accreditation, and Credentialing
Daniel Peck, EMS Specialist
- B. Receive report on EMS Investigations and Enforcement [📄 \(Page 92\)](#)
Daniel Peck, EMS Specialist
- C. Receive report on Medical Volunteers for Disaster Response Program [📄 \(Page 93\)](#)
Michael Cabano, EMS Specialist

12. EMS System Initiatives: Equipment and Supplies

- A. Receive report [📄 \(Page 95\)](#)
Jason Weed, EMS Specialist

13. EMS System Initiatives: Data Systems

- A. Receive report [📄 \(Page 96\)](#)
Michael Clark, EMS Specialist

14. EMS System Initiatives: Clinical Care and Patient Outcome

- A. Receive report from EMS Agency Medical Director [📄 \(Page 98\)](#)
Dr. Ken Miller, EMS Medical Director
- B. Receive report on Specialty Center Quality Improvement [📄 \(Page 98\)](#)
Dr. Ken Miller, EMS Medical Director
- C. Receive report on Prehospital Patient Care Quality Improvement [📄 \(Page 99\)](#)
John Sampson, EMS Specialist
- D. Receive report on Prehospital Care Policy Revision Activities [📄 \(Page 100\)](#)
David Sullivan, EMS Specialist
- E. Receive report on Emergency Medical Dispatch Quality Improvement
Chris Duncan, EMS Specialist

15. EMS System Initiatives: Skills Maintenance/Competency

- A. Receive report
Daniel Franklin, EMS Specialist

16. EMS System Initiatives: Public Education

- A. Receive report
Daniel Franklin, EMS Specialist

17. EMS System Initiatives: Transportation/Facilities

- A. Receive report on Bypass [📄 \(Page 101\)](#)
Jackie Lowther, EMS Director
- B. Receive report on APOT [📄 \(Page 105\)](#)
Jackie Lowther, EMS Director

18. EMS System Initiatives: Preparedness

- A. Receive report on Disaster and Significant events [📄 \(Page 108\)](#)
Michael Cabano, EMS Specialist

19. EMS Trust Fund Awards

Patricia Natividad, Senior Management Analyst

20. Future EMCC Meetings 

Jackie Lowther, EMS Director

21. Behavioral Health Department Presentation

Toni Tullys, Director of Behavioral Health

22. EMCC Member Requests for Future Agenda Items / Announcements

Elinor Stetson, Co-Chair and Health Advisory Commissioner

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

23. EMS Stakeholder Requests for Future Agenda Items / Announcements

Elinor Stetson, Co-Chair and Health Advisory Commissioner

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

24. Next Meeting and Adjourn

Elinor Stetson, Co-Chair and Health Advisory Commissioner

May 21, 2020 from 2:00-4:00 pm at Valley Specialty Center, Room BQ160, 751 South Bascom Avenue, San Jose, CA 95128

Emergency Medical Care Committee
Valley Specialty Center, 751 S. Bascom Avenue
November 14, 2019 at 2:00pm
Meeting Minutes

Item	Discussion	Action
1. Call to Order/Roll Call	Ken Horowitz called the meeting to order at 2:00 p.m. A quorum was present.	Meeting called to order
2. Introductions and Announcements	Chief Geoffrey Blackshire is our new EMCC member, he is representing City of Palo Alto.	Trust Fund sub-committee members will be meeting to review and approve submissions.
3. Public Comment	No public comment request submitted.	
<u>Consent Items</u> 4. Approval of August 15, 2019 Meeting Minutes 5. Summary of Items Present to BOS and HHC 6. EMS Trust Fund 7. Santa Clara County Exclusive Operating Area 8. Non-911 Ambulance Service 9. HHS Facilities	Correction item 7 page 84 of your packet: September 2019 response compliance, Rural Metro was below the 90% benchmark. It was discussed at the Health & Hospital Committee yesterday; it was explained how the data is provided by First Watch and how it populates data for performance. For full transparency we provided what was received from the database. Correction item 14 (C), page 95 - John Sampson submitted a revised report.	Consent items approved by: Geo Blackshire / Dan Bobier
10. Health Advisory Commission Updates	HAC has two open slots, if you are interested in the committee please let Mr. Horowitz know. You will need to apply through Clerk of the Board.	
11. EMS System Initiates: Personnel A. EMT Certification, Paramedic Accreditation, and Credentialing (Daniel Peck)	A. Eva Ortiz was introduced to the committee. She is our new Administrative Assistant whom will be handling all the accreditation and certification process. - Looking forward to San Jose mass renewal in May 2020.	

Item	Discussion	Action
<p>B. EMS Investigations and Enforcement (Daniel Peck)</p> <p>C. Medical Volunteers for Disaster Response Program (Michael Cabano)</p>	<p>B. Investigation report was presented and can be found on page 88.</p> <p>C. MVDR report was presented and can be found on page 89. Richard Alameda has been working on reconciliation report, currently working on the volunteer list. Numbers have been finalized and 441 DHV accounts have been closed and 50 remain active. 386 MRC accounts have been closed and 85 accounts remain active.</p>	
<p>12. EMS System Initiatives: Equipment and Supplies (Jason Weed)</p>	<p>Michael Cabano presented the report which can be found on page 92. The EMS agency received the initial batch of Ballistic Protection from the vender, will be placing control tags on the equipment for distribution.</p> <p>Field Treatment Site Trailer (FTS) restock supplies, will begin to deliver in January 2020.</p>	<p>Second batch of EMS Ballistic Protection is expected in mid-November.</p> <p>Once the EMS agency has the restock all the hospitals and fire stations with an FTS will be notified.</p>
<p>13. EMS System Initiatives: Data Systems (Michael Clark)</p>	<p>EMS Data System Update – In October the EMS Agency successfully finished its train-the-trainer class. EMS will be able to place PCR information into an electronic health record as PDF. Will the system eventually be able to flag frequent flyers? Probably not, it's more of a data exchange database. Report can be found on page 93.</p>	<p>Full implementation date for these new items is targeted to be January 2020.</p>

Item	Discussion	Action
<p>14. EMS System Initiatives: Clinical Care and Patient Outcomes.</p> <p>A. Report from EMS Agency Medical Director (Dr. Miller)</p> <p>B. Specialty Center Quality Improvement, EMS Agency Medical Director (Dr. Miller)</p> <p>C. Prehospital Patient Care Quality (John Sampson)</p> <p>D. Prehospital Care Policy Revision Activities (David Sullivan)</p>	<p>A. Dr. Miller spoke of his report which can be found on page 94. Some of the key points:</p> <ul style="list-style-type: none"> - EMS 2022 beyond the current year of the contract, EMS is exploring how EMS agency will unfold in the future. - MPDS Protocol 33A3, slight modification. Might require evaluation to allow the healthcare provider to speak to a 911, currently working well. <p>B. Dr. Miller presented the report which can be found on page 94.</p> <ul style="list-style-type: none"> - PG&E Public Safety Power Shutoff, thank you all and all the public safety personal that helped during this time. Beyond the operational challenges during the duration of the power outage there wasn't a direct effect to the EMS system. - High performance CPR, has it made a difference? <p>C. John Sampson presented his report which can be found on page 95. Spoke about intubation success and intubation attempts.</p> <p>D. David Sullivan spoke on his report which can be found on page 101.</p> <ul style="list-style-type: none"> - The report is a summary of what we have done in the past. 	<p>Stakeholders will be part of the process.</p> <p>Will ensure that it works well with Custody Health before we add other providers. Base Hospital Guidelines, protocols that have new information will be presented at the next ED meeting scheduled for next Wednesday. Opportunity to speak to the hospitals regarding sustainability in case of a future power outage.</p> <p>Working on verifying the data.</p> <p>We have approximately 20 policies that are going live January 1, 2020</p>

Item	Discussion	Action
15. EMS System Initiative: Skills Maintenance/Competency (Daniel Franklin)	Began the EMS update in October and each agency is currently training staff. Monitoring the rosters until the end of the year.	Staff training should be done by December 31st
16. EMS System Initiative: Public Education (Daniel Franklin)	<p>The Public Education report can be found on page 102.</p> <ul style="list-style-type: none"> - October was fall prevention. September he will be speaking on influenza. December he will cover carbon monoxide. Currently doing a campaign for distractive driving. - Moving forward Daniel will include the EMS exam numbers as they appear on page 102 of the report. Some providers have developed packages for new hires which does help at the time of the EMS exam. Paramedics are only allowed to try three times and will have to wait one calendar year before taking the exam again. There is no cost for the exam, cost is included as part of the accreditation process. 	<p>Ken Horowitz would like to see the success rate from national registry for the different schools that offer the EMS exam.</p>
17. EMS System Initiative: Transportation/Facilities A. Palo Alto Exclusive Operating Area (Geo Blackshire)	<p>A. Report was provided and can be found on page 103. Moving forward, the report will be provided on a bi-annual basis only.</p>	

Item	Discussion	Action
<p>B. Report on Bypass (Jackie Lowther)</p> <p>C. Report on APOT (Jackie Lowther)</p>	<p>B. Preparing for things to change with the flu season. Steady transport volume over the period from April to September. Most hospital did not exceed 14 hours of bypass per month.</p> <p>C. Have seen considerable improvement throughout the County in ambulance patient offload time over the last year. Due to a health and safety code the State average has been met. If waiting time is greater than one hour, field supervisor is to contact the EMS Chief which in turn will contact Jackie.</p> <ul style="list-style-type: none"> - Jackie also presented the EMS 2018 Annual Report which can be found on page 15. The Board of Supervisors expectations have changed, it is about patient care quality and data. Discussed each power point slide from the EMS 2018 Annual Report. - One of our Specialist is working on scene times for STEMI. - Sudden cardiac arrest – treatment protocol was our focused in 2018. - MCI Plan redone in 2018, a lot of work in Gilroy over the summer. Two of our employees will be receiving medals on December 4th in San Francisco for all their hard work. Michael Cabano and Jason Weed, congratulations. 	<p>All hospitals have been requested to submit their winter ED surg plans, they are due by tomorrow.</p> <p>As of January 1, 2020, we will not be tracking Stroke times.</p> <p>Currently working on data for cardiac arrest.</p>

Item	Discussion	Action
18. EMS System Initiatives: Preparedness (Michael Cabano)	<p>Michael Cabano presented his report which can be found on page 128. Working with Chief Bosel regarding NARCAN supply. Thank you, County Communications team, in your assistance with the Fairmont Hazmat incident.</p> <p>Recent Events/Incidents</p> <ul style="list-style-type: none"> - Great Mall Incident - Fairmont San Jose Hazmat Incident - Present / SEIU Labor Action - PG&E Public Safety Power Shutoff 	
19. EMCC meeting dates for 2020	<p>February 20, 2020 May 21, 2020 August 20, 2020 November 19, 2020</p>	<p>EMCC Chair member will not be present at the 2/20/20 meeting, Elinor will sit at his alternate.</p>
20. EMCC Member Request for Future Agenda Items	<p>Ken Horowitz requested for the committee to vote on frequency of future EMCC meetings. Agency reports are being submitted without the need of action/vote from the voting members.</p>	<p>Will be placed in future agenda for voting.</p>
21. EMS Stakeholder Request for Future Agenda Items	<p>John Blain requested to move Palo Alto EOA report under consent item for future meetings.</p>	<p>Motion to approved by: Jo Coffaro / Heather Plamondon</p>
22. Next Meeting	<p>February 20, 2020 from 2:00pm-4:00pm at Valley Specialty Center, Room BQ160, 751 S. Bascom Ave, San Jose, CA 95128.</p>	<p>Meeting adjourned at 3:31pm.</p>

<p>VOTING MEMBERS PRESENT:</p> <p>Kenneth Horowitz, EMCC Chair Joshua E. Markowitz, MD, Specialty Care Physician Daniel Nunez, Private Sector Paramedic/EMT Douglas Petrick, County EOA Ambulance Provider Geoffrey Blackshire, Palo Alto Exclusive Operating Area Provider Dan Bobier, Private Ambulance Service Executive Officer Robert Jonsen, Law Enforcement Executive Officer Heather Tannehill-Plamondon, County Communications Jo Coffaro, Hospital Council</p>	<p>Voting Alternates PRESENT:</p> <p>Jeff Cole, Fire Service Executive Officer</p>
<p>EMS STAFF PRESENT:</p> <p>Jackie Lowther, EMS Director Dr. Ken Miller, EMS Medical Director Ramona Aguilar, Executive Assistant John Blain, EMS Specialist Michael Cabano, EMS Specialist Michael Clark, EMS Specialist Chris Duncan, ESM Specialist David Franklin, EMS Specialist Patricia Natividad, Sr. Management Analyst Evangalina Ortiz, Administrative Assistant Daniel Peck, EMS Specialist John Sampson, EMS Specialist David Sullivan, EMS Specialist</p>	<p>Others in Attendance:</p> <p>John Hosmoh, Good Sam/Regional Karen Pike, El Camino Hospital Chelsea McAlpine, ProTransport Marc Gautreau, Stanford Hospital Jesus Guerrero, AMR Christopher Harper, Royal Ambulance Bennett Yendrey, San Jose Fire Department Dustin Gonzalez Josh Staley, San Jose Fire Department Diane St Denis, MVDR Tim Taylor, ProTransport Kaitlyn Tiner, ProTransport Pamela Fiehmannn, El Camino Health Maxwell Lawrence, Royal Ambulance Ryan Lugo, Santa Clara County Parks Garrett Cordes, Good Samaritan Hospital Nathan Kyle, Good Samaritan Hospital</p>

Attachments, presentations and documents can be found at: www.sccemsagency.org

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95126
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 22, 2020

To: Santa Clara County EMS Committee Members

From: Patricia Natividad
Senior Management Analyst

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

Summary of Health and Hospital Committee Approved Items:

EMS Stroke System Update– December 11, 2019

Receive report from Emergency Medical Services relating to direction of selected stroke patients to Comprehensive Stroke Centers.

During its February 15, 2017 meeting, the Health and Hospital Committee received a report relating to Emergency Medical Services System policies and procedures for Comprehensive Stroke Centers (Referral from October 12, 2016, Health and Hospital Committee meeting. At that time, the Committee requested an update on the number of patients who were directed to Comprehensive Stroke Centers, by-passing Primary Stroke Centers for acute stroke management.

The complete legislative file that contains the update is attached for review.

Director's Report, County of Santa Clara Health System – October 30, 2019

The Health and Hospital Committee has requested the Deputy County Executive/Director of County of Santa Clara Health System present monthly reports regarding emerging issues and items of interest to the public and to the Committee. The Committee also requested verbal as well as written updates on operations for the departments comprising the Health System. Emergency Medical Services and Behavioral Health Services Department written updates are provided as attachments this month.

The Emergency Medical Services Department Monthly Update report is attached.

Director's Report, County of Santa Clara Health System – November 13, 2019

The Health and Hospital Committee has requested the Deputy County Executive/Director of County of Santa Clara Health System present monthly reports regarding emerging issues and items of interest to the public and to the Committee. The Committee also requested verbal as well as written updates on operations for the departments comprising the Health System. The Emergency Medical Services and Public Health Department updates are provided as attachments, as is a report on Whole Person Care.

The Emergency Medical Services Department Monthly Update report is attached.

Director's Report, County of Santa Clara Health System – December 11, 2019

The Health and Hospital Committee has requested the Deputy County Executive/Director of County of Santa Clara Health System present monthly reports regarding emerging issues and items of interest to the public and to the Committee. The Committee also requested verbal as well as written updates on operations for the departments comprising the Health System. The Emergency Medical Services and Public Health Department updates are provided as attachments, as is a report on Whole Person Care.

The Emergency Medical Services Department Monthly Update report is attached.

Summary of Board of Supervisors Approved Items:

Ambulance Services Request for Proposals Process – November 19, 2019

Under advisement from May 21, 2019 (Item No. 22): Receive report from Emergency Medical Services relating to Ambulance Services Request for Proposals Process (EMS 2022).

At the May 21, 2019 Board of Supervisors meeting, the EMS Agency was directed to report back on developing a work plan regarding the Request for Proposals (RFP) process for ambulance services, including identified stakeholders and whether solicitation methods are limited to RFPs or include requests for solutions or innovations. In addition, the Board requested to receive information before the next Emergency Medical Services (EMS) RFP process relating to first responder technical advisory stakeholder efforts to develop a public option to provide emergency ambulance services.

The complete legislative file that contains the update is attached for review.

County of Santa Clara
Santa Clara Valley Health & Hospital System
Emergency Medical Services



99440

DATE: December 11, 2019
TO: Health and Hospital Committee
FROM: Kenneth Miller, MD, PHD, EMS Medical Director
SUBJECT: EMS Stroke System Update

RECOMMENDED ACTION

Receive report from Emergency Medical Services relating to direction of selected stroke patients to Comprehensive Stroke Centers. (Referral from February 15, 2017, Item No. 8)

FISCAL IMPLICATIONS

Receipt of this report would not require any modification to the current Board-approved budget for the EMS Agency; it is an informational item.

REASONS FOR RECOMMENDATION

During its February 15, 2017 meeting, the Health and Hospital Committee received a report relating to Emergency Medical Services System policies and procedures for Comprehensive Stroke Centers (Referral from October 12, 2016, Health and Hospital Committee meeting, ID# 82528). At that time, the Committee requested an update on the number of patients who were directed to Comprehensive Stroke Centers, by-passing Primary Stroke Centers for acute stroke management.

CHILD IMPACT

The recommended action will have limited impact on children and youth. Although stroke is rare in children and adolescents the prehospital stroke care strategy is applied across all ages.

SENIOR IMPACT

The recommended action will have a positive impact on seniors in the community by assisting in facilitating transfer to the most appropriate hospital in an expeditious time frame.

SUSTAINABILITY IMPLICATIONS

The recommended action will have no/neutral sustainability implications.

BACKGROUND

In 2004, The Joint Commission (the organization that accredits hospitals) initiated the Primary Stroke Center (PSC) designation, which indicates the capability of a hospital to provide a certain standard of care for acute stroke patients, including: rapid evaluation, intravenous administration of tissue plasminogen activator (tPA), discharge planning, and other evidence-based acute care. Around the same time, Santa Clara County adopted a Comprehensive Stroke System Plan, based on recommendations from a Stroke Task Force. The Stroke Plan amended the EMS System's Prehospital Care Manual to require that stroke patients "are to be transported to the closest approved Primary Stroke Center...". At the time, some, but not all, hospitals in the County had earned the Primary Stroke Center designation. After this requirement was added to the EMS prehospital manual, the remaining hospitals made the necessary changes to earn the designation, thus strengthening the system of care for stroke patients across the region.

The County's Stroke Plan, adopted in 2005, anticipated the "many advances in stroke care that [were] forthcoming," including "a new array of interventional procedures that can extend the effective treatment windows for acute stroke." In recognition of these medical advances, The Joint Commission initiated the Comprehensive Stroke Center (CSC) designation in 2012 for complex stroke patients and those requiring advanced intervention. Required capabilities include advanced neuroimaging, endovascular neurointervention, prehospital coordination, and dedicated neuro-intensive care beds.

In Santa Clara County, a stroke severity-based triage tool was developed by a subcommittee of the Stroke Task Force over the course of two meetings and comprehensive literature review in July 2017, with training of field medics in October and implementation of the new triage strategy in December 2017. The in-field assessment tool, GFAST (Gaze, Facial Droop, Arm Drift, Speech Abnormalities, and Time Last Seen Normal), is a symptom-related way of evaluating stroke patients. If a suspected stroke patient has all four (4) findings on GFAST stroke screening and a last seen well time of six (6) hours or less, the patient is transported to a Comprehensive Stroke Center. If the patient has three (3) or fewer findings on GFAST stroke screening and/or a last seen well time of greater than six (6) hours, the patient is transported to the closest Stroke Center (Comprehensive or Primary).

Through this report, the Emergency Medical Services Agency presents data on patients presenting to 911 EMS with stroke-like symptoms for the first three quarters of calendar year 2019.

Between the months of January and September 2019, there were 1,608 patients transported by 911 EMS to stroke centers for the evaluation of acute stroke-like symptoms, accounting for approximately 2% of all 911 EMS transports for that period.

The 911 EMS provider agencies in Santa Clara County are priority dispatched from primary and secondary public safety answering points using a medical priority dispatch system. One of the emergency medical dispatch protocols attempts to identify stroke-like symptoms from the 911 caller. Of the 911 EMS patients transported to stroke centers with stroke-like

symptoms during this period, 48% were dispatched according to the stroke protocol with information provided by the 911 caller. Responses for suspected patients with stroke-like symptoms are dispatched as a high priority response (public safety advanced life support first responder and advanced life support ambulance both lights-and-siren).

The locations of the 911 EMS response for patients with stroke-like symptoms were: 68% at a private residence, 18% at a public or commercial address and 14% at a healthcare facility such as a doctor's office or nursing home.

The median age of the patient was 73 years (interquartile range 61-83), 50% were female and 11% presented with an initial cardiac rhythm of atrial fibrillation (a risk factor for stroke).

Of the components of GFAST used in assessing stroke severity, abnormal gaze occurred in 14% of patients, facial droop in 36%, arm weakness in 31%, and speech abnormality in 52%; 34% of patients presented with one GFAST finding, 28% with two findings, 26% with three and 12% with all four findings.

The triage decision to transport directly to a comprehensive stroke center (CSC) is based in part on the finding of all 4 GFAST elements. As noted above, 12% of patients had a GFAST score of 4, while 88% had a GFAST score of 1, 2 or 3. Patients with a GFAST score of 1-3 are triaged to the closest stroke center, primary (PSC) or comprehensive (CSC).

Timeframes of stroke symptom onset are used in decision making related to treatment. The timeframe of 4.5 hours from the onset of stroke-like symptoms is used as an upper limit for intravenous thrombolysis and 6 hours for thrombectomy. Brain and vascular imaging advances are changing the perspective on symptom timeframes and are opening opportunities for definitive treatment outside of previously held timeframes. Thrombolysis is done at both PSCs and CSCs, while thrombectomy is performed only at CSCs (or PSCs with the added accreditation of 'thrombectomy capable').

The other component of the triage decision to transport a patient directly to a CSC is the 'time last known well' (TLKW) interval of less than 6 hours. Of patients presenting with a GFAST score of 4, 82% were transported by 911 EMS within 6 hours of symptom onset, making them candidates for triage directly to a CSC. In addition, 77% of patients present within the 4.5 hours treatment interval for thrombolysis.

The current Santa Clara County EMS Agency protocol for direct triage of a patient with stroke-like symptoms to a CSC is a GFAST score of 4 and presentation within 6 hours of symptom onset. Based upon transport destinations, 92% of patients with this presentation are transported to a CSC. The remaining 8% may represent some degree of protocol deviation or documentation error, but also reflects patient preference. If a patient or family requests a specific hospital destination and understands the reasons for an alternative recommendation, that request will be honored.

Of stroke-alert patients arriving at CSCs by 911 EMS transport, 79% have a GFAST score of 1-3 and 21% a GFAST score of 4 with a symptom onset time 6 hours or less. At PSCs, 93% have a GFAST score of 1-3 and 7% a GFAST score of 4 (symptom onset greater than 6 hours or patient preference). There is no difference in this database in median age or gender in patients with a GFAST score of 1-3 versus those with a GFAST score of 4.

Timeframes for decision making and transport are important, given the timeframe within which to offer thrombolysis as the initial definitive therapy followed subsequently by thrombectomy in selected patients. The 911 EMS median transport interval for patients with a GFAST score of 1-3, and therefore transported to the closest stroke center, was 11 minutes (interquartile range 8-14 min) with a 90th percentile of 18 minutes. The median transport interval for patients presenting with a GFAST score of 4 and within 6 hours of symptom onset, sometimes bypassing a PSC for a CSC, was also 11 minutes (interquartile range 8-13 min) with a 90th percentile of 15 minutes. Because of the geographic distribution of CSCs, and the distribution of patients using 911 for symptoms of an acute stroke, bypassing a PSC does not add substantial time to the transport or a delay in access to thrombolysis.

The Stroke Task Force has continued to meet and consider best practices. In particular, consideration was given to two important studies demonstrating the safety and efficacy of thrombectomy in selected patients with a large vessel occlusion ischemic stroke. One study looked at extending the TLKW to 16 hours and the other to 24 hours. The inclusion criteria for patients in each study were somewhat different but the American Heart Association/American Stroke Association (AHA/ASA) recommended in their 2018 and 2019 guidelines for acute stroke management that if patient selection was conducted in accordance with that in either study then the corresponding timeframe extension for thrombectomy could be used. In collaboration with the Stroke Task Force, the Santa Clara County EMS agency updated the criteria for direct CSC triage to include only the stroke symptom severity inclusive of all four elements of the GFAST assessment, removing any reference to symptom onset timeframe. Timeframe was removed because consistently between 82% and 85% of patients presenting with a GFAST stroke severity score of 4 did so within 6 hours of stroke symptom onset and a proportion of the remaining 15-18% presented with symptoms upon awaking from sleep (wake-up strokes). That change in strategy could increase suspected stroke patient transport via 911 EMS to CSCs by about 15%. Education of the EMS providers in Santa Clara County on this stroke triage strategy change began with the EMS Agency Annual Update in October 2019 and will become policy on January 1, 2020.

The prehospital data presented here, linked to hospital outcomes data through the AHA/ASA Get With The Guidelines (GWTG) Stroke registry, will provide for ongoing evaluation of the safety and efficacy of the prehospital stroke system in Santa Clara County.

CONSEQUENCES OF NEGATIVE ACTION

The Committee would not receive the information that was requested at the February 15, 2017 Health and Hospital Committee.



98848

DATE: October 30, 2019

TO: Health and Hospital Committee

FROM: Rene G. Santiago, Deputy County Executive/Director, SCVHHS

SUBJECT: Director's Report, County of Santa Clara Health System

RECOMMENDED ACTION

Consider recommendations relating to emerging issues regarding the County of Santa Clara Health System.

Possible action:

- a. Receive report from Director, County of Santa Clara Health System.
- b. Receive verbal report from Health Officer.
- c. Receive verbal report from Chief Executive Officer (CEO), Santa Clara Valley Medical Center.
- d. Receive verbal report from Director, Behavioral Health Services Department.
- e. Receive verbal report from CEO, Valley Health Plan.
- f. Receive verbal report relating to Federal health policy and budget landscape.

The following information comprises the Director's written report; updates will be provided verbally.

FISCAL IMPLICATIONS

There are no fiscal implications associated with the receipt of this report. It is an informational item, only.

REASONS FOR RECOMMENDATION

The Health and Hospital Committee has requested the Deputy County Executive/Director of County of Santa Clara Health System present monthly reports regarding emerging issues and items of interest to the public and to the Committee. The Committee also requested verbal as well as written updates on operations for the departments comprising the Health System. The

Emergency Medical Services and Behavioral Health Services Department written updates are provided as attachments this month.

CHILD IMPACT

The recommended action will have no/neutral impact on children and youth.

SENIOR IMPACT

The recommended action will have no/neutral impact on seniors.

SUSTAINABILITY IMPLICATIONS

The recommended action will have no/neutral sustainability implications.

BACKGROUND

The County of Santa Clara Health System seeks to advance the “Triple Aim Plus” goals of Better Health, Better Care, Better Service, Better Value, and Continuous Growth and Development. The acquisition of O’Connor Hospital, St. Louise Regional Hospital and De Paul Health Center offers the Health System new opportunities to further advance our “Triple Aim Plus” objectives, in addition to the Health System’s efforts on Transformation 2020, toward an expanded community integrated health system.

Waiver

During the August 22, 2019 Health and Hospital Committee meeting, the Health System launched the Transformation 2025/Waiver planning process by presenting a comprehensive overview of significant accomplishments and progress under the Affordable Care Act and two 1115 Waivers (agenda item 6). The report discussed planning for the future, including the State Department of Health Care Services’ (DHCS) California Advancing and Innovating Medi-Cal (Cal AIM) process, as well as a local process.¹

The Transformation 2025/Waiver planning process was launched during a presentation to the Health Care Reform Stakeholder Work Group on October 1, 2019. Using the DHCS framework, three (3) work groups were created:

- Population Health
- Integrated Care
- Behavioral Health

During the Health Care Reform Stakeholder Work Group discussion, the participants agreed with the three work groups, requesting that four (4) focus areas be included within each of the smaller work groups:

¹ <https://www.dhcs.ca.gov/calaim>

- Social needs (like housing)
- Special populations (like seniors, residual uninsured, undocumented)
- Geography
- Prevention

Dates are being circulated to convene each of the smaller work groups in early November.

The State DHCS's stakeholder process outlines the release of a concept paper by October 29, 2019 and convening of five (5) work groups. The County Health System has submitted applications to participate on each of the DHCS work groups:

- National Committee for Quality Assurance (NCQA) Accreditation: This workgroup will provide input on topics related to the standards and processes of requiring MCPs to obtain NCQA accreditation, including consideration of the proposed accreditation requirements. Workgroup members will be asked to provide feedback on the NCQA Medicaid module, the long-term services and supports distinction survey, and accreditation deeming policies.
- Behavioral Health: This workgroup will provide input on opportunities and challenges in integrating county-level mental health and substance use disorder programs under a single contract; proposed changes to the reimbursement structure of county-level mental health and substance use disorder services; proposed revisions to the medical necessity criteria for behavioral health services; and, the possibility of pursuing the Institutions for Mental Diseases (IMD) waiver opportunity which would allow counties to receive federal reimbursement for services furnished to Medicaid eligible adults with serious mental illness and children with serious emotional disturbance in an IMD.
- Population Health Management: This workgroup will provide input on requiring Medi-Cal managed care plans to develop and maintain population health management strategies that address initial and ongoing assessment of risk and need, leverage risk stratification in care planning, consider social determinants of health, ensure smooth transitions of care, and focus on data collection and reporting. This workgroup will also provide input on a proposal to move to annual Medi-Cal health plan open enrollment.
- Enhanced Care Management: This workgroup will discuss the possibility of implementing a policy to establish an enhanced care management benefit. An enhanced care management benefit would be designed to provide a whole-person approach to care that addresses the clinical and non-clinical needs of high-need Medi-Cal beneficiaries enrolled in requiring Medi-Cal managed care plans. enhanced care management is a collaborative and interdisciplinary approach to providing intensive and comprehensive care management services to individuals. Additionally, DHCS is seeking input regarding the possibility of including "in lieu of" services, which are

flexible wrap-around services that the Medi-Cal managed care plan will integrate into their population health management strategy. These services are provided as a substitute, or to avoid, other services, such as a hospital or skilled nursing facility admission, discharge delay, or other. in lieu of services should be integrated with case management for members at medium to high levels of risk and may fill gaps in State Plan benefit service to address medical or social determinants of health needs. The workgroup will provide feedback on these concepts, including on topics such as target populations, beneficiary and provider eligibility criteria for the new benefit and payment structures

- *Full Integration Plans:* This work group will provide input on a pilot to test the effectiveness of full integration of physical health, behavioral health, and oral health under one entity. This component of CalAIM will be meeting later in the process, as it has a longer implementation timeline.

Coverage Expansion

In past updates on coverage expansion, discussion ensued regarding the federal Public Charge rule that was slated to go into effect on October 15. Judges in New York and California issued injunctions, holding off the implementation of the rule. While the Medi-Cal expansion to young adults aged 19 through 25 does not “count” toward Public Charge, concern has been raised by some. A definitive ruling on Public Charge would make communication regarding Medi-Cal expansion and accessing services easier.

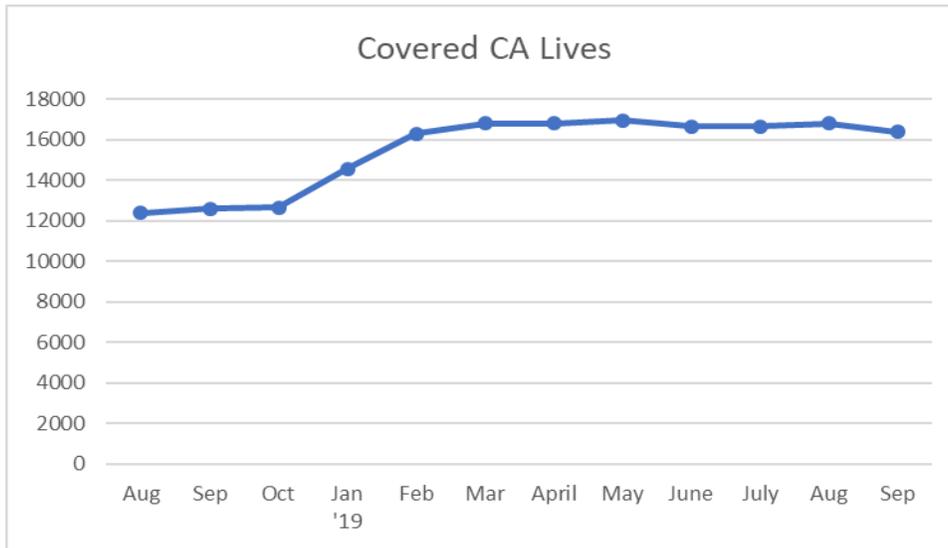
On October 4, the President issued a proclamation stating that visas will no longer be issued unless the applicant can show they either have health insurance or have the means to purchase health insurance within the first 30 days of being in the US. The proclamation is effective on November 3. This does not exactly fit into coverage expansion but shows the Administration’s intention with regard to immigration, using health care and insurance as an argument.

Medi-Cal Enrollment

According to DHCS’ Medi-Cal Managed Care Enrollment Report for September 2019, there were 235,848 beneficiaries receiving care through the Santa Clara Family Health Plan (SCFHP) and 65,069 through Anthem Blue Cross. There has been a steady decline in enrollment. Over the past 12 months, SCFHP managed care enrollment dropped by 4% and Anthem Blue Cross declined by 5.8%.

Covered California

As of VHP’s September Enrollment Report, the number of effectuated Covered California beneficiaries under Valley Health Plan is 16,393. This number is down 423 cases from the previous month.



Healthy Kids Enrollment

The recently adopted California state budget includes instructions for the three counties with Healthy Kids programs (Santa Clara, San Mateo, and San Francisco) to transfer their beneficiaries enrolled through the County Children’s Health Insurance Program (CCHIP) into Medi-Cal by October 1, 2019. Only two current Healthy Kids members do not qualify to make this transition to Medi-Cal, as their status disqualifies them from CCHIP eligibility and their family income exceeds Medi-Cal eligibility limits.

As of October 1, 2019, the 3,696 members effective with Healthy Kids CCHIP in September transitioned to Medi-Cal or termed from Healthy Kids (aged out, moved out of area, eligible for other coverage, etc.). Total Healthy Kids enrollment as of October 1, 2019 is two (2) members. The two members who remain enrolled in Healthy Kids are enrolled directly with SCFHP, not through Covered California and CCHIP.

With the CCHIP transition to Medi-Cal, and to comply with CA Department of Managed Health Care regulatory requirements, SCFHP will close the Healthy Kids product line by the end of the year. Healthy Kids members not enrolled through CCHIP, and therefore not transitioning to Medi-Cal, are now eligible for Valley Kids and may apply.

Primary Care Access Program (PCAP): Access Initiative for Adults

As of October 1, 2019, there were a total of 4713 active PCAP enrollees (12 months), which represents an increase of 93 enrollees from the previous month.

Table 1:

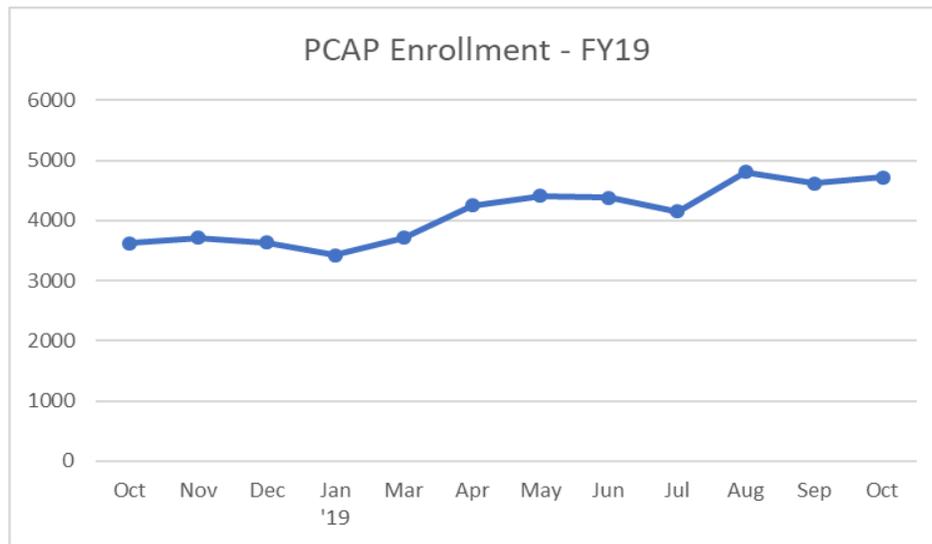


Table 2:

PCAP Applications & Enrollment - 10/1/2019														
	Expired	Active												Total
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
Submitted	143	151	95	169	178	195	367	490	368	435	447	442	23	3360
Approved	293	394	196	354	254	390	503	509	384	458	472	479	28	4421
Effective	213	293	394	196	354	254	892	509	384	458	472	479	28	4713
Denied	2	0	2	8	9	8	1	0	0	0	0	0	0	28
Pending	1	6	1	0	7	9	1	0	1	1	0	0	0	26

PCAP Effective Coverage By Clinic - 10/1/2019														
	Expired	Active												Total
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
AACI	8	7	13	3	8	8	28	9	11	10	13	22	1	133
GFHN	84	139	199	120	153	119	421	250	165	200	218	160	9	2153
IHC	3	2	1	2	3	2	53	55	35	38	48	38	4	281
MayView	40	54	84	22	63	40	170	48	49	81	91	126	5	833
NEMS	0	1	1	1	3	4	7	8	3	3	1	6	0	38
PPMM	3	5	5	2	10	7	32	18	12	16	7	4	0	118
EVCC/MMCC	6	13	20	7	7	3	20	5	4	5	3	1	0	88
SHC	26	17	25	5	29	12	33	32	27	22	10	22	3	237
SCVMC	43	55	46	34	78	59	129	84	77	83	81	100	6	832
Total	213	293	394	196	354	254	893	509	383	458	472	479	28	4713

Whole Person Care

Sharing with Partners

The Office of System Integration and Transformation (OSIT) held its Whole Person Care (WPC) Stakeholder Group Meeting on September 19, 2019 at Valley Specialty Center. For this meeting, the invitation list was expanded and the format redesigned. More than 125 people representing 27 organizations/departments participated. By design, this fast-paced, one-and-a-half-hour event was created to showcase the exciting work that is taking place in our community each day, by both internal and external WPC partners. Organizations shared information about what they do and their outcomes accomplished to date. An informative, and at times heart-wrenching, panel of speakers from three organizations, Blackbird House (Peer Respite Program), Institute on Aging and Gardner Family Health Network, powerfully conveyed the challenges faced in serving the WPC populations. They described the often-heroic efforts required to overcome barriers. The panelists described how their respective programs worked and did so from the perspective of patients/clients. One story from the panelists is shared in the next section. The 45-minute speakers' panel was sandwiched on both sides with an interactive poster session. Nineteen posters were on display, each with a representative(s) present to engage meeting participants and answer their questions. Each poster visually depicted the work being done, the innovative approaches being used and together clearly told the stories about the tremendous power of collective partnerships to create change in the community. Several participants recapped their experiences and shared how palpable the energy, passion, sense of community, and dedication was at this meeting. Based on evaluations, all respondents indicated that they would consider coming to the next meeting, with 88% indicating that they would come again. Seventy one percent of respondents liked the meeting format (with both posters and presentations) and suggested the same format be used again. Current plans are underway for a spring event.

One-Time Housing Funds for WPC Pilots

On September 20, 2019, the Letter of Intent (or application) from the County of Santa Clara for One-Time Housing Funds for WPC Pilots was sent to the State of California, Health and Human Services Agency, Department of Health Care Services (DHCS). On September 30, 2019, OSIT received a letter from DHCS that the County was approved for these funds. The allocation of funds totaling \$5,680,408.35 is expected to be processed by December 30, 2019 and will be available for final encumbrance or expenditure by June 30, 2025. The executed County of Santa Clara Participation in One-Time Housing Funds for Whole Person Care Pilots resolution (BOS-2019-126) was approved by the Board of Supervisors on September 24, 2019 (ID #98459) and submitted to DHCS, as required, on October 7, 2019. Upon receipt by the State, DHCS acknowledged the County's acceptance of these funds that same day.

Custody Health Services Update

Custody Health Services has been focusing on building a comprehensive system of care for high-risk populations. Two examples of recent progress have been managing the transitions of care for acute mentally ill and providing services for inmates living with HIV.

Transitions of Care

Custody Health Services are moving into managing our 5150 holds to provide enhanced services for optimal care. When 5150 holds that had been initiated by outside law enforcement will be discontinued at booking for those inmates who do not meet criteria. These inmates will be referred to the appropriate housing such as special Management units to support their mental health needs. For inmates who struggle with ideations of self-harming behaviors with no plan or intent and not meeting the criteria or detoxing from substance use will be housed in an assessment and observation unit (A & O).

Custody Health Services plans are to establish an A & O unit for 72-hour observation for inmates to be monitored as they are detoxing off alcohol or drugs. This unit will be managed by primary care providers to ensure medical services are provided for patient safety. The desired outcomes are to reduce inappropriate 5150 holds which will decrease the use of unnecessary resources, such as limited bed space, 24-hour short stays on the LPS unit, optimal use of psychiatric services, and to protect patients' rights. This will process with enhanced CHS transition of care mitigating appropriate medical and mental health treatment.

Inmates Living With HIV

The Health Trust (THT) is a non-profit organization that has been providing a variety of services to low-income Santa Clara County residents living with HIV/AIDS for over 20 years. Services include, but are not limited to, medical and non-medical case management, care coordination, and food assistance. THT has been providing support to CHS through the Project START Plus (PS+) program which focuses on harm reduction and linkage to care. As part of the program, THT staff worked with inmates living with HIV and assisted them in planning their transition into the community upon their release.

PS+ was funded by the Santa Clara County Public Health Department. When funding ceased in June 2018, THT continued to assist inmates and sought other sources of funding. On July 13, 2018 THT was awarded a grant from Gilead Sciences Incorporated's *Frontlines of Communities in the United States* (FOCUS) Program to develop a replicable model program that embodies best practices in HIV and hepatitis screening and linkage to care. The FOCUS program's goals are to: (1) Increase the identification of new and known persons who are HIV-positive early during their incarceration period; (2) Identify and treat other infections as a secondary way of preventing HIV infection; and (3) Increase the linkage to primary care for persons with HIV or chronic hepatitis C after release from custody.

Below are screening results for June 2019 prior to the initiation of FOCUS, and in the first three months following the implementation of the FOCUS grant (which started July 1):

	June 2019	July 2019	August 2019	September 2019
Number of tests	280	750	850	630
Hepatitis C: Antibody Positive	11	30	31	35
RNA Positive	6	21	13	19
New Diagnosis	4	12	10	7
Acute Hepatitis C	0	1	0	0
Hepatitis B: New Diagnosis	0	4	5	3
	0	2	3	2
Syphilis	27	41	52	39
Chlamydia	15	20	27	16
Gonorrhea	8	9	8	8
HIV	0	0	2	0

Though we are in the very early stages of FOCUS, Custody Health Services (CHS) collaboration with THT in expanding screenings show that we are able to improve the early identification and treatment of inmates infected with Human Immunodeficiency virus (HIV), Hepatitis C virus (HCV), or sexually transmitted diseases (STD).

Prior to FOCUS, HIV-positive inmates are identified only when: (1) Their medical records indicate that they are HIV-positive; (2) They submit a medical request to be screened for HIV/STD; or (3) They agree to be screened for HIV/STD during a medical visit. This process excludes inmates who do not specifically request a screening or do not have a medical appointment.

Legislative Update

This document provides information about bills of interest, vaping news and updates on the Master Plan for Aging, Medi-Cal Rx and Gubernatorial appointments.

Bills of Interest

Public Health

SB 159 (Wiener): Pre- and Post-Exposure Prophylaxis

Governor Newsom signed SB 159 by Senator Scott Wiener that authorizes pharmacists to furnish pre- and post-exposure prophylaxis (PrEP and PEP) without a physician's prescription. The bill also prohibits insurance companies from requiring prior authorizations for patients to obtain PrEP coverage.

Health Care Coverage & Affordability

AB 174 (Wood): Health Care Coverage Affordability

AB 174 was approved by the Governor and requires Covered California to develop and prepare one or more reports to be issued at least quarterly and be made publicly available

within 30 days following the end of each quarter for the purpose of informing the California Health and Human Services Agency, the Legislature, and the public about the enrollment process for the individual market assistance program, established in the 2019-20 Budget Act.

AB 414 (Bonta): Individual Mandate

AB 414 by Assembly Member Bonta was approved by the Governor and directs the Franchise Tax Board to report to the Legislature regarding specific information resulting from California's minimum essential health coverage requirement and individual shared responsibility penalty.

AB 824 (Wood): Preserving Access to Affordable Drugs

Governor Newsom signed AB 824, authored by Assembly Member Jim Wood (D-Santa Rosa) and sponsored by Attorney General Xavier Becerra, which restricts so-called "pay-for-delay" agreements among pharmaceutical companies. The bill prohibits these agreements between brand name and generic drug manufacturers by making them presumptively anticompetitive. According to a Federal Trade Commission study, these anticompetitive deals cost consumers and taxpayers \$3.5 billion in higher drug costs every year.

Behavioral Health

AB 1642 (Wood): Medi-Cal Managed Care Sanctions

Governor Newsom signed AB 1642 would enhance DHCS's ability to penalize Medi-Cal managed care plans, county mental health plans, and pre-paid inpatient health plans (which include plans being operated by counties under the Drug Medi-Cal Organized Delivery System waiver). While the measure gives the director of DHCS broad authority to impose financial sanctions, counties worked with the author on amendments to address concerns about transparency and have since recently opposition. The measure now includes language to limit monetary sanctions to those violations which stem from established standards set forth in state or federal law, regulation or contract.

Emergency Medical Services

SB 438 (Hertzberg): Emergency Medical Services Dispatch

The Governor signed into law SB 438, by Senator Bob Hertzberg, as part of a package of firefighter bills. This measure prohibits a public agency from entering into a contract for 911 call processing services unless the contract is with another public agency, with specified exceptions. SB 438 also makes changes to medical control. A coalition of public agencies had negotiated amendments over the summer to address many of the county concerns about health and safety issues.

Health Disparities

SB 464 (Mitchell): California Dignity in Pregnancy and Childbirth Act

Governor Newsom signed SB 464 by Senator Holly Mitchell, which is aimed at reducing preventable maternal mortality among black women by requiring all perinatal health care providers to undergo implicit bias training to curb the impact of bias on maternal health. SB

464 will also improve data collection at the California Department of Public Health to better understand pregnancy-related deaths.

Executive Order Issued on Vaping Controls

Governor Newsom announced several actions related to addressing vaping. First, he signed an Executive Order directing the California Department of Public Health (CDPH) to launch a media campaign to educate the public about the health risks of vaping nicotine and cannabis products. CDPH has also been directed to develop recommendations to reduce smoking among young adults and teens, which includes posting warning signs where vaping products are sold and on advertisements.

The order came on the heels of the Centers for Disease Control and Prevention and the CDPH warnings to consumers to abstain from smoking tobacco vaping products as investigations continue into illnesses related to vaping.

The Executive Order also tasks the Department of Tax and Fee Administration (CDTFA) to develop recommendations to remove illegal or counterfeit vaping products from stores and reducing youth vaping consumption through increased enforcement and incorporating nicotine content into the calculation of the existing tax on electronic cigarettes. CDTFA has until October 29, 2019 to submit these recommendations.

Additionally, the Governor signed SB 39, by Senator Jerry Hill, which would require a signature from someone age 21 or older for delivery of online tobacco purchases.

Governor Makes Several HHS Appointments

Department of Health Care Services

Governor Newsom recently announced that Richard Figueroa will serve as the acting DHCS director following Kent's departure at the end of September. Figueroa has been serving in the Newsom Administration as deputy cabinet secretary. Prior to joining the Newsom Administration, Figueroa was director of prevention for The California Endowment. He also as served under several governors and statewide elected officials, including Governor Arnold Schwarzenegger, State Insurance Commissioner John Garamendi, and Governor Gray Davis.

California Department of Public Health

As director of the California Department of Public Health, the Governor appointed Sonia Angell. Most recently, Dr. Angell has served an assistant clinical professor of medicine and an assistant attending physician at New York Presbyterian/Columbia University Hospital. Other experience includes her work as an independent consultant to the Pan American Health Organization, deputy commissioner for prevention and primary care at the New York City Department of Health and Mental Hygiene, and senior advisor for global noncommunicable diseases and chief and founder of the Global Noncommunicable Disease Unit at the Centers for Disease Control and Prevention.

Emergency Medical Services Authority

David R. Duncan Jr. has been appointed director of the Emergency Medical Services Authority. Duncan has served as medical director and executive medical officer at Air

Medical Group Holdings and REACH Air Medical Services since 2008. Previously, he served as medical director at the California Department of Forestry and Fire Protection as well as a staff emergency physician at the Veterans Administration Hospital.

Growth, Learning and Development

On September 26, 2019, the Wave 11 Unit Based Teams (UBTs) shared their first project presentations at the Labor/Management Work Group session. The 15 Health System teams have developed the initial SMART (**S**-Specific; **M**-Measurable; **A**- Achievable; **R**-Results-focused/Relevant; **T**-Time-bound) goals for their projects, as listed below:

- **VSC Neurosurgery Clinic** team, called the Mighty Neurons, intends to decrease wait time in obtaining a language translator from three minutes to one minute by December 2019. Through a faster language translation process, patients will have a better understanding of their diagnosis and plan of care, and a more positive patient experience.
- **SCVMC's 6 Med** team, called CLABSI BUSTERS, named their project "CLABSI Prevention Awareness". The UBT's goal is decrease the incidence of central line-associated bloodstream infection (CLABSI) in 6A Medical - Oncology Unit, from two (2) occurrences to one (1) by December 31, 2019, as the team strives to deliver excellent service and the highest quality of patient care.
- **Valley Health Center - East Valley Internal Medicine** team, called Game Changers, hopes to decrease the number of non-medical walk-ins from an average of 155 walk-ins per month to 135 walk-ins per month (i.e., 20 walk-ins = 13%) by December 31, 2019. They will concentrate on providing highest quality care for patients through improving work efficiency.
- **VSC Surgical Specialties/Eye Clinic** UBT, called All EYES on US, has a goal to decrease average visit time by 10% from 83 minutes to 74 minutes by December 31, 2019. The team is working on improving clinic workflow from registration to discharge to accommodate additional patients on the schedule.
- **SCVMC's 2 Medical /1Medical** team will work on decreasing the number of patient falls from 12 per quarter to 10 per quarter by January 20, 2020.
- **Valley Specialty Center (VSC) Diabetes/Endocrine** UBT Project Team Huddles is in the process of setting their SMART goal. The team plans to increase/improve team communication through daily team huddles to improve quality, service, value, and to promote employee engagement.
- **SCVMC's Progressive Care Unit (PCU)** launched their second UBT project. For this project, the PCU Cares team seeks to improve the patient discharge process through

decreasing the discharge turnaround time (the length of time between a discharge order being placed and patient being discharged) by 10% by January 15, 2020.

- **VSC Pulmonary & Sleep Clinic** UBT, called We Be-LUNG Together, strives to deliver excellent patient service. For their second UBT project, they will work on decreasing Pulmonary Clinic follow up visit cycle time (from check in to printing of after-visit summary - AVS), from 73 minutes to 70 minutes, by January 6, 2020.
- **Behavioral Health Services Team** (Adult/Older Adult Services) will work to increase quality audit scores within BHSD clinics, from current clinic audit results to 5% improvement in audit results, by January 30, 2020.
- **SCVMC 4 Surgical** UBT seeks to improve the quality of patient services by increasing the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) score regarding patient preferences, from 60% to 65%, by January 2020.
- **SCVMC's Spinal Cord Injury Acute Rehabilitation** team, in 3 Acute Rehabilitation Unit (ARU), will work on increasing the accuracy and consolidation of patient bowel and bladder orders for 3ARU patients, from 13.3% (30 patient charts audited from May-September 2019) to 75%, by December 31, 2019. The increased efficiency and accuracy will deliver better quality patient care.
- **SCVMC Labor and Delivery** UBT, called Chorio Busters, will focus on quality of patient care by decreasing the chorioamnionitis (a bacterial infection before or during labor) rate in their laboring mothers, from 7% to 5.6%, by December 2019.
- **SCVMC's Division of Palliative Care** team is focused on improving outpatient services and increasing the number of closed medical records of deceased Palliative Care patients who were on hospice, within two weeks of death, from 32% to 80% by December 19, 2019.
- **SCVMC Neonatal Intensive Care Unit (NICU)** is dedicated to using comforting music to improve patient care. Their team, called NICU Pals, will increase the consistent use of the pacifier activated lullaby (PAL) machine during eye exams, from approximately 10% to 75%, by January 23, 2020.
- **VSC Surgical Specialties/ENT Clinic** team, called Service with a Smile: The 15-10-5 Model, is working to improve patient satisfaction. Using a 10-point scale, 0 = Poor to 10 = Excellent, the team will work in increasing the patient satisfaction score on courtesy of front office staff, from 9.0 to 9.8, by December 31, 2019.

During the project report outs, the teams also shared the many ways they are engaging their staff and management to get involved and share ideas for their UBT projects. The teams are scheduled to share their second UBT project report outs at the October 24

Labor/Management Work Group session. Social services Agency (SSA) will complete its current set of UBT projects in November 2019.

CONSEQUENCES OF NEGATIVE ACTION

The Committee would not receive the requested information.

ATTACHMENTS:

- 2019 October HHC Hospital Operational Financial Report (PDF)
- BHSD Monthly Activities Update for October 2019 HHC(PDF)
- EMS Monthly Update (PDF)

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

To: Health and Hospital Committee
From: Jackie Lowther, Director Emergency Medical Service
Subject: Emergency Medical Services Department Monthly Update
Date: October 30, 2019

Through this memo, the Emergency Medical Services (EMS) Agency provides its monthly update to the Health and Hospital Committee (HHC). In addition, at the May 21, 2019 Board of Supervisors (Board) meeting (Item 22), the Board requested an ongoing report relating to the work plan regarding the Request for Proposals process for ambulance services, including identified stakeholders and whether solicitation methods are limited to RFPs or include requests for solutions or innovations, and advisory stakeholder efforts to develop a public option to provide emergency ambulance services; and a quarterly report to HHC on the current ambulance contractor performance.

CONTRACT AMBULANCE PERFORMANCE

Rural Metro, the County’s contracted ambulance services provider, missed meeting their response time standard in Zone 4 for Code 3 patients by .39%; they were compliant in all other zones. All other system providers are meeting their response time standards as of August 31, 2019. The daily average ambulance responses and patients transported were 338 and 234 respectively for the month of August 2019.

Monthly, the contracted ambulance provider reports deployed unit hours. A unit hour is each one (1) hour period that one fully equipped and properly staffed ambulance is available to be utilized by the system, whether that ambulance is assigned to an event or not. Daily unit hours vary due to anticipated need/demand, callouts, etc. Based on the monthly reports, the contracted ambulance provider’s average daily unit hours of deployment were:

Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19
742	745	738	739	746	741	744	752

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

CONTRACTOR PERFORMANCE

Compliance is measured by several key performance indicators that include: response time requirements based on population density; designated response areas; type of response priority (RLS: red lights & siren or Non-RLS: non-red lights & siren); total number of responses; total number of late responses; and total number of responses exempted (removed) from compliance calculations. Compliance is achieved when ninety (90.00%) percent or more of the responses meet the specified response time requirement in each response priority within each designated response area. The chart below provides the requested-on time response by zone by month (for the period January-August 2019).

CODE 3 "RLS"	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>
<i>Zone 1</i>	93.32%	91.17%	90.17%	93.24%	92.25%	90.18%	92.81%	90.13%
<i>Zone 2</i>	92.71%	92.56%	92.19%	93.72%	92.34%	92.61%	93.96%	90.87%
<i>Zone 3</i>	94.40%	92.82%	91.40%	93.88%	92.51%	92.55%	92.60%	92.01%
<i>Zone 4</i>	92.80%	92.21%	92.00%	94.14%	93.59%	92.09%	93.71%	89.61%
<i>Zone 5</i>	92.75%	92.54%	92.20%	93.23%	94.69%	93.89%	92.87%	91.70%
CODE 2 "Non-RLS"	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>
<i>Zone 1</i>	97.18%	96.38%	96.36%	97.32%	95.43%	96.15%	95.14%	93.50%
<i>Zone 2</i>	94.26%	92.39%	92.86%	94.85%	95.03%	94.55%	94.54%	93.67%
<i>Zone 3</i>	92.22%	95.69%	94.48%	94.63%	96.05%	94.20%	93.68%	93.10%
<i>Zone 4</i>	92.74%	93.93%	93.45%	94.98%	93.70%	97.13%	96.41%	91.79%
<i>Zone 5</i>	97.75%	96.72%	96.47%	100.00%	96.94%	94.50%	97.14%	95.52%

First Responder Compliance

Code 3 Response	Aug 19
Gilroy, City	97.22%
Milpitas, City of	96.46%
Morgan Hill, City of	96.46%
Mountain View, City of	97.20%
San Jose, City of	91.50%
Santa Clara, City of	99.68%
Santa Clara County Central FPD	97.18%
South Santa Clara County FPD	96.99%
Sunnyvale, City of	96.29%

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
 County Executive: Jeffrey V. Smith

EMS 2022

During the June 4, 2019 Board meeting (Item 29), Supervisor Chavez requested that the EMS Agency provide a work plan for how a future Request for Proposal would be structured to create multiple options including a public option. The EMS Agency convened an introductory meeting on June 27, 2019 with the Chief Operating Officer of the County (COO), EMS Director, EMS Medical Director, Procurement Department, and County Counsel. At this meeting it was determined to structure a stakeholder group to navigate options available to the county. A summary is provided below.

The mission of the stakeholder group called EMS 2022 would be to:

- Explore and define the options and structure of the EMS system in Santa Clara County after the current non-exclusive 911 EMS ambulance transport agreement ends in 2022
- Analyze means of financing the future EMS system given those options and structure; include feasibility, sustainability as well as applicability to demographics
- Recommend decision-making in the continuing of nonexclusive 911 EMS ambulance transport after 2022 or to conduct a competitive bid for 911 EMS ambulance transport and other EMS functions
- Report group progress to HHC and Board and report non-exclusive 911 EMS ambulance transport system performance characteristics at intervals specified by HHC and the Board of Supervisors after implementation on July 1, 2019

The stakeholder group structure would include:

- Chair: EMS Agency
- Staff Support: EMS Agency, County Counsel, Chief Procurement Officer(CPO), COO
- Vision Group: COO/CEO, EMS, County Counsel, CPO, Santa Clara County Fire Chiefs Association, SCC Communications
- Police Chiefs, City Managers, Hospital Council
- EMS system stakeholder engagement through scope of work document comment periods, including member from the public, private ambulance providers, field paramedic

The Vision Group was provided the EMS Agency's Guiding Principles prior to the first meeting on August 28 in order to facilitate group discussion. These guiding principles are essential in decision-making processes and may be modified by the

group if a principle is identified as crucial to operations moving forward. This group will be meeting on a monthly basis and will be providing updates to HHC and the Board of Supervisors. The highlights from the Vision Group meeting on September 25, 2019 follow:

- Phases of a 911 EMS Response
- Initiation -911
- Configuring the response
- Response
- On-Scene
- Patient disposition
- Data and Quality
- Call to 911
 - Location confirmation/identification & call back information
 - Primary Public Safety Answering Points (PSAP) (law enforcement)
 - Landline
 - Cellular
 - Text
 - Secondary PSAP Transfer
 - EMD (Emergency Medical Dispatch)
 - PAI (Pre-Arrival Instructions)

The group would like to review systems that are currently in California with best practices and invite them to the Vision Group meeting. The Vision Group minutes are attached for your review. Additionally, there was a discussion on the article published in the Journal of Emergency Medical Services in June 2019 (attached).

ABUSE AND NEGLECT SCREEN

In response to the June 4, 2019 meeting of the Board, Agenda Item 29 entitled *“Approve Seventh Amendment to Agreement with Rural/Metro of California relating to providing 911 emergency paramedic and ambulance services, increasing authorized rates with no change to the term of the Agreement, that has been reviewed and approved by County Counsel as to form and legality”*. Supervisor Chavez requested that the EMS Agency provide a report relating to Sexual Assault Response Team (SART) protocols, a sexual assault tracking mechanism for emergency medical services

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

responders, SART training timelines for all first responders countywide, and updates regarding communication between the SART and Emergency Medical Services. This is an interim report on the project. The EMS Agency had a meeting with Valley Medical Center Leadership on June 20, 2019, August 19, 2019 and September 19, 2019. In addition to SART, the EMS Agency also wanted to focus on all mandatory reportable events required by first responders. Training was presented on October 1, 2019 to all 911 and non-911 responder Program Managers, who in turn are responsible for training all system providers by December 31, 2019. The objectives for the Abuse module are as follows:

After successfully completing this course, you will be able to:

1. Discuss the incidence of abuse and assault and describe the categories of abuse.
2. Discuss examples of partner abuse, elder abuse, child abuse, and sexual assault.
3. Describe the characteristics associated with the profile of the typical abuser of a spouse, of the elder, and of children, as well as the typical assailant of sexual assault.
4. Identify the profile of the "at-risk" spouse, elder and child.
5. Discuss the assessment and management of the abused patient.
6. Discuss the legal aspects associated with abuse situations, identify community resources that are able to assist victims of abuse and assault, and discuss the documentation associated with abused and assaulted patients.

Each patient will be assessed for signs and symptoms of abuse. The providers will be collecting necessary data regarding suspected patient abuse, neglect or domestic violence. The data will be linked to values of "Cause of Injury" accidental Injury "hit, struck, other" by another person, asphyxiation – mechanical suffocation, injury from blunt object (assault), stabbing/cut/laceration (assault), firearm injury, maltreatment/abuse, sexual abuse. Santa Clara is the only county in California that is doing this screening. The EMS Agency will begin to receive data in February 2020 and analyze any patterns and trends throughout the county. A copy of the abuse and neglect documentation guide is listed below:

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

ePCR: Patient Care: Abuse / Neglect

	<p>PATIENT CARE – Abuse / Neglect – This panel is used to collect necessary data regarding suspected patient abuse, neglect, or domestic violence. This panel is linked to these values from the element “Cause of Injury”: Accidental Injury (hit, struck, other) by another person, Asphyxiation - Mechanical Suffocation, Injury from Blunt Object (assault), Stabbing/Cut/Laceration (assault), Firearm injury, Maltreatment/Abuse, Sexual abuse</p>
<p>Are there signs or symptoms of abuse present?:</p> <p>Not applicable Unable to assess No</p> <p>Yes</p> <p>If Yes, list signs and symptoms:</p> <p>Do you suspect any abuse, neglect, or violence?:</p> <p>Not Suspected Suspected violent injury Suspected child abuse / neglect</p> <p>Suspected child molestation Suspected domestic violence Suspected elder abuse / neglect</p>	<p>Are there signs or symptoms of abuse/assault present? select the appropriate value.</p> <p>If Yes, list signs and symptoms: enter all symptoms present.</p> <p>Do you suspect any Abuse, or Neglect, or Violence: select the appropriate value.</p>
<p>Did you complete the appropriate mandatory reporting requirements for APS or CPS?:</p> <p>Not applicable No Yes (comments required)</p> <p>If Yes, what is the report number?:</p> <p>Did you report the information to law enforcement?:</p> <p>Not applicable No Yes (comment required)</p> <p>If Yes, what law enforcement agency?:</p>	<p>Did you complete appropriate mandatory reporting requirements to APS or CPS? select the appropriate value.</p> <p>If Yes, what is the report number? enter the numeric value.</p> <p>Did you report the information to Law Enforcement? select the appropriate value.</p> <p>If Yes, what Law Enforcement Agency? enter the appropriate name of the law enforcement agency.</p>
<p>Do you feel safe where you live?:</p> <p>Not applicable Yes Refuses to answer</p> <p>Patient not alone and couldn't answer Unable to answer No (comment required)</p> <p>If No, patient comments:</p> <p>Do you feel safe in your relationship, or with your family?:</p> <p>Not applicable Yes Refuses to answer</p> <p>Pt not alone and couldn't answer Unable to answer No (comment required)</p> <p>If No, patient's comment:</p>	<p>Do you feel safe at home? select the appropriate value.</p> <p>If No, patient comments: enter what the patient states as to why they may feel unsafe.</p> <p>Do you feel safe in your relationship, or with your family? select the appropriate value.</p> <p>If No, patient's comments: enter what the patient states as to why they may feel unsafe.</p>
<p>Additional patient comments:</p> <p>Start typing here...</p>	<p>Additional patient comments: enter any other specific details observed or reported.</p>

EMS UPDATE

Once a year the EMS Agency provides training and education for all system paramedics and EMTs. On October 1, 2019 a train-the-trainer course was held. It was a class for EMS Program Managers from all the fire departments, ambulance services and hospitals. This course prepares trainers to teach field responders in their respective departments/companies about the EMS System policy updates, which will take effect on January 1, 2020. All training materials are provided at no cost to Santa Clara County EMS System Providers, based on available grants and the EMS Trust Fund. The components of this year's EMS update included the following:

Module 1 – Policy and Protocol Updates (All Providers)

- Policy Update Overview
- Hazmat Decontamination Form

Module 2 – EMT Basic Scope Additions (All EMTs)

- Overview of changes

Module 3 – Paramedic Protocol Changes and Additions (Paramedics)

- Overview of changes and additions

Module 4 – Ventricular Assist Device (All Providers)

- Review of Protocol

Module 5 – Abuse (All Providers)

- Review of types of abuse, signs and symptoms, reporting requirements, and tactics in providing patient care

Module 6 – Documentation Policy Update (All Providers)

- Review of Policy

Module 7 – Elite ePCR Solution (All Elite ePCR Users)

- Policy 509 Review
- ePCR Instructor Training Guide



One EMS System Develops a Rational 911 Response

Thu, Jun 20, 2019 | By Karl A. Sporer, MD, FACEP, FACP, Nicole D'Arcy, MD



EMS providers in Alameda County, California.

Our 911 Emergency Medical Services (EMS) systems have seen an unprecedented increase in the need for their services over the past decade. There are significant financial and regulatory constraints on all of our EMS systems as well as concern about the currently common use of lights and sirens response.^{1, 2} Managing this avalanche of patients will need the analysis of existing local experience to design rational responses.

Alameda County is an urban/suburban county in Northern California that is 737 square miles with a population of 1.6 million. The paramedic-staffed first response engines and transport ambulances respond to 140,000 EMS calls and transport 100,000 patients each year.

Our two dispatch centers use the Medical Priority Dispatch System (MPDS) and are certified as Centers of Excellence. The computer-aided dispatch systems are linked to a single electronic patient care record that is used by all paramedics in our county.

In a prior publication, we described our data analysis and presentation of the prehospital clinical outcomes for each dispatch determinant.³ By linking dispatch data with our electronic patient care record (EPCR) for each 911 call, we captured the MPDS determinant, disposition (transport, cancelled, patient declined transport, etc.), any critical interventions performed, and all deaths.

We presented the total number of calls, the number of transports, the prehospital mortality rate, the total rate of critical interventions, and the breakdown of those critical interventions for each determinant on our website: <http://www.alcoems.org/mpds-categories/>.

The optimal presentation of this data has been driven by several iterations over the past several years.⁴⁻⁷ The list of time-critical interventions include those that involve cardiac arrest, advanced airway management, STEMI/Stroke/Trauma alert patients, and those with treatment of active seizures. (Table 1)

Table 1

CPAP	Dopamine
Intubation	Epinephrine (1:1000 & 1:10,000)
King LTD	Intraosseous
Needle Decompression	Pacing
Albuterol	Res-Q-POD
Amiodarone	ROSC
Assisted Ventilation	Sodium Bicarbonate
Atropine	STEMI Alert
BVM	Stroke Alert
Calcium Chloride	Trauma Activation
CPR (Manual or Mechanical)	Midazolam
Defibrillation	

Early in this process, we recognized that the use of interventions such as IV placement, glucose measurement, and pulse oximetry measurement were too common to assist in predicting the need for ALS interventions or as a surrogate for severity and time-sensitivity of illness.

Fentanyl or morphine are the most commonly administered intervention and we chose not to include it among our critical interventions because analgesia is not time critical. The use of aspirin and nitroglycerin are also not included.

Our experience at analyzing this type of data at four different dispatch centers in three counties demonstrated enough regional differences to recommend that local data should be used to optimize any EMS system.

In the development of an optimal EMS system to be implemented in 2019, we proposed to identify those determinants with consistently low acuity that could have a limited response (no first response, Basic Life Support) with a longer response time standard without lights and sirens.

This optimization would have our first responders and transport paramedics available for the sickest patients who require a time-sensitive intervention. The risks of lights and sirens response have been well documented with an increased risk of ambulance and engine accidents as well as the “wake effect” causing ancillary traffic accidents.^{2, 8-10}

A 2017 study from Utah estimated that nationally there are 6,500 EMS vehicle collisions per year and 32,500 wake-effect collisions per year.² Our goal is to approach a rational response to 911 calls with a judicious use of lights and sirens, appropriate determinant-based standards for response times, and efficient resource utilization.

With data from 2015 and 2016, we developed a formula to create a Risk Priority Number (RPN) to help us in assigning each MPDS determinant to a specific priority response. (See Figure 1)

Figure 1: Risk Priority Number (RPN)

Risk Priority Number = [(% Transported x 2) + 1] x [(% Time Sensitive/Critical x 3) + 1] x [(% Field Death x 4) + 1].

Risk Priority Number (RPN) is the multiplication of the following columns:

(%Transported * 2)+1

-- Transport Rate increases patient risk versus Non-transport, hence is multiplied by 2 to help illuminate this. 1 is added to the rate to prevent multiplication by zero.

(% Time Sensitive/Critical *3)+1

-- Time Sensitive/Critical Calls are thought to be critical over and above transports, and hence are multiplied by 3. 1 is added to the rate to prevent multiplication by zero.

(% Field Death *4)+1

-- Field Deaths are thought to be the most critical patient risk and hence are multiplied by 4. 1 is added to the rate to prevent multiplication by zero.

The **Risk Priority Number** allows us order each determinant by severity. A working group analyzed the list of ordered determinants and determined the cutoff between Priorities. A further analysis of operational issues required some changes, e.g. moving MVA determinants to require a first responder despite low rates of transport and interventions.

The formula used the transport rate, the rate of critical interventions, and the field death rate to calculate this score. Each of the three components is multiplied by its severity-weighted coefficient (1, 2 or 3) to increase the importance of critical interventions and field death. then multiplied by 1 to prevent multiplication by 0.

Then, the three weighted components are multiplied together to produce a Risk Priority Number. A working group then analyzed the list of determinants and applied a cutoff between priorities.

Figure 2

Priority 1	
	Code 3 ALS First Responder
	Code 3 ALS Ambulance
	Code 3 EMS Super
Priority 2	
02D	Allergic Rx
02E	Allergic Rx
06D	Breathing Problem
06E	Breathing Problem
07D	Burns / Explosions
07E	Burns / Explosions
09D	Cardiac / Resp Arre
09E	Cardiac / Resp Arre
11E	Choking
14A	Drowning
14B	Drowning
14C	Drowning
14D	Drowning
14E	Drowning
23D	Overdose / Poisoni
27B	GSW / Stabbing / P
27D	GSW / Stabbing / P
30D	Traumatic Injury
31E	Uncon. / Syncope
01D	ABD Pain
02B	Allergic Rx
02C	Allergic Rx
03D	Animal Bite/At
04D	Assault/Sex As
05D	Back Pain
06C	Breathing Prol
07A	Burns / Explos
07B	Burns / Explos
07C	Burns / Explos
08C	CO / Inh. / Haz
08D	CO / Inh. / Haz
08O	CO / Inh. / Hazmat
09B	Cardiac / Resp Arrest
10C	Chest Pain
10D	Chest Pain
11A	Choking
11D	Choking
11A	Choking
Priority 3	
	Code 3 ALS First Responder (As needed)
	Code 3 ALS A
33A	Inter-Fac Tra
33C	Inter-Fac Tra
33D	Inter-Fac Tra
	Code 3 ALS A
37A	Inter-Fac Tra
37C	Inter-Fac Tra
37D	Inter-Fac Tra
Priority 4	
	Code 2 BLS or ALS First Responder (Optional)
	Code 2 BLS or ALS Ambulance
01A	ABD Pain
01C	ABD Pain
02A	Allergic Rx
03A	Animal Bite/Attack
03B	Animal Bite/Attack
04A	Assault/Sex Assault
04B	Assault/Sex Assault
05A	Back Pain
05C	Back Pain
08B	CO / Inh. / Hazmat

Above, an example of the priority groups. [Download the complete set \(PDF\)](#).

Operational Issues

There were a number of operational issues that needed to be considered. For example, motor vehicle accidents had a low rate of transportation to the hospital and few critical interventions, but it was felt that there was an operational need for the engine first response.

Other determinants such as 12 A (Seizure stopped and breathing verified) received a Priority 2 (Lights and Sirens response) because of the rate (6%) of patients who received midazolam (Versed).

Table 2

Priority 1	
Critical	
ALS First Responder	Lights and Sirens
ALS Ambulance	Lights and Sirens
EMS Supervisor	Lights and Sirens
Calls with very high rates of ALS interventions or mortality. This level could also use any type of vehicle or provider to initiate CPR or AED.	
Priority 2	
Life Threatening	
ALS First Responder	Lights and Sirens
ALS Ambulance	Lights and Sirens
Mixture of several categories with high rate of ALS intervention and high transportation rates.	
Priority 3	
Urgent / Emergent Interfacility Transport	
ALS First Responder(as needed)	Lights and Sirens
ALS Ambulance	Lights and Sirens
911 system generated request for interfacility transfer from healthcare facility that has licensed medical personnel on scene credentialed at the level of Registered Nurse or higher (no need for first response).	
Priority 4	
Non-Life Threatening	
Optional BLS or ALS First Responder	No Lights and Sirens
BLS or ALS Ambulance	No Lights and Sirens
Mixture of categories with low rates of interventions and moderate transport rates.	

There were a number of determinants with small numbers and low rates of intervention but due to potential emotional responses were included in Priority 2. These include drownings, electrocutions, choking, and burns. Table 2 outlines the four priority levels as exemplified by the examples below:

Priority 1

This group will capture most of our cardiac arrest patients and will make up 9% of all calls. Multiple vehicles will be dispatched lights and sirens in order to get a defibrillator to the patient as soon as possible. These include many Delta and Echo determinants in various categories such as respiratory distress, cardiac arrest, as well as drowning and penetrating trauma.

Priority 2

This group will capture those patients who will need some sort of time-dependent treatment who make up 40% of all 911 calls. It includes a number of Delta as well as selected Charlie determinants with high rates of critical interventions among a variety of complaints such as breathing problems, choking, and burns.

Priority 3

This group includes all of our interfacility transports from clinics and emergency departments. The group from the emergency department is a very sick group of patients with high rates of mortality and critical interventions that commonly have an acute myocardial infarction or are post-cardiac arrest.

Because they are in a medical setting with health professionals, they receive a lights and sirens ambulance-only response (no first responders). This response is unchanged from our current practice.

Priority 4

This group of patients with a minimal need for a time-dependent intervention will not require an engine first response and will receive either a BLS or ALS ambulance without lights and sirens. This priority has a large number of determinants such as abdominal pain, sick person, or back pain.

It is this group that will see a decrease in the overall lights and sirens rate under our new response system. For those jurisdictions who wish to respond with an engine-first response, lights and sirens response is clearly not medically indicated. This new EMS system integrated into a performance-based contract will have longer time standards/allowances for Priority 4 patients.

Our EMS system used our existing local clinical data to measure transport rates, critical interventions, and mortality rates for all of our dispatch determinants. This information is used to calculate a Risk Priority Number that is used along with operational common sense to develop a rational approach to utilizing our prehospital personnel in a manner that is best for our workers, for our patients and for our community. (Table 3 and Figure 2)

Table 3

- Link Computer Aided Dispatch data and electronic patient care record
- Measure the rates of transport, critical interventions, and mortality for each category
- Use the Risk Priority Number (RPN) to order all of our categories
- Separate these categories by RPN and operational considerations into rational priorities

Acknowledgement:

For our deployment GIS mapping and statistical analysis, we had assistance from Stewart Gary, Public Safety Principal, Citygate Associates.

sgary@citygateassociates.com

for further information.

References

1. Alpert A, Morganti KG, Margolis GS, et al. Giving EMS flexibility in transporting low-acuity patients could generate substantial Medicare savings. *Health Aff (Millwood)* 2013;32(12):2142-8. doi: 10.1377/hlthaff.2013.0741

2. Murray B, Kue R. The Use of Emergency Lights and Sirens by Ambulances and Their Effect on Patient Outcomes and Public Safety: A Comprehensive Review of the Literature. *Prehosp Disaster Med* 2017;32(2):209-16. doi: 10.1017/S1049023X16001503
3. Sporer KA, English J. What dispatch really shows. *JEMS* 2014;39(7):58-60, 62-3.
4. Sporer KA, Youngblood GM, Rodriguez RM. The ability of emergency medical dispatch codes of medical complaints to predict ALS prehospital interventions. *Prehosp Emerg Care* 2007;11(2):192-8. doi: 10.1080/10903120701205984 [published Online First: 2007/04/25]
5. Sporer KA, Johnson NJ. Detailed analysis of prehospital interventions in medical priority dispatch system determinants. *West J Emerg Med* 2011;12(1):19-29. [published Online First: 2011/06/22]
6. Sporer KA, Craig AM, Johnson NJ, et al. Does emergency medical dispatch priority predict delphi process-derived levels of prehospital intervention? *Prehosp Disaster Med* 2010;25(4):309-17. [published Online First: 2010/09/17]
7. Hodell EM, Sporer KA, Brown JF. Which emergency medical dispatch codes predict high prehospital nontransport rates in an urban community? *Prehosp Emerg Care* 2014;18(1):28-34. doi: 10.3109/10903127.2013.825349 [published Online First: 2013/09/14]
8. Sanddal TL, Sanddal ND, Ward N, et al. Ambulance Crash Characteristics in the US Defined by the Popular Press: A Retrospective Analysis. *Emerg Med Int* 2010;2010:525979. doi: 10.1155/2010/525979
9. Clawson JJ, Martin RL, Cady GA, et al. The wake-effect--emergency vehicle-related collisions. *Prehosp Disaster Med* 1997;12(4):274-7.
10. Firefighter Fatalities in the United States, 2016. *NPFA Journal* 2017

By

[Karl A. Sporer, MD, FACEP, FACP](#)

Karl A. Sporer, MD, FACEP, FACP, is an emergency physician with over 30 years experience in urban county EDs and over 12 years of EMS experience in both fire-based and private emergency medical systems. He's currently the EMS medical director for Alameda County, Calif.

[Nicole D'Arcy, MD](#)

Nicole D'Arcy, MD is a graduate of the EMS and Disaster Medicine fellow at UCSF and currently affiliated with Santa Clara Valley Medical Center. She attended Stanford Medical School and completed residency in emergency medicine at Harbor-UCLA. She can be reached at nicoloid@gmail.com.

Copyright © 2019: Clarion UX. All Rights Reserved.

EXHIBIT G – MPDS CLINICAL RESPONSE PRIORITIES

	Priority 1
	Code 3 ALS First Responder
	Code 3 ALS Ambulance
	Code 3 EMS Supervisor
02D	Allergic Rx
02E	Allergic Rx
06D	Breathing Problems
06E	Breathing Problems
07D	Burns / Explosions
07E	Burns / Explosions
09D	Cardiac / Resp Arrest
09E	Cardiac / Resp Arrest
11E	Choking
14A	Drowning
14B	Drowning
14C	Drowning
14D	Drowning
14E	Drowning
23D	Overdose / Poisoning
27B	GSW / Stabbing / Pen. Trauma
27D	GSW / Stabbing / Pen. Trauma
30D	Traumatic Injury
31E	Uncon. / Syncope

	Priority 2
	Code 3 ALS First Responder
	Code 3 ALS Ambulance
01D	ABD Pain
02B	Allergic Rx
02C	Allergic Rx
03D	Animal Bite/Attack
04D	Assault/Sex Assault
05D	Back Pain
06C	Breathing Problems
07A	Burns / Explosions
07B	Burns / Explosions

07C	Burns / Explosions
08C	CO / Inh. / Hazmat
08D	CO / Inh. / Hazmat
08O	CO / Inh. / Hazmat
09B	Cardiac / Resp Arrest
10C	Chest Pain
10D	Chest Pain
11A	Choking
11D	Choking
12A	Seizures
12B	Seizures
12C	Seizures
12D	Seizures
13C	Diabetic Problems
13D	Diabetic Problems
15C	Electrocution
15D	Electrocution
15E	Electrocution
17D	Falls
18C	Headache
19C	Heart Problems
19D	Heart Problems
21C	Hemorrhage/Lacerations
21D	Hemorrhage/Lacerations
22A	Inaccessible Incident- No longer trapped
22B	Entrapment
22D	Entrapment
24C	Pregnancy / Childbirth
24D	Pregnancy / Childbirth
25D	Suicide Attempt
26C	Sick Person
27A	GSW / Stabbing / Pen. Trauma
28A	Stroke / CVA
28C	Stroke / CVA
29A	MVA
29B	MVA
29D	MVA
29O	MVA
31C	Uncon. / Syncope
31D	Uncon. / Syncope

	Priority 3
	Code 3 ALS First Responder (As needed)
	Code 3 ALS Ambulance
33A	Inter-Fac Transfer - Routine
33C	Inter-Fac Transfer - Routine
33D	Inter-Fac Transfer - Routine
	Code 3 ALS Ambulance
37A	Inter-Fac Transfer - Specific
37C	Inter-Fac Transfer - Specific
37D	Inter-Fac Transfer - Specific

	Priority 4
	Code 2 BLS or ALS First Responder (Optional)
	Code 2 BLS or ALS Ambulance
01A	ABD Pain
01C	ABD Pain
02A	Allergic Rx
03A	Animal Bite/Attack
03B	Animal Bite/Attack
04A	Assault/Sex Assault
04B	Assault/Sex Assault
05A	Back Pain
05C	Back Pain
08B	CO / Inh. / Hazmat
09O	Cardiac / Resp Arrest
10A	Chest Pain
13A	Diabetic Problems
16A	Eye Injury / Problem
16B	Severe Eye Injury
16D	Eye Injury / Problem
17A	Falls
17B	Falls
18A	Headache
18B	Headache Unknown Status
19A	Heart Problems
20A	Heat / Cold Exposure
20B	Heat / Cold Exposure
20C	Heat / Cold Exposure
20D	Heat / Cold Exposure

21A	Hemorrhage/Lacerations
21B	Hemorrhage/Lacerations
23B	Overdose / Poisoning
23C	Overdose / Poisoning
23O	Overdose / Poisoning
24A	Pregnancy / Childbirth
24B	Pregnancy / Childbirth
24O	Pregnancy / Childbirth
25A	Suicide Attempt
25B	Suicide Attempt
26A	Sick Person
26B	Sick Person
26D	Sick Person
26O	Sick Person
30A	Traumatic Injury
30B	Traumatic Injury
31A	Uncon. / Syncope
32B	Unk. Problem (Man down)
32D	Unk. Problem (Man down)



99123

DATE: November 13, 2019

TO: Health and Hospital Committee

FROM: Rene G. Santiago, Deputy County Executive/Director, SCVHHS

SUBJECT: Director's Report, County of Santa Clara Health System

RECOMMENDED ACTION

Consider recommendations relating to emerging issues regarding the County of Santa Clara Health System.

Possible action:

- a. Receive report from Director, County of Santa Clara Health System.
- b. Receive verbal report from Health Officer.
- c. Receive verbal report from Chief Executive Officer (CEO), Santa Clara Valley Medical Center.
- d. Receive verbal report from Director, Behavioral Health Services Department.
- e. Receive verbal report from CEO, Valley Health Plan.
- f. Receive verbal report relating to Federal health policy and budget landscape.

FISCAL IMPLICATIONS

There are no fiscal implications associated with the receipt of this report. It is an informational item, only.

REASONS FOR RECOMMENDATION

The Health and Hospital Committee has requested the Deputy County Executive/Director of County of Santa Clara Health System present monthly reports regarding emerging issues and items of interest to the public and to the Committee. The Committee also requested verbal as well as written updates on operations for the departments comprising the Health System. The Emergency Medical Services and Public Health Department updates are provided as attachments, as is a report on Whole Person Care.

CHILD IMPACT

The recommended action will have no/neutral impact on children and youth.

SENIOR IMPACT

The recommended action will have no/neutral impact on seniors.

SUSTAINABILITY IMPLICATIONS

The recommended action will have no/neutral sustainability implications.

BACKGROUND

Given the short amount of time between the October and November meetings, a verbal update will be provided.

CONSEQUENCES OF NEGATIVE ACTION

The Committee would not receive the requested information.

ATTACHMENTS:

- 2019 November HHC Hospital Operational Financial Report (PDF)
- EMS_Monthly Update_11-13-2019_HHC_final (PDF)
- PHD HHC Update _11-13-2019 HHC Final (PDF)
- WPC Report_11-13-2019 HHC (PDF)

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

To: Health and Hospital Committee
From: Jackie Lowther, Director Emergency Medical Service
Subject: Emergency Medical Services Department Monthly Update
Date: November 13, 2019

Through this memo, the Emergency Medical Services (EMS) Agency provides its monthly update to the Health and Hospital Committee (HHC). Due to multiple issues presenting simultaneously in Santa Clara County, the EMS 2020 Vision Group has not had the opportunity to meet since their last meeting September 25, 2019.

CONTRACT AMBULANCE PERFORMANCE

Rural Metro missed meeting their response time standard in Zone 1, 2 and 3 for Code 3 patients; they were compliant in zones 4 and 5. The daily average ambulance responses and patients transported were 330 and 225 respectively for the month of September 2019.

Monthly, the contracted ambulance provider reports deployed unit hours. A unit hour is each one (1) hour period that one fully equipped, and properly staffed ambulance is available to be utilized by the system, whether that ambulance is assigned to an event or not. Daily unit hours vary due to anticipated need/demand, callouts, etc. Despite lower volumes, deployment has increased since July in order to insure coverage throughout all zones. Based on the monthly reports, the contracted ambulance provider’s average daily unit hours of deployment were:

<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>
742	745	738	739	746	741	744	752	790

CONTRACTOR PERFORMANCE

Compliance is measured by several key performance indicators that include; response time requirements based on population density; designated response areas; type of

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

response priority (RLS: red lights & siren or Non-RLS: non-red lights & siren); total number of responses; total number of late responses; and total number of responses exempted (removed) from compliance calculations. Compliance is achieved when ninety (90.00%) percent or more of the responses meet the specified response time requirement in each response priority within each designated response area. The chart below provides the requested-on time response by zone by month (for the period January-September 2019).

2019 performance data.

CODE 3 "RLS"	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>
<i>Zone 1</i>	93.32%	91.17%	90.17%	93.24%	92.25%	90.18%	92.81%	90.13%	88.64%
<i>Zone 2</i>	92.71%	92.56%	92.19%	93.72%	92.34%	92.61%	93.96%	90.87%	89.60%
<i>Zone 3</i>	94.40%	92.82%	91.40%	93.88%	92.51%	92.55%	92.60%	92.01%	89.46%
<i>Zone 4</i>	92.80%	92.21%	92.00%	94.14%	93.59%	92.09%	93.71%	89.61%	91.35%
<i>Zone 5</i>	92.75%	92.54%	92.20%	93.23%	94.69%	93.89%	92.87%	91.70%	92.11%
CODE 2 "Non-RLS"	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>
<i>Zone 1</i>	97.18%	96.38%	96.36%	97.32%	95.43%	96.15%	95.14%	93.50%	92.35%
<i>Zone 2</i>	94.26%	92.39%	92.86%	94.85%	95.03%	94.55%	94.54%	93.67%	93.92%
<i>Zone 3</i>	92.22%	95.69%	94.48%	94.63%	96.05%	94.20%	93.68%	93.10%	91.58%
<i>Zone 4</i>	92.74%	93.93%	93.45%	94.98%	93.70%	97.13%	96.41%	91.79%	92.82%
<i>Zone 5</i>	97.75%	96.72%	96.47%	100.00%	96.94%	94.50%	97.14%	95.52%	94.63%

First Responder Compliance

First responders report their compliance the last day of month following their reported response in order to reconcile all possible late responses. August data was reported as part of the October Committee meeting; September data will be provided in the next report.

DISASTER PREPAREDNESS

Over the course of October, the EMS Agency staffed several key roles within the County Emergency Operations Center (EOC) as part of the activation and response to multiple County events and Pacific Gas and Electric (PG&E) Public Safety Power Shutoff Event. These roles included Operations Section Chief, Medical-Health Branch Director and EMS Unit Leader.

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
 County Executive: Jeffrey V. Smith

Throughout the course of County events, the focus for those staffing the EOC was to protect the safety of our County employees and citizens; limit or prevent disruptions of our medical-health system and maintain other critical County services. To date, there have been no significant impacts noted to the Medical-Health System from any County events.

The County was also faced with the management of the first PG&E Public Safety Power Shutoff. The Public Health Department and EMS Agency staffed additional roles within the EOC and quickly identified the need to locate and assess the needs of approximately 1,100 individuals in the County deemed dependent on baseline medical equipment by PG&E. These individuals were first contacted by PG&E and advised of the potential power shutoff and encouraged to plan for interruption of services. Those whom PG&E were unable to contact were identified and contacted by their cities, local law enforcement or outreach from the County Medical-Health System.



99624

DATE: December 11, 2019
TO: Health and Hospital Committee
FROM: Rene G. Santiago, Deputy County Executive/Director, SCVHHS
SUBJECT: Director's Report, County of Santa Clara Health System

RECOMMENDED ACTION

Consider recommendations relating to emerging issues regarding the County of Santa Clara Health System.

Possible action:

- a. Receive report from Director, County of Santa Clara Health System.
- b. Receive verbal report from Public Health Officer.
- c. Receive verbal report from Chief Executive Officer (CEO), Santa Clara Valley Medical Center.
- d. Receive verbal report from Director, Behavioral Health Services Department.
- e. Receive verbal report from CEO, Valley Health Plan.
- f. Receive verbal report relating to Federal health policy and budget landscape.

FISCAL IMPLICATIONS

There are no fiscal implications associated with the receipt of this report. It is an informational item, only.

CHILD IMPACT

The recommended action will have no/neutral impact on children and youth.

SENIOR IMPACT

The recommended action will have no/neutral impact on seniors.

SUSTAINABILITY IMPLICATIONS

The recommended action will have no/neutral sustainability implications.

CONSEQUENCES OF NEGATIVE ACTION

The Committee would not receive the requested information.

ATTACHMENTS:

- PHD Monthly Update_12-11-2019 HHC (PDF)
- 2019 December HHC Hospital Operational Financial Report (PDF)
- BHSD Monthly Activities Update for December 2019 HHC_12.11.2019 (PDF)
- EMS Monthly Update_12-11-2019 HHC Meeting_FINAL (PDF)

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

To: Health and Hospital Committee
From: Jackie Lowther, Director Emergency Medical Service
Subject: Emergency Medical Services Department Monthly Update
Date: December 11, 2019

Through this memo, the Emergency Medical Services (EMS) Agency provides its monthly update to the Health and Hospital Committee (HHC).

EMS 2022

The EMS 2022 Vision Group has met twice; the next meeting is scheduled for December.

First Responder Compliance

2019 performance data.

The First Responders are not required to submit their data until the last day of the previous month, therefore this report will be a month behind. All first responders have exceeded their on-time compliance requirements.

CODE 3 Response	19-Jan	19-Feb	19-Mar	19-Apr	19-May	19-Jun	19-Jul	19-Aug	19-Sep
Gilroy, City of	96.53%	97.55%	97.04%	95.70%	97.74%	96.92%	95.97%	97.22%	98.49%
Milpitas, City of	93.87%	93.22%	94.60%	98.72%	96.21%	96.59%	97.43%	96.46%	95.52%
Morgan Hill, City of	93.62%	96.88%	97.84%	95.83%	95.02%	96.65%	96.98%	96.46%	97.26%
Mountain View, City of	97.31%	99.66%	99.14%	97.96%	97.82%	97.38%	99.37%	97.20%	99.09%
San Jose, City of	91.59%	90.40%	92.41%	91.98%	91.52%	91.62%	90.87%	91.50%	92.20%
Santa Clara, City of	98.33%	99.01%	99.23%	99.43%	99.71%	100.00%	99.41%	99.69%	99.71%
Santa Clara County Central FPD	98.13%	96.10%	97.01%	97.64%	96.96%	96.50%	97.83%	97.18%	96.46%
South Santa Clara County FPD	98.46%	94.55%	98.25%	93.65%	92.96%	90.35%	91.54%	96.99%	95.12%
Sunnyvale, City of	98.74%	97.33%	97.78%	98.07%	97.50%	96.96%	96.32%	96.29%	96.87%

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

PUBLIC EDUCATION

The EMS Agency promotes several public education outreach campaigns. Each month, the EMS Agency provides educational campaign materials to fire departments and ambulance services within the Santa Clara County EMS System. During the third quarter CY2019, the EMS Agency’s public education focused on Heat Related Illness, Hands Only CPR and Fall Prevention. All three campaigns had materials available in English, Spanish and Vietnamese. The EMS Agency’s social media posts reached 15,015 individuals during the quarter. The posts pertained to the three-public education campaigns as well as other subjects like cooling center locations and mental health awareness and resources. Fourth quarter public education campaign topics will include influenza, heart attack and carbon monoxide poisoning. Currently, the EMS Agency is working on a Distracted Driver flyer to distribute to the community.

Public Education
<i>Carbon Monoxide Poisoning</i>
<i>Influenza</i>
<i>Santa Clara County Emergency Alert System (AlertSCC)</i>
<i>Pool Safety</i>
<i>Preventing Snake Bites</i>
<i>STROKE Awareness</i>
<i>Heart Attacks, Heart Attacks and Women</i>
<i>Heat Related Illness</i>
<i>Falls and Seniors</i>
<i>“Pull to the Right for Sirens and Lights”</i>
<i>Distracted Driver</i>



County of Santa Clara
Emergency Medical Services System

Public Information

Draft of
Distracted
Driver
Campaign

STOP DISTRACTED DRIVING



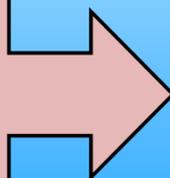
In 2019, distracted driving was a reported factor in 8.5% of fatal motor vehicle crashes.



- Reaching for an object increases the chances of a car crash by 8 times according to the more alarming distracted driving statistics.
- Distracted driving, fueled by the accessibility of smart phones, is one of the factors contributing to the recent spike in accident claims.
- In 2019, distracted driving was a reported factor in 8.5% of fatal motor vehicle crashes.

Common distractions while driving:

- Talking and texting
- Eating
- Adjustment of music or GPS
- Handling children or pets
- Talking to passengers
- Applying makeup



Ways to avoid distractions:

- If there is an emergency pull over safely to the right shoulder to make a call.
- Don't eat while driving, food spills are a major cause of distraction.
- Do your multi-tasking outside the car, get everything settled before you start driving.
- Speak up, if you see someone driving while distracted, say something, let them know that you are not comfortable with that behavior.



www.sccemsagency.org
<http://facebook.com/SantaClaraCountyEMS>

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

To: Health and Hospital Committee
From: Jackie Lowther, Director Emergency Medical Services
Subject: Emergency Medical Services – Contract Ambulance Performance
Date: December 11, 2019

At the November 13, 2019 Health and Hospital Committee (HHC) meeting, there was significant discussion regarding the response times of Rural/Metro of California, Inc. (“Rural/Metro”), a subsidiary of American Medical Response, the sole contracted ambulance provider for emergency transport services in the County. As a result of that discussion, Chairperson Simitian and Vice Chairperson Ellenberg requested that Emergency Medical Services (EMS) report back at this HHC meeting with answers to the following questions:

1. Are Rural/Metro’s response times for August through October 2019 in compliance with Rural/Metro’s contractual obligations?
2. What accounts for the decrease in Rural/Metro’s response time compliance below the required 90% threshold for the months of August through October 2019?
3. Does Rural/Metro’s response time performance from August through October 2019 raise patient care concerns?
4. What penalties, if any, does Rural/Metro face based on its response times for August through October 2019, and how do those penalties differ from those that would have been faced prior to enactment of the 7th amendment? What corrective actions are planned to improve compliance?

Further, at the November 19, 2019 regular meeting of the Board of Supervisors, President Simitian requested that EMS answer the following additional question in its next report:

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

5. Does EMS have the ability to independently verify the response times reported by Rural/Metro?

Detailed answers to each of these questions are provided below:

Question 1: Are Rural/Metro’s response times for August through October 2019 in compliance with Rural/Metro’s contractual obligations?

No. As shown in the highlighted portions of Table 1, below, and as explained in more detail in response to Question 2, below, beginning in August 2019 and continuing through October 2019, the response times reported by Rural/Metro failed to meet the minimum 90% compliance per zone as required under the 7th amendment to the contract between the County and Rural/Metro (the “7th Amendment”).

Table 1 Response Time Compliance of Rural/Metro by Zone June 2019 to October 2019

CODE 3 “RLS”**	19-Jun	19-Jul	19-Aug	19-Sep	19-Oct
Zone 1	90.18%	92.81%	90.13%	88.64%	87.92%
Zone 2	92.61%	93.96%	90.87%	89.60%	90.61%
Zone 3	92.55%	92.60%	92.01%	89.46%	89.98%
Zone 4	92.09%	93.71%	89.61%	91.35%	90.02%
Zone 5	93.89%	92.87%	91.70%	92.11%	90.69%
CODE 2 “Non-RLS”**	19-Jun	19-Jul	19-Aug	19-Sep	19-Oct
Zone 1	96.15%	95.14%	93.50%	92.35%	93.31%
Zone 2	94.55%	94.54%	93.67%	93.92%	92.73%
Zone 3	94.20%	93.68%	93.10%	91.58%	89.92%
Zone 4	97.13%	96.41%	91.79%	92.82%	90.83%
Zone 5	94.50%	97.14%	95.52%	94.63%	94.81%

* “Red lights and siren” emergency response

** Acute, but non-time sensitive response

Question 2: What accounts for the decrease in Rural/Metro’s response time compliance below the required 90% threshold for the months of August through October 2019?

The decrease in Rural/Metro’s reported response times appears to be attributable to two related factors:

- A. The 7th Amendment modified the methodology to calculate how the “cancellation en route responses” should be determined to be “on time” or “late,” to take into account the “projected remaining drive time” at the moment of cancellation; however,
- B. The method of capturing the projected remaining drive times, proposed by Rural/Metro and as set forth in the 7th Amendment, is not sensitive enough, technologically speaking, to implement the new cancellation provision in the manner intended under the contract.

This conclusion is supported by the direct correlation between implementation of the new methodology for calculating response times for cancelled en route responses and the immediate and substantial increase in the “late” en route cancelled responses.

A detailed explanation of each of these factors is provided below:

A. Change in “Cancellation En route” Response Time Calculation

The 7th Amendment became effective July 2019, but the new methodology for calculating response times was not fully implemented until August 2019 because the technology systems for capturing and verifying these response times had to be re-configured. The data in Table 1, above, shows that the decrease in response times directly corresponds to the timing of the implementation of this new methodology.

Prior to execution of the 7th Amendment, “cancelled en route” responses were excluded from the compliance calculation process and cancelled en route calls were counted as “late” only if they were beyond the response time requirement at the time of cancellation. This prior methodology was used because the moment of cancellation data point would not always accurately reflect an ambulance response time and could skew overall percentages unless it was already late at the point of cancellation.

During negotiation of the terms of the 7th Amendment, Rural/Metro insisted upon a change to the method for calculating “cancelled en route” response times. Rural/Metro argued that the existing methodology was unfair because Rural/Metro was not given credit for on time cancelled responses but was still penalized for late cancelled responses.

Under the new methodology proposed by Rural/Metro and ultimately adopted under the 7th Amendment, an ambulance’s “projected remaining drive time” data is captured at the point of cancellation using an existing third-party software system called MARVLIS (Mobile Area Routing and Vehicle Location Information System). Under this methodology, Rural/Metro is supposed to receive credit for an on-time response if MARVLIS projects an arrival to the scene within the required response time window. But if MARVLIS projects arrival to the scene beyond the required response time, the cancelled call is counted as late.

Table 2 documents the response time performance for the zones in which the minimum 90% was not achieved and compares the response times under the “new” calculation methodology (i.e., including projected drive times under the 7th Amendment) versus the “old” calculation methodology (i.e., not taking into account projected drive times and excluding “on time” cancelled en route times).

Table 2 Comparison of Response Time Compliance Using Methodology Under the Original Agreement Versus Under the 7th Amendment

August 2019 Zone 4 / CODE 3	Total Zone Responses	Total Cancelled Enroute Response in Zone	Total “On- Time” Cancelled Enroute Responses in Zone	Total “Late” Cancelled Enroute Responses in Zone	Total Late Responses in Zone	Compliance %
7th Amendment Standard (Current)	2,271	146	93	53	236	89.61%
Original Agreement Standard	2,134	146	137	9	192	91.01%
September 2019 Zone 1 / CODE 3						
7th Amendment Standard (Current)	1,100	59	40	19	125	88.64%
Original Agreement Standard	1,044	59	56	3	109	89.56%
September 2019						

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
 County Executive: Jeffrey V. Smith

Zone 2 / CODE 3						
7th Amendment Standard (Current)	1,298	84	55	29	135	89.60%
Original Agreement Standard	1,218	84	80	4	110	90.97%
September 2019 Zone 3 / CODE 3						
7th Amendment Standard (Current)	2,050	140	89	51	216	89.46%
Original Agreement Standard	1,925	140	125	15	180	90.65%
October 2019 Zone 1 / CODE 3						
7th Amendment Standard (Current)	1,142	78	53	25	138	87.92%
Original Agreement Standard	1,068	78	74	4	117	89.05%
October 2019 Zone 2 / CODE 2						
7th Amendment Standard (Current)	645	97	83	14	65	89.92%
Original Agreement Standard	552	97	93	4	55	90.04%
October 2019 Zone 3 / CODE 3						
7th Amendment Standard (Current)	2,316	142	89	53	232	89.98%
Original Agreement Standard	2,236	142	80	9	188	91.60%

As shown, using the “old” methodology, Rural/Metro would have exceeded the 90% compliance threshold in all but two zones. And based on manual calculations by EMS, the ambulance provider missed the minimum 90% threshold in one of those two zones by three (3) responses.

B. Issues with Implementation of Projected Response Time Calculation

The MARVLIS ambulance tracking system is widely used by ambulance providers around the State to provide location data to ambulance providers, dispatchers, and EMS agencies for the purposes of assessing demand and adequacy of deployment within an EMS operating area. However, the MARVLIS system was not developed for the purpose of providing real-time location data for calculating response time compliance

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

and, furthermore, EMS is unaware of any such system available on the market. The MARVLIS location data is not captured in real-time. Instead, there is a latency in location updates that may affect the accuracy of response time projections while an ambulance is en route.¹ While this lag time in receiving location updates is slight enough that it does not materially affect system-wide monitoring activities, it is not precise enough for the extremely time-sensitive purpose of determining compliance with the contractual response-time requirements, which may come down to a difference of minutes or even seconds.

Question 3: Does Rural/Metro’s response time performance from August through October 2019 raise patient care concerns?

Unable to determine.

Due to the inability of the current system to indicate whether a cancelled ambulance would have been late and the variety of reasons a call may be cancelled, EMS is unable to determine whether patient care was adversely affected in any significant way during this time frame.

Cancelled en route responses account for approximately 7%-8% of total monthly EMS responses. And in review of the August through October 2019 response data, cancelled en route “late” responses accounted for 1.5%-2% of all monthly EMS responses.

Calls may be cancelled for a number of reasons, including:

- Another provider arriving on scene first;
- A previously unavailable ambulance that is closer to the scene becomes available;
- No patient at the scene;
- Patient is deceased;
- The call is cancelled by the caller, first responder, medical alarm company, etc.

While “late” cancelled en route responses do raise patient care concerns, calls that are cancelled en route that are not late are less critical, which is the reason the original agreement had excluded these times from the response time calculation.

¹ EMS believes this limitation of the MARVLIS system is what the representative from Rural/Metro referred to as a technical “glitch” during the November 13 HHC meeting.

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

Question 4: What penalties, if any, does Rural/Metro face based on its response times for August through October 2019, and how do those penalties differ from those that would have been faced prior to enactment of the 7th Amendment? What corrective actions are planned to improve compliance?

Exact “apples-to-apples” numbers that would allow a meaningful comparison of penalties are still pending as of the date of this report.

EMS relies upon a system called First Watch to provide reports on response time compliance. These reports are configured based upon the calculation methodology required under the contract with Rural/Metro. In this case, due to the drastic difference in the new configuration versus the old configuration—where the new data includes projected response times—EMS has not been able to generate an apples-to-apples comparison of liquidated damages for the August 2019 – October 2019 time frame.

The reason for the difficulty in drawing apples-to-apples comparisons of liquidated damages arises from the nature of the data generated under the prior contractual requirement versus the data generated under the 7th Amendment. As noted, the data being fed into the system under the 7th Amendment methodology includes response-time projections that were not included under the prior configuration of the system. At the same time, since the 7th Amendment methodology was implemented this past summer, EMS has no longer been receiving data under the old configuration—data that is necessary to run an apples-to-apples comparison of the applicable liquidated damages pre- and post-7th Amendment.

To reconstruct the data that is no longer generated under the pre-7th Amendment configuration, EMS has requested that First Watch develop a report for the time period in question that utilizes the pre-7th Amendment configuration to calculate liquidated damages. As of the writing of this report, this information was not yet available, but EMS plans to submit a responsive analysis based on this re-generated data in its January HHC report.

It should be noted that for the month of October 2019, Rural/Metro submitted its response time compliance report six (6) days late, on November 21, 2019. Furthermore, the response time report that Rural/Metro submitted, as of the writing of this report, is still missing all cancelled en route responses (late and on-time). For this reason, EMS had to access its online compliance utility to collect

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
County Executive: Jeffrey V. Smith

October’s response time data, including all responses (on scene and cancelled en routes) for the purposes of this report. EMS has followed up with Rural/Metro to request a corrected report, but Rural/Metro has yet to provided one. Under EMS’s contract with Rural/Metro, penalties for failure to submit any required monthly or quarterly report is assessed \$1,000 per day until EMS receives the report.

Although EMS is still assessing what corrective actions should be taken to improve Rural/Metro’s compliance, Rural/Metro appears to have responded to its recent lack of compliance with response time requirements by increasing unit deployment hours by almost 9% over the past quarter, as reflected in the below data:

Unit Hours*

<i>19-Jun</i>	<i>19-Jul</i>	<i>19-Aug</i>	<i>19-Sep</i>	<i>19-Oct</i>
741	744	752	790	805

* A unit hour is equal to one hour of service by a fully equipped and staffed ambulance available for dispatch or assigned to a call.

EMS will assess the effect of Rural/Metro’s unit hour increase and, in turn, what corrective action(s) may be necessary.

Question 5: Does EMS have the ability to independently verify the response times reported by Rural/Metro?

Yes. EMS can, and has, independently verified the recent response times reported by Rural/Metro. The response time data is automatically uploaded to a third-party validation system, First Watch, which is configured and monitored by EMS. EMS also has the ability to audit raw response time data, as needed.

Pursuant to the contract with Rural/Metro, EMS can access Rural/Metro’s “raw/unadjusted” response time data through a complex process that involves four independent technology systems. First, response time data is generated from County Communications’ computer-aided dispatch (CAD) system inputs and automated vehicle location (AVL) system inputs, and then stored in MARVLIS. This “raw/unadjusted” data is then downloaded into the FirstWatch “Online Compliance Utility” (OCU) data system. The OCU is a data management and analytical system that functions as a third-party data validation system used to collect Rural/Metro’s response time data and to analyze data for contractual compliance reporting. This system reconciles the CAD, AVL, and MARVLIS data and is configured to generate reports regarding response time compliance in accordance with the terms of the Rural/Metro contract. Each

Board of Supervisors: Mike Wasserman, Cindy Chavez, Dave Cortese, Susan Ellenberg, S. Joseph Simitian
 County Executive: Jeffrey V. Smith

month, after Rural/Metro has submitted its monthly compliance reports, EMS reviews the data from the OCU and identifies any outliers or irregularities for further investigation. EMS also has the ability to view and pull raw/unadjusted response time data to calculate compliance manually, if such action is warranted.

County of Santa Clara
Santa Clara Valley Health & Hospital System
Emergency Medical Services



99076

DATE: November 19, 2019
TO: Board of Supervisors
FROM: Jackie Lowther, EMS Director
SUBJECT: Ambulance Services Request for Proposals Process

RECOMMENDED ACTION

Under advisement from May 21, 2019 (Item No. 22): Receive report from Emergency Medical Services relating to Ambulance Services Request for Proposals Process (EMS 2022).

FISCAL IMPLICATIONS

There are no fiscal implications associated with receiving this report as it is an informational item only.

CONTRACT HISTORY

Not applicable.

REASONS FOR RECOMMENDATION

At the May 21, 2019 Board of Supervisors meeting, the EMS Agency was directed to report back on developing a work plan regarding the Request for Proposals (RFP) process for ambulance services, including identified stakeholders and whether solicitation methods are limited to RFPs or include requests for solutions or innovations. In addition, the Board requested to receive information before the next Emergency Medical Services (EMS) RFP process relating to first responder technical advisory stakeholder efforts to develop a public option to provide emergency ambulance services.

The EMS Agency convened an introductory meeting on June 27, 2019 with the Chief Operating Officer of the County (COO), EMS Director, EMS Medical Director, Procurement Department, and County Counsel. At this meeting it was determined to structure a stakeholder group to navigate options available to the county. A summary is provided below.

The mission of the stakeholder group, called EMS 2022, would be to explore and define the options and structure of the EMS system in Santa Clara County after the current non-exclusive 911 EMS ambulance transport agreement ends in 2022; analyze means of financing

the future EMS system given those options and structure; include feasibility, sustainability as well as applicability to demographics; recommend decision-making in the continuing of nonexclusive 911 EMS ambulance transport after 2022 or to conduct a competitive bid for 911 EMS ambulance transport and other EMS functions; and report group progress to the Health and Hospital Committee and Board and report non-exclusive 911 EMS ambulance transport system performance characteristics at intervals specified by HHC and the Board of Supervisors after implementation on July 1, 2019

The stakeholder group structure would include:

- Chair: EMS Agency
- Staff Support: EMS Agency, County Counsel, Procurement/CPO, COO
- Full Vision Group: COO/CEO, EMS, County Counsel, Procurement/Chief Procurement Officer (CPO), SCC Fire Chiefs Association, SCC Communications, Police Chiefs, City Managers, Hospital Council
- EMS system stakeholder engagement through scope of work document comment periods, including member from the public, private ambulance providers, field paramedic

The Vision Group was provided the EMS Agency's Guiding Principles prior to the first meeting on August 28 in order to facilitate group discussion. These guiding principles are essential in decision-making processes and may be modified by the group if a particular principle is identified as crucial to operations moving forward. This group will be meeting on a monthly basis and will be providing updates to HHC and the Board of Supervisors. The highlights from the meeting on August 28, 2019 follow:

- Patient/client centered system is of utmost importance
- Group should look at different EMS models, nationwide or Europe
- EMSA attempting to regulate changes
- Triage patients efficiently, EMS Agency writing policies to address.
- Change in regulations and legislation, propose changes in regulation
- Work with California Hospital Association as avenue for legislative change
- County Communications moving forward with Emergency Medical Dispatch (EMD) Task Force
- Request timeline necessary for RFP
- Need for current data on types of calls EMS is currently receiving.

The group met on September 25, 2019 and focused on:

- Phases of a 911 EMS Response
- Call to 911
 - Location confirmation/identification & call back information

- Primary Public Safety Answering Points (PSAP) (law enforcement)
 - Landline
 - Cellular
 - Text
- Secondary PSAP Transfer
 - EMD (Emergency Medical Dispatch)
 - PAI (Pre-Arrival Instructions)

The group would like to review systems that are currently in California with best practices and invite them to the committee. The committee minutes are attached for review. Minutes from the two meetings are attached along with an article from Alameda County on EMD that was discussed.

The guiding principles are as follows:

Integrated Response Structure – EMS system design recognizes the unique aspects and essential contributions of both first response and transport components.

Appropriate Resource Allocation – Jurisdictional Public Service Answering Points (PSAPs) optimize the EMS system’s patient care abilities when utilizing integrated EMS resource capabilities to identify and dispatch the closest appropriate resource.

Medical Dispatch Prioritization – Jurisdictional PSAPs optimize the EMS system’s patient care abilities when utilizing evidence-based priority dispatching. Successful priority dispatching initiates patient care and matches necessary resource(s) to the patient, without excessive and inappropriate utilization of first response and transport components.

Evidence Based Design Standards – EMS system design is based on scientific medical and economic evidence published as well as by the system’s continuous quality improvement processes.

Team approach – Collegial working relationships among all stakeholders in the current EMS system to promote optimal patient care.

Structured and Integrated Continuous Quality Improvement – All care provided in the EMS system is subject to review of both treatment and operational compliance, enabling efficient CQI.

Integrated Protocols – Medical treatment and other protocols are derived utilizing prevailing EMS standards of care, evidence-based medicine and system design considerations. Medical treatment protocols are formatted to recognize the essential contributions from communications, first response, and transport personnel as well and promote seamless care delivery.

Cost Effectiveness – The EMS system recognizes and respects the community’s desire for high-quality emergency medical services delivered through an affordable, cost effective design. Communication, first response and transport components/resources are integrally linked and depend upon the effectiveness and efficiency of each other.

Measuring and Reporting on Key Performance Indicators – Accountability for response time performance must exist for both first response and transport components. Key performance indicators are appropriate and strict compliance within standards are expected.

Electronic Data Capture – The seamless integration of electronic patient records on each patient ensures that the care provided throughout the system conforms to system requirements, thereby provided at the highest level.

CHILD IMPACT

The recommended action will have no/neutral impact on children and youth.

SENIOR IMPACT

The recommended action will have no/neutral impact on seniors.

SUSTAINABILITY IMPLICATIONS

The recommended action will have no/neutral sustainability implications.

BACKGROUND

The State Emergency Medical Services Authority and California Health and Safety Code recommend that Exclusive Operating Area agreements be competitively bid every ten years. The EMS Agency supports the State recommendation and proposes to go out to bid before the end of the existing agreement.

Rural Metro began providing 911 Emergency Ambulance Transportation Services to the County in 2011 when they secured exclusive rights to provide these services to the Santa Clara Exclusive Operating Area. The current contract with Rural Metro will expire in June 2022.

CONSEQUENCES OF NEGATIVE ACTION

The Board of Supervisors would not receive the requested report.

STEPS FOLLOWING APPROVAL

None needed.

ATTACHMENTS:

- EMS2022 Meeting Minutes 08282019(PDF)
- EMS2022 Meeting Minutes 09252019(PDF)

County of Santa Clara Emergency Medical Services System

Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS



Emergency Medical Services 2022
Working Group
70 West Hedding, 9th Floor, Medrone Conf. Rm.
Thursday, August 28, 2019 at 9:00am
Meeting Minutes

- Introductions
- Jackie thanked the working group for being part of the process.
 - County Ambulance contract has been extended and set to expire in three (3) years, this group will help to develop:
 - An RFP would take about two (2) years
 - Public Options
 - Financing
 - Later the group will invite other stakeholders which will include EMS system providers and members from the public.
 - Continual report back to Health Hospital Committee (HHC) and Board of Supervisors (BoS) regarding status of EMS2022.
 - John Blain, EMS Specialist will be joining the group at the next meeting. John has been with EMS for over 15 years and provides vast knowledge of our system.
 - Integrated response, Jackie spoke about the Exclusive Operating Area (EOA) that has been in place since 2010.
 - We are going to need a finance person in the group with EMS background.
- Dr. Miller spoke on the opportunities:
 - What do we want and how do we deliver County EMS in the system after 2022?
 - How do we pay for it? Lots of ideas.
 - Once we know what we want for 2022, how do we proceed.
 - Focus heavily on transports, we are now in a Non-Exclusive EMS System.
 - What else can we do in public, private or global EMS approach.
 - Changes in regulations and legislation.
 - Fire base transports have different rules.
- Miguel explained how the State Emergency Medical Services Authority (EMSA) antitrust immunity was revoked and the complexity of the challenges ahead of us.
 - Would like to propose changes in regulation with the new Interim Director from EMSA.
 - Patient/client centered system is of utmost importance.
 - Our County Counsel, Wes, is here to keep us on track and stay within legal boundaries.
 - Requested a timeline be provided.

Received: 11/19/2019

- Andrew will provide Jackie a timeline in case there is a need for a Request for Proposal (RFP).
 - Requested a meeting prior to the Health and Hospital Committee (HHC) meeting scheduled for September 25th.
- Jo had questions for the group and spoke on the following.
 - What is the legislative tone regarding EMS?
 - Dr. Miller suggested that being able to triage patients more efficiently and having an opportunity to write policy more direct.
 - EMSA is attempting to regulate change, speaking on bill 1544 alternate destination.
 - Patient Care, has there been an idea of an assessment? What kind of calls are we receiving? Where are we headed?
 - Dr. Miller stated that change would need to happen in legislation first.
 - Jo offered to present the issue at California Hospital Association (CHA) as an avenue for legislative change.
 - Hospitals walk-ins and ER studies categorize by medical needs in the community.
- Robert is representing the County Fire Chiefs.
 - Spoke on the increase of calls and the cost recovery, would like to keep the resources in the county.
 - Requested to hear about the Guiding principles and how they were finalized.
 - Jackie stated that these are the EMS Agency Guiding principles, open to change them if request is made.
 - Concerned about the timeline, group should think about how services are delivered before time expires.
 - Suggested for the group to review the 2018 EMS Annual Report.
- Jim is representing the County EMS Chiefs.
 - Spoke about the importance of arrival/response times and the ability to transport a critical patient in the current contract.
 - Group should look at different EMS models, making sure it is patient/client focus.
 - Cost recovery and first responder fees are of concern and more accurate performance measures.
- Heather spoke about improving technology and applying that to the system.
 - County Communications policies about Medical, she will move forward and will start and Emergency Medical Dispatch (EMD) Task Force.
 - Staffing continues to be difficult, currently has 17% vacancies.
 - Currently updating medical protocols and spoke on the differences of medical and psychological protocols.
- Harjot representing City Managers.
 - Suggested that we invite someone from EMSA to join the group.
 - A great place to start with informed decisions would be to analyze and report back on data, suggested we hire a contractor.

- Worthwhile looking Nationwide or Europe and applying that to what fits our system.
- He will ask the City Managers to provide a finance person with EMS experience.

Members Present:

Miguel Marquez, CEO
Jackie Lowther, EMS Director
Dr. Ken Miller, EMS Medical Director
Miriam Singer, Chief Procurement Officer
Andrew Zawoyski, Director
Wesley Dodd, County Counsel
Heather Plamondon, County Comm Director
Robert Sapien, Fire Chief, City of San Jose
Jim Wyatt, Division Chief, Gilroy Fire
Jo Coffaro, Regional Vice President
Robert Jonsen, Chief of Police
Harjot Sangha, City of Morgan Hill
Ramona Aguilar, Executive Assistant to Jackie Lowther

Meeting adjourned at 10:05am

County of Santa Clara Emergency Medical Services System

Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS



Emergency Medical Services 2022
Vision Group
70 West Hedding, 11th Floor, Conf. Rm. 1
Wednesday, September 25, 2019 at 8:30am
Meeting Minutes

- Welcome
- Jo joined us via conference call until she arrived.
- Review meeting minutes from August 28, 2019.
- Dr. Miller handed out copies of his PowerPoint presentation – *The 911 EMS Response; Today Then Tomorrow*. A few important key points from the discussion:
 - Presented slide 1, 2 and 3 from PowerPoint:
 - 3rd slide-initiated discussion.
 - Heather updated the group on the “Call if you can text if you can’t” launch. Text communication will only be available in English.
 - Dr. Miller spoke on EMD, video call and location confirmation. If you are on a high line or urban environment it can become a problem. Technology is getting better by the day.
 - Dr. Miller also mentioned the different language services we have. Heather stated that County Communications uses the translator services and third party which only takes seconds to connect to.
 - Jim Wyatt mentioned that Gilroy would like to see the Fire Department and Police Department be separate entities.
 - Heather spoke about Emergency Fire Dispatch protocol which will be launching this week.
 - PSAP and Code 3 discussion took place, calls have become overwhelming and policies need to be developed.
 - Jo suggested we invite bigger cities to the table. What systems are out there and where are the best practices. Jackie will reach out to a few of the cities.
 - Jackie spoke to René Santiago regarding hiring a consultant for the group which will help with the data since EMS is short staffed and do not have 2018 data as of now.
 - John mentioned a published model in Alameda County.
 - Wesley spoke about the immunity and flexibility regarding some of the discussion.
 - Miguel appreciates the information and discussion as he learned from it, the group needs to get the right people involved for future discussions.
 - Jackie suggested moving forward for all meetings be scheduled for 90 minutes, group agreed.

Received: 11/19/2019

- Jackie will meet with Andrew to discuss RFP process, Miguel requested for Andrew to give EMS 1-year timeline prior to contract expiring.

Members Present:

Miguel Marquez, COO
Jackie Lowther, EMS Director
Dr. Ken Miller, EMS Medical Director
John Blain, EMS Specialist
Andrew Zawoyski, Director
Wesley Dodd, County Counsel
Heather Plamondon, County Comm Director
Jim Wyatt, Division Chief, Gilroy Fire
Jo Coffaro, Regional Vice President
Robert Jonsen, Chief of Police
Harjot Sangha, Assistant to the City Manager, City of Morgan Hill
Ramona Aguilar, Executive Assistant to Jackie Lowther

Members Absent:

Miriam Singer, Chief Procurement Officer
Robert Sapien, Fire Chief, City of San Jose

Meeting adjourned at 9:35am

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.885.4250 voice 408.885.3538 fax
www.sccemsagency.org

Date: January 22, 2020
To: Santa Clara County EMS Committee Members
From: Patricia Natividad
Senior Management Analyst
Subject: EMS Trust Fund – Liquidated Damages for Calendar Year 2019

Monthly Liquidated Damages for Response Time

January 1, 2019 – December 31, 2019

Month / Year	Amount
January-19	\$14,000.00
February-19	\$93,250.00
March-19	\$155,250.00
April-19	\$8,000.00
May-19	\$2,000.00
June-19	\$68,750.00
July-19	\$0.00
August-19	<i>pending</i>
September-19	<i>pending</i>
October-19	<i>pending</i>
November-19	<i>pending</i>
December-19	<i>pending</i>
Total for CY19	\$341,250.00
Average Monthly Total In Period	\$48,750.00

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95126
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: February 20, 2020
To: Santa Clara County Emergency Medical Care Committee
From: John Blain, EMS Specialist
Subject: County Service Area Response Time Performance Reports

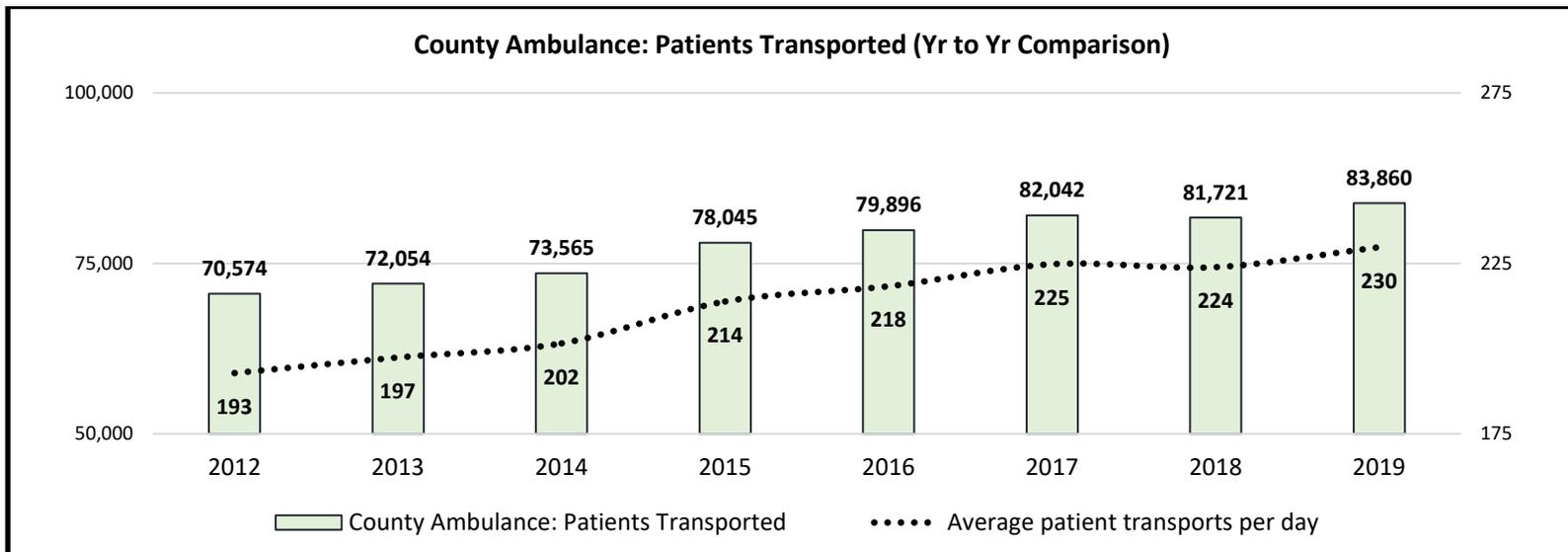
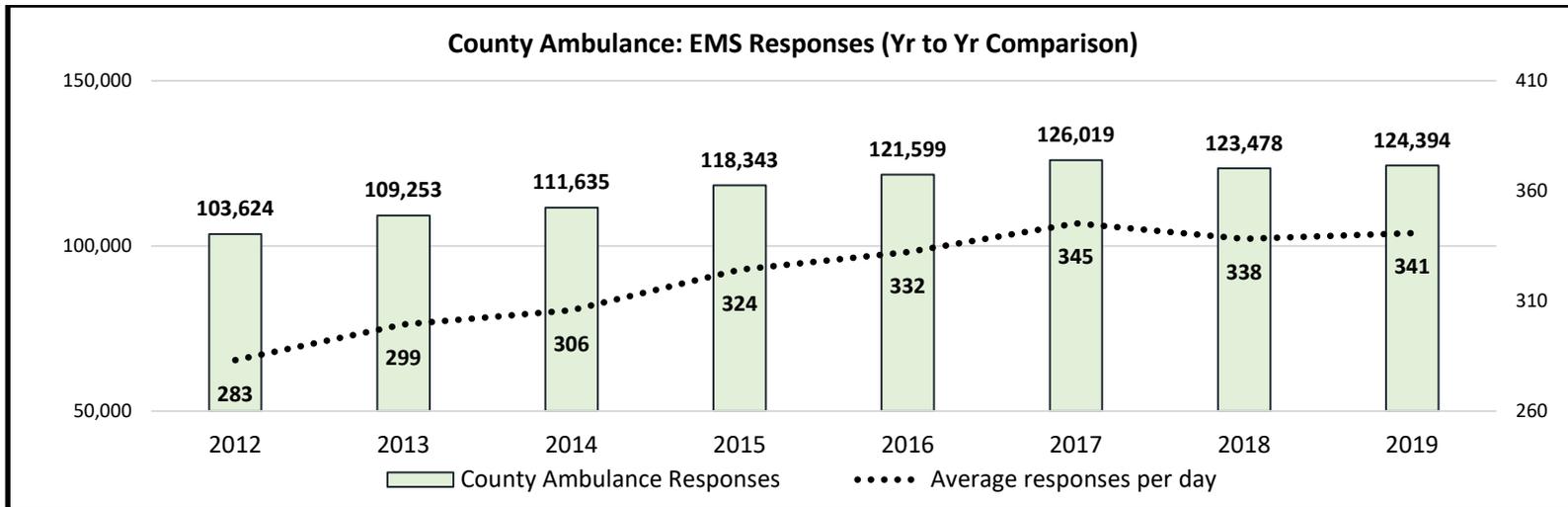
History and Issue

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

- County Ambulance Contracted Provider (Rural/Metro of California-AMR)
- Gilroy, *City of*
- Milpitas, *City of*
- Morgan Hill, *City of*
- Mountain View, *City of*
- San Jose, *City of*
- Santa Clara, *City of*
- Santa Clara County Central Fire Protection District
- South Santa Clara County Fire District
- Sunnyvale, *City of*

Context

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



County Ambulance: Code 3 Response Compliance

	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Zone 1	93.32%	91.17%	90.17%	93.24%	92.25%	90.16%	92.81%	90.13%	88.64%	87.92%	88.96%
Zone 2	92.71%	92.56%	92.19%	93.72%	92.34%	92.61%	93.96%	90.87%	89.60%	90.61%	90.63%
Zone 3	94.40%	92.82%	91.40%	93.88%	92.51%	92.55%	92.60%	92.01%	89.46%	89.98%	90.73%
Zone 4	92.80%	92.21%	92.00%	94.14%	93.59%	92.09%	93.71%	89.61%	91.35%	90.02%	90.16%
Zone 5	92.75%	92.54%	92.20%	93.23%	94.69%	93.89%	92.87%	91.70%	92.11%	90.69%	92.66%

County Ambulance: Code 2 Response Compliance

	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Zone 1	97.18%	96.38%	96.36%	97.32%	95.43%	96.15%	95.14%	93.50%	92.35%	93.31%	93.11%
Zone 2	94.26%	92.39%	92.86%	94.85%	95.03%	94.55%	94.54%	93.67%	93.92%	92.73%	93.11%
Zone 3	92.22%	95.69%	94.48%	94.63%	96.05%	94.20%	93.68%	93.10%	91.58%	89.92%	89.58%
Zone 4	92.74%	93.93%	93.45%	94.98%	93.70%	97.13%	96.41%	91.79%	92.82%	90.83%	94.08%
Zone 5	97.75%	96.72%	96.47%	100%	96.94%	94.50%	97.14%	95.52%	94.63%	94.81%	94.14%

<i>Gilroy, City of</i>	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Total EMS Responses [#]	361	306	324	321	331	300	329	349	354	328	370
Code 3 Compliance [%]	96.53%	97.55%	97.04%	95.70%	97.74%	96.92%	95.97%	97.22%	98.49%	96.49%	96.08%

<i>Milpitas, City of</i>	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Total EMS Responses [#]	378	315	366	322	307	315	332	324	300	335	315
Code 3 Compliance [%]	93.87%	93.22%	94.60%	98.72%	96.21%	96.59%	97.43%	96.46%	95.52%	96.41%	96.81%

<i>Morgan Hill, City of</i>	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Total EMS Responses [#]	191	198	190	220	248	278	240	230	226	217	211
Code 3 Compliance [%]	93.62%	96.88%	97.84%	95.83%	95.02%	96.65%	96.98%	96.46%	97.26%	95.83%	98.10%

<i>Mountain View, City of</i>	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Total EMS Responses [#]	408	384	407	360	406	432	409	418	410	392	355
Code 3 Compliance [%]	97.31%	99.66%	99.14%	97.96%	97.82%	97.38%	98.37%	97.20%	99.09%	98.14%	99.26%
Code 2 Compliance [%]	100.00%	100.00%	100.00%	100.00%	97.06%	100.00%	100.00%	98.77%	100.00%	100.00%	100.00%

<i>San Jose, City of</i>	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Total EMS Responses [#]	6,296	5,784	6,553	6,091	6,301	6,182	6,219	6,453	5,954	6,124	5,720
Code 3 Compliance [%]	91.59%	90.40%	92.41%	91.98%	91.06%	91.62%	90.87%	91.49%	92.20%	91.54%	91.19%
Code 2 Compliance [%]	97.71%	97.96%	97.61%	97.59%	97.57%	97.54%	97.44%	96.67%	98.58%	97.25%	97.15%

<i>Santa Clara, City of</i>	<i>Jan 19</i>	<i>Feb 19</i>	<i>Mar 19</i>	<i>Apr 19</i>	<i>May 19</i>	<i>Jun 19</i>	<i>Jul 19</i>	<i>Aug 19</i>	<i>Sep 19</i>	<i>Oct 19</i>	<i>Nov 19</i>
Total EMS Responses [#]	531	535	563	579	562	528	554	514	563	559	548
Code 3 Compliance [%]	98.33%	99.01%	99.23%	99.43%	99.71%	100.00%	99.41%	99.69%	99.71%	99.70%	99.40%
Code 2 Compliance [%]	98.08%	100.00%	100.00%	100.00%	100.00%	99.47%	99.51%	100.00%	96.91%	96.81%	96.73%

Santa Clara Co. Central FPD	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19
Total EMS Responses [#]	1,226	1,181	1,394	1,141	1,221	1,188	1,152	1,198	1,135	1,245	1,183
Code 3 Compliance [%]	98.13%	96.10%	97.01%	97.64%	96.96%	96.50%	97.83%	97.18%	96.46%	96.13%	96.21%
Code 2 Compliance [%]	99.68%	99.67%	99.65%	99.18%	99.66%	99.66%	99.68%	100.00%	99.37%	99.30%	99.57%

South Santa Clara Co. FD	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19
Total EMS Responses [#]	135	117	115	130	142	114	137	135	127	138	127
Code 3 Compliance [%]	98.46%	94.55%	98.25%	93.65%	92.96%	90.35%	91.54%	96.99%	95.12%	91.04%	94.44%

Sunnyvale, City of	Jan 19	Feb 19	Mar 19	Apr 19	May 19	Jun 19	Jul 19	Aug 19	Sep 19	Oct 19	Nov 19
Total EMS Responses [#]	609	527	597	580	605	601	580	607	548	565	543
Code 3 Compliance [%]	98.74%	97.33%	97.78%	98.07%	97.50%	96.96%	96.32%	96.29%	96.87%	96.03%	98.59%
Code 2 Compliance [%]	99.49%	98.46%	100.00%	97.24%	100.00%	97.96%	99.28%	100.00%	99.15%	97.81%	98.31%

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 2, 2020
To: Santa Clara County Emergency Medical Care Committee
From: David Sullivan, EMS Specialist, Vehicle Permit Officer
Subject: Non-911 Ambulance Services and Permitted Vehicles

Current Non-911 Private Ambulance Providers (as of 01/02/20):

Provider	Levels of Service
American Medical Response - Sutter	CCT, BLS
Falck North America	CCT, ALS, BLS
Falcon Critical Care Transport	CCT, BLS
NORCAL Ambulance	CCT, BLS
ProTransport-1	CCT, ALS, BLS
Royal Ambulance	CCT, BLS
Silicon Valley Ambulance	ALS, BLS
Westmed Ambulance	CCT, ALS, BLS

Number of Non-911 resources (as of 01/02/20):

Provider	Santa Clara County Resources
American Medical Response - Sutter	7
Falck North America	14
Falcon Critical Care Transport	9
NORCAL Ambulance	6
ProTransport-1	30
Royal Ambulance	29
Silicon Valley Ambulance	9
Westmed Ambulance	22
Total	126

Number of field inspections of ambulances and fire apparatus, so far, during CY2019 and 2020:

Resource Type	Inspections
Ambulances (Fire, EOA, and Non-911)	54
Fire Apparatus (Non-Transport)	11
Quick Response Vehicle (EOA)	3
Total	68

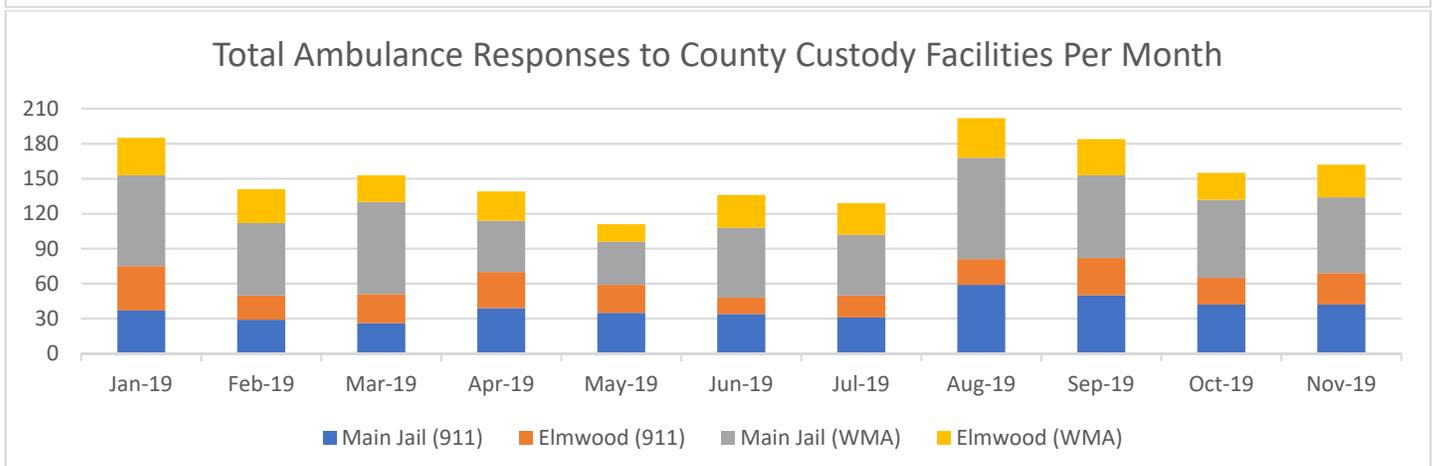
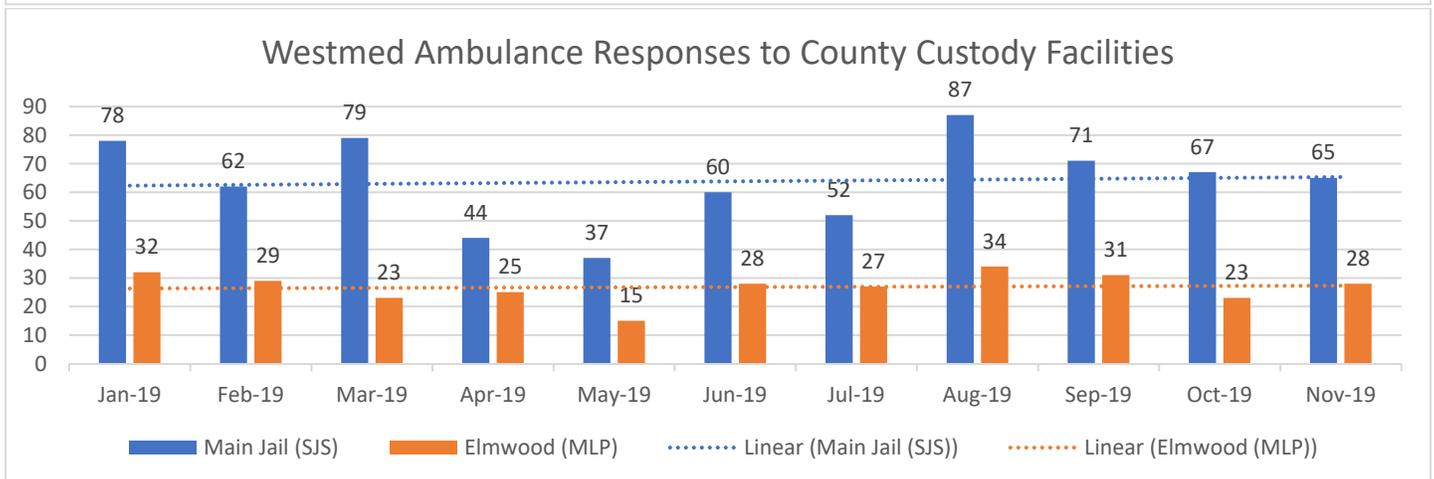
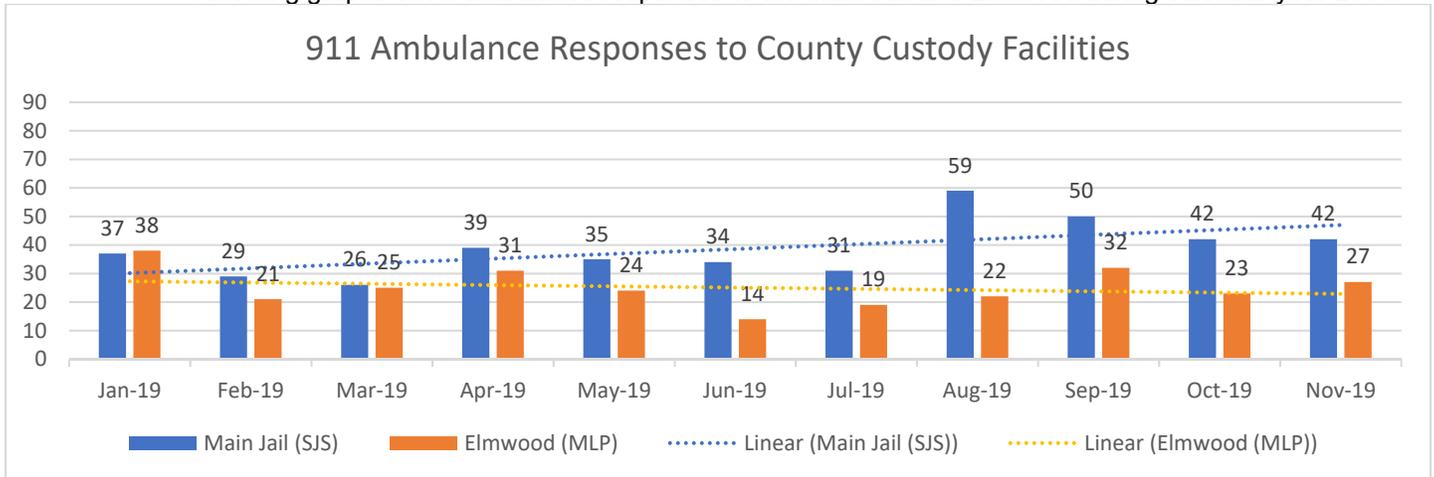


Date: December 24, 2019

From: David Sullivan, EMS Specialist

Subject: Ambulance Responses to County Custody Facilities

Report: Westmed Ambulance is the contracted ambulance provider for the Santa Clara County Custody Facilities. Occasionally, 911 ambulances are utilized due to patient condition or nature of the emergency. The following graphs show ambulance responses to the Main Jail and Elmwood during calendar year 2019.



County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
 700 Empey Way
 San Jose, CA 95128
 408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 31, 2020
To: Santa Clara County Emergency Medical Care Committee Members
From: Daniel Peck, MSL
 EMS Specialist
 Investigations/Enforcement
Subject: Investigations Report November 1, 2019 to January 31, 2020

History

Santa Clara County EMS Agency investigates hundreds of cases each year including but not limited to protocol deviations, vehicle failures during a response or transport, criminal situations and general complaints from the public. Cases are reviewed by staff members within the EMS Agency or sent to EMS Program Managers for department review. Below are the numbers of cases that have been reported to the Santa Clara County EMS Agency from November 1, 2019 to January 31, 2020.

Report

Care Concern	7
Communications Systems	1
Complaint	7
Confidential	0
Criminal - Background	2
Criminal - Subsequent Arrest	2
EMS Policy or Protocol	9
Injury or Illness of EMS Provider	1
Ordinance or Law Violation	1
Provider Recognition	1
Public Comment	0
Public Concern or Media Event	1
Quality Assurance (QA)	0
Vehicle or Equipment Failure	7
Total	39



**MVDR MEMBERSHIP REPORT
JANUARY 2020**

Current Membership:

MEMBERSHIP TYPE	ACTIVE	CLOSED NO RESPONSE	REQUESTED CLOSURE
Medical Volunteers for Disaster Response (MVDR)	85	414	27
Disaster Health Volunteers (DHV)	50	346	40
Total	135	760	67

Event Participation:

MONTH	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY
EVENT	Region 2 MRC Coordinators Meeting	ABAHO Regionalized MRC Presentation	-	-	DHV Quarterly Drill
PARTICIPANTS	1	1	-	-	1
TOTAL MONTHLY PARTICIPANTS	1	1	-	-	1

Event Summary:

The MVDR Program completed a six-month long reconciliation of all membership databases and these responses are included in this report.

Since the last membership report the MVDR Program Administrator has participated in several workshops and drills to enhance program readiness and coordinate with state resources. These events occurred on September 23rd, October 18th and January 15th.

Membership Summary:

Please see table contained above.



Membership Level Definitions:

Level I: the program has little or no advanced knowledge of member or prior training. Level I members require emergency credentialing and are last to be utilized to fill resource needs. Level I members and are ineligible to deploy unless sworn in as Disaster Service Workers (DSW)

Level II: Basic volunteers who have expressed some level of interest in the program prior to attendance. These members have registered with the DHV but have yet to participate in a new member orientation. These members are used to fill resource needs after Level III and Level IV volunteers. Level II members and are ineligible to deploy unless sworn in as Disaster Service Workers (DSW).

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

Level IV: Level 4 members are first call for deployments and are deployable with little or no advanced notice. They have completed advanced training classes in addition to frequent participation in training and exercises.

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 23, 2020
To: Santa Clara County Emergency Medical Care Committee
From: Jason Weed, EMS Specialist, Communications/System Providers Unit
Subject: EMS System Initiatives: Equipment and Supplies

History

The Santa Clara County EMS Agency is providing an update related to the ordered restock supplies for the Field Treatment Site Trailers (FTS) through State Homeland Security Grant Program (SHSGP). The EMS also replaced all the AED's in DMSU's 125/126

Report

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

DMSU 125 and 126 each received 2 new AED that were purchased through the Heart Start program.

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 21, 2020
To: Santa Clara County EMCC Committee Members
From: Michael Clark
EMS Specialist
Subject: EMS Data Systems Update

911 ePCR System Update

On December 31, 2019, the EMS Agency began the transition to a brand new ePCR template and process. The new template incorporates a series of time saving items such as power tools and situation tools. These tools allow for a rapid timestamp and documentation of many procedures and medication administration tasks. In most cases, the PCR's author would only need to answer a few remaining questions for that item being documented. Where in the past this simple step would take a minute or so to complete, it now takes seconds. Other changes related to the new template were updated validation rules, a more refined patient interview panel, and a reduced amount of questions.

The EMS Agency started a total revamp of validation rules. These rules help to assure that PCRs are compliant with the State and Federal data submission. With new requirements coming down from both the California EMS Authority as well as the National EMS Information System, it became apparent that the rules needed to be changed. As of the time of the launch, the Agency has written over 150 validation rules. Over the next couple of months, the Agency is slated to write approximately 200 more.

With reducing time on task as a main goal, the Agency wanted to make the initial data collection faster. For most calls, one of the on-scene responders enters data about the patient while other provide care at the patient's side. This is usually the fire department Captain's role. To help the Captain, the Agency placed all pertinent demographic and medical history items on a single page. Doing so reduced the need for the author to quickly switch between the many tabs as information was presented to them. The Agency also set up the PCR system so that the data captured on this page is easily sharable with the other responding entities. This is done through an in-the-field data transfer. Sharing the data then reduced the time on task for the other agency's crew as the data becomes populated within their PCR.

The Agency also took a hard look at the questions used to populate the PCR template. Many questions that were asked in the past, but were never used in data reporting, were removed from the new template.

One item recently noted by the EMS Agency is the number of 911 PCRs that have been accepted by the State and National data systems. The Agency is required to submit PCR data to the California EMS Information System (CEMSIS) and the National EMS Information System (NEMSIS). When comparing the data submission of 2019 to 2020, it was quickly apparent that the new PCR template and validation rules are working. This is seen by a dramatic reduction of failed submissions and therefore a reduction in the need for the PCR's author to re-visit the PCR and correct mistakes.

Next Steps

The EMS Agency's next steps for the EMS Data System is to re-visit the non-911 transport patient care data. All EMS transport providers are required to submit patient care data to the EMS Agency for calls that originate within Santa Clara County. All providers are also required to capture this data by way of an electronic, non-paper, means.

Over the next few months, the EMS Agency will be reaching out to the non-911 transport providers and working with them to verify that the data being sent to the Agency is complete and accurate based on CEMSIS and NEMSIS requirements. For those that are not accurately submitting data, the Agency will assist them with coming into compliance.

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: 20 February 2020
To: Santa Clara County EMCC Committee Members
From: Ken Miller MD PhD
Medical Director
Subject: EMCC Medical Director's Report

History

Santa Clara County EMS Agency has regulatory over-sight of the Countywide EMS system

Report

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

14. A.
 1. Tranexamic Acid Utilization and Trauma Outcomes Data
 2. MPDS Protocol 33: Healthcare Facility
 3. Base Hospital Guidelines
 4. Coronavirus

- B.
 1. Acute Stroke Triage

**County of Santa Clara
Emergency Medical Services System**



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95126
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: November 14, 2019
To: Santa Clara County Emergency Medical Care Committee
From: John Sampson, Prehospital CQI Unit

A handwritten signature in black ink, appearing to read "John Sampson".

Subject: Pre-Hospital QI reporting
History: Please see attached report

Tranexamic Acid: On January 1st, Tranexamic Acid or TXA was added to the Traumatic Hemorrhage Control protocol (700-M17). Administration of TXA is indicated under the following circumstances; continued hemorrhage after tourniquet placement and/or non-compressible truncal hemorrhage. Since the first of the year there has been no usages. Usage of TXA will continue to be monitored with 100% patient care report review by the EMS Agency.

Intubation update: Comprehensive data analysis is being prepared for each provider agency and presented to that agency's QI Coordinator to better triage provider groups for skills training to correct the county's intubation success. County Ambulance's QI team has developed a robust QI evaluation and training process. They have deployed this last month and experienced very promising results. Allied agencies have started to reach out to county ambulance to deploy the same process. Data will be provided at the committee meeting.

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency

700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 1, 2020
From: David Sullivan, EMS Specialist
Subject: Policy Development Summary

Consistent with Santa Clara County Emergency Medical Services Prehospital Care Policy #109: Policy Development and Implementation, the EMS Agency regularly updates policies and protocols. The following policies and protocols were released or updated by the County of Santa Clara EMS Agency and are effective today. The new versions of these policies can be found on the EMS Agency website.

Policy #	Policy Name	Effective Date	Change
301	Supplemental EMS System Resources	1/1/2020	Updated
302	Prehospital Care Asset - Minimum Inventory Requirements	1/1/2020	Updated
500	Electronic Patient Care Record (ePCR) Documentation	1/1/2020	Replaced 311 and 314
503	EMS Patient Care Data System Overview	1/1/2020	Replaced 309 and 312
505	Command Event Record Documentation	1/1/2020	New Policy
509	EMS Elite Field Documentation User Guide	1/1/2020	New Reference Guide
602	911 EMS Patient Destination	1/1/2020	Replaced 403
602A	Trauma Center Service Areas	1/1/2020	Replaced 403
603	Hospital Bypass	1/1/2020	Updated
607	Non-Emergency Ambulance Utilization in the 911 EMS System	1/1/2020	Updated
610	Hazardous Material Incidents – EMS Response & Transport	1/1/2020	Updated
610A	Patient Decontamination Survey Sheet for Transport to Hospital	1/1/2020	New Policy
611	EMS Air Resource Utilization	1/1/2020	Updated
700-A02	Seizure	1/1/2020	Updated
700-A03	Hypoglycemia	1/1/2020	Updated
700-A07	Cardiac Arrest	1/1/2020	Updated
700-A08	Chest Pain	1/1/2020	Replaced 700-X04
700-A13	Stroke	1/1/2020	Updated
700-A15	Poisoning and Overdose	1/1/2020	Replaced 700-X03
700-A20	Excited Delirium	1/1/2020	Updated
700-M17	Traumatic Hemorrhage Control	1/1/2020	Updated
700-P02	Pediatric Seizure	1/1/2020	Updated
700-P03	Pediatric Altered Mental Status	1/1/2020	Updated
700-P15	Pediatric Poisoning and Overdose	1/1/2020	Replaced 700-X03
700-S04	Routine Medical Care Adult	1/1/2020	Updated
700-S05	Routine Medical Care Pediatric	1/1/2020	Updated
700-S11	Ventricular Assist Devices	1/1/2020	Updated

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95128
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: February 20, 2020
To: Santa Clara County EMCC Committee Members
From: Jackie Lowther, RN, MSN, MBA
EMS Director
Subject: Hospital Destination, Bypass and Advisory Status Reports

History

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

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

Report

The Santa Clara County EMS system saw a steady transport volume over the period from Jul to December with the busiest months being October and December. EMS Policy #603 states that each hospital shall request no more than thirty-six hours of 911 system bypass within a calendar month. All hospitals except one did not exceed 13 hours of bypass per month; with the majority staying below 10 hours per month. Specialty services bypass for this last quarter remained low. The average number of patients transported is 3 above this time last year at 235. The EMS Agency monitors the use of Hospital Bypass on a continuous basis and works closely with each hospitals Emergency Department management as well as Hospital Administrations to address surge times. All hospitals have submitted their winter Emergency Department surg plans except one.



**County of Santa Clara
Emergency Medical Services System**

Monthly Hospital Destination & Bypass Status Report

Report for Time Period: December 2019

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

Hospital (Diversion Zone)	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Stanford (North)	494	538	480	529	497	513	3,051
El Camino - Mt. View (North)	780	759	807	794	770	864	4,774
Kaiser - Santa Clara (North)	721	725	736	792	723	774	4,471
VMC (Central)	1,393	1,410	1,338	1,361	1,245	1,324	8,071
O'Connor (Central)	564	572	570	613	587	636	3,542
Good Samaritan (Central)	730	779	673	734	789	824	4,529
Regional - San Jose (South)	1,337	1,337	1,239	1,439	1,262	1,295	7,909
Kaiser - San Jose (South)	669	641	681	702	688	731	4,112
Saint Louise (South)	327	316	325	353	362	342	2,025
El Camino - Los Gatos (N/A)	111	97	98	117	115	111	649
VA - Palo Alto (N/A)	64	68	67	72	74	74	419
Total	7,190	7,242	7,014	7,506	7,112	7,488	43,552

Source: Santa Clara County Communications & Palo Alto Fire Department

Hospital (Diversion Zone)	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	6 Mth Avg
Stanford (North)	16	17	15	17	16	17	16
El Camino - Mt. View (North)	26	24	26	26	25	28	26
Kaiser - Santa Clara (North)	24	23	24	26	23	25	24
VMC (Central)	46	45	43	44	40	43	44
O'Connor (Central)	19	18	18	20	19	21	19
Good Samaritan (Central)	24	25	22	24	25	27	24
Regional - San Jose (South)	45	43	40	46	41	42	43
Kaiser - San Jose (South)	22	21	22	23	22	24	22
Saint Louise (South)	11	10	10	11	12	11	11
El Camino - Los Gatos (N/A)	4	3	3	4	4	4	4
VA - Palo Alto (N/A)	2	2	2	2	2	2	2
Total Daily Average	240	234	226	242	229	242	

Source: Santa Clara County Communications & Palo Alto Fire Department

*Notes for Tables 1 and 2: These numbers only reflect patients that originated in Santa Clara County and were transported by the County's EOA Ambulance Provider and Palo Alto Fire Department. Data for Stanford does not include patients from San Mateo

Table 3: Total Monthly Hours of Emergency Department on "AMBULANCE" Bypass

Hospital (Diversion Zone)	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Stanford (North)	0.00	0.00	0.00	1.00	0.00	2.01	3.01
El Camino - Mt. View (North)	5.01	1.00	7.02	5.01	2.01	7.02	27.07
Kaiser - Santa Clara (North)	6.01	4.01	5.37	7.66	1.00	13.03	37.08
VMC (Central)	27.06	21.06	22.61	20.10	13.48	27.80	132.11
O'Connor (Central)	0.00	0.00	0.00	0.97	0.00	0.92	1.89
Good Samaritan (Central)	6.01	3.83	0.00	3.04	0.00	2.01	14.89
Regional - San Jose (South)	0.00	0.00	0.00	0.00	0.00	1.00	1.00
Kaiser - San Jose (South)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Saint Louise (South)	8.35	8.69	3.44	5.31	9.99	4.04	39.82
El Camino - Los Gatos (N/A)	1.00	0.00	0.00	0.00	0.00	0.00	1.00
Total	53.44	38.59	38.44	43.09	26.48	57.83	257.87

Color Legend for ED Ambulance Bypass Only

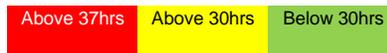


Table 4: Total Monthly Hours of Stroke Center on "STROKE" Bypass*

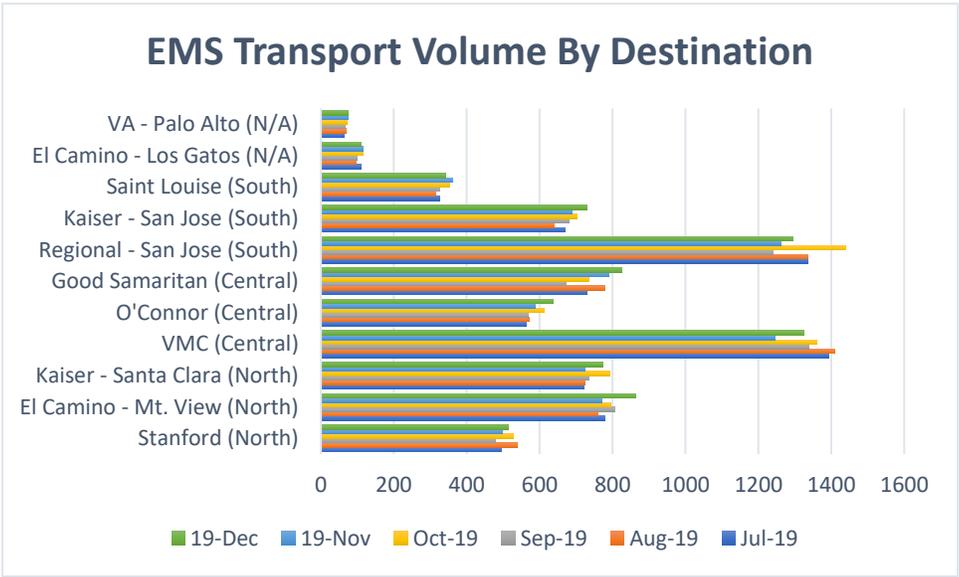
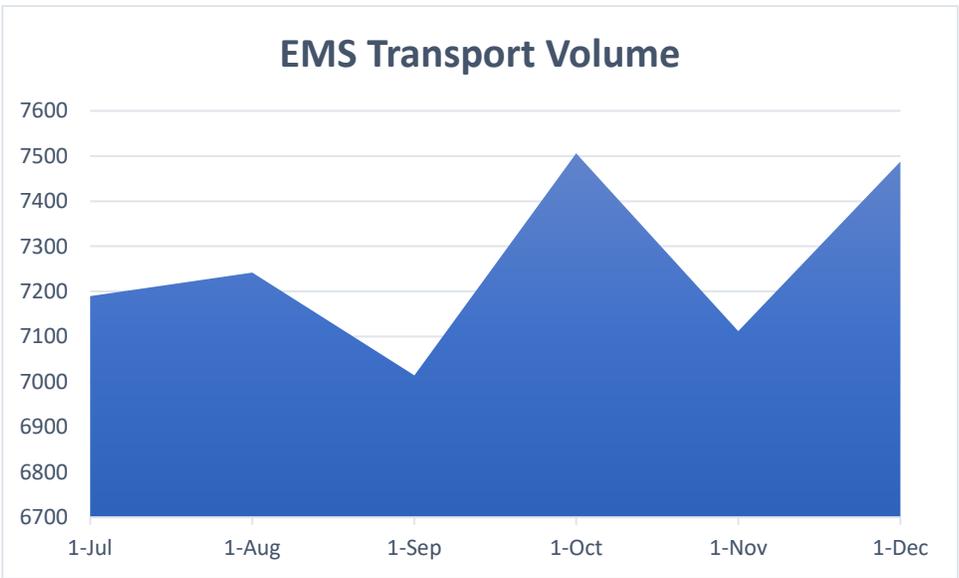
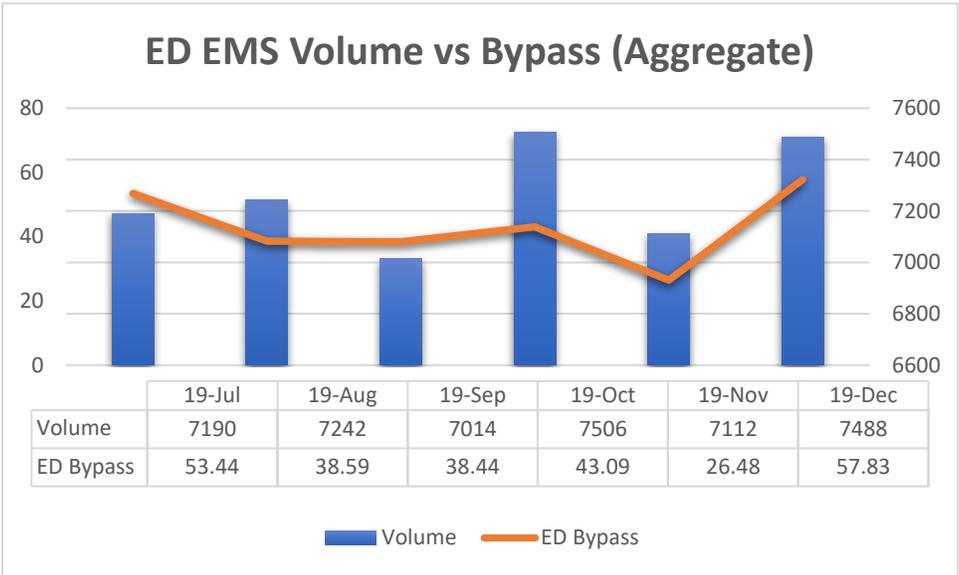
Hospital (Diversion Zone)	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Stanford (North)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Camino - Mt. View (North)	0.00	0.00	0.00	1.08	0.00	0.00	1.08
Kaiser - Santa Clara (North)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Regional - San Jose (Central)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
O'Connor (Central)	0.00	11.58	10.79	2.65	0.77	0.00	25.79
VMC (Central)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Good Samaritan (South)	9.11	0.00	0.00	1.08	0.00	1.25	11.44
Kaiser - San Jose (South)	0.00	0.00	0.14	0.00	0.00	0.00	0.14
Saint Louise (South)	8.57	128.05	2.64	5.13	31.10	1.97	177.46
El Camino - Los Gatos (N/A)	0.00	0.00	1.92	7.79	0.00	0.45	10.16
Total	17.68	139.63	15.49	17.73	31.87	3.67	226.07

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

Hospital (Diversion Zone)	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Stanford (North)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
El Camino - Mt. View (North)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kaiser - Santa Clara (North)	7.56	0.00	11.88	0.00	0.00	0.00	19.44
VMC (Central)	1.68	10.68	0.00	0.00	0.00	0.00	12.36
O'Connor (Central)	0.00	9.49	0.00	0.00	0.00	0.00	9.49
Good Samaritan (Central)	9.12	0.00	0.00	1.07	0.00	4.38	14.57
Regional - San Jose (South)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Kaiser - San Jose (South)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total	18.36	20.17	11.88	1.07	0.00	4.38	55.86

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

Hospital (Diversion Zone)	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	Dec-19	Total
Stanford (North)	0.00	0.00	0.00	1.00	0.00	0.00	1.00
VMC (Central)	0.00	0.00	0.00	0.40	0.00	0.00	0.40
Regional - San Jose (South)	0.00	0.00	0.00	0.00	0.36	0.00	0.36
Total	0.00	0.00	0.00	1.40	0.36	0.00	1.76



County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency

700 Empey Way
San Jose, CA 95128
408.885.4250 voice 408.885.3538 fax
www.sccemsagency.org

Date: February 20, 2020

To: Santa Clara County Emergency Medical Care Committee Members

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

Subject: Ambulance Patient Offload Times (APOT)

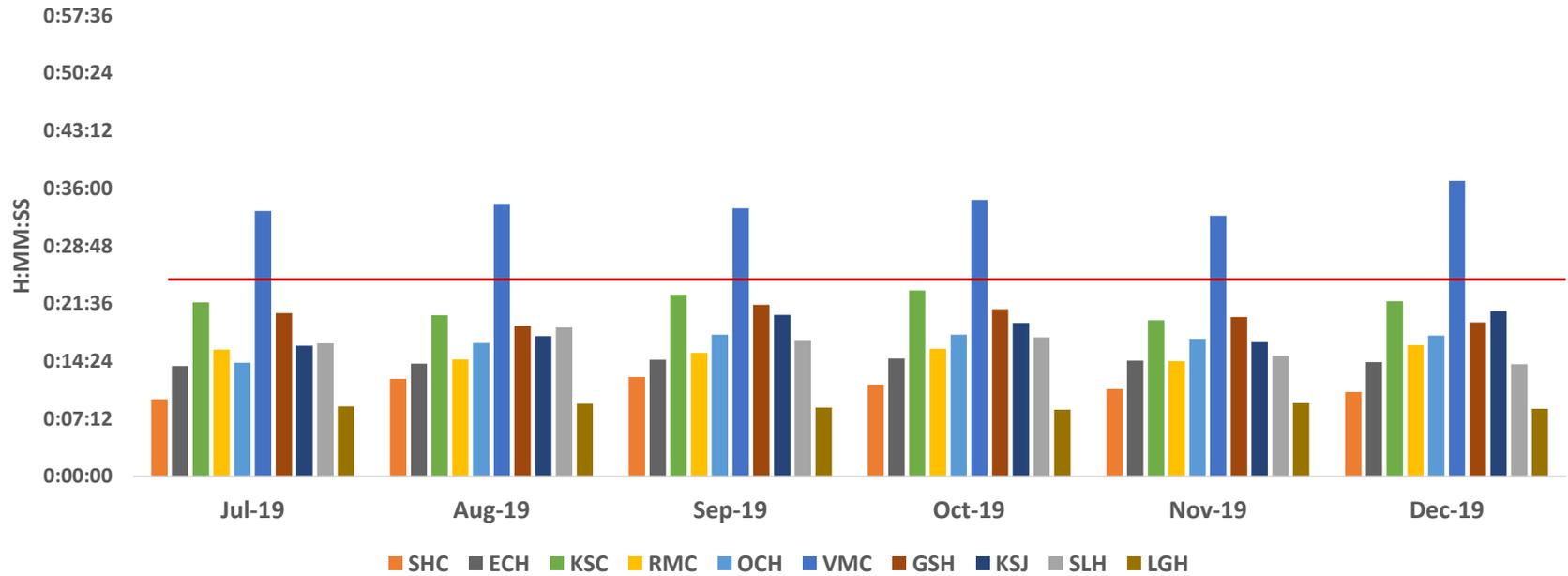
History

The role hospitals play in assuring that 9-1-1 ambulances are available for the next 9-1-1 call is critical. Ambulance offload delay, the time it takes to transfer a patient to an Emergency Department stretcher for the Emergency Department staff to assume responsibility for the care of the patient, may have more impact on ambulance turnaround time than ambulance bypass. Ambulance patient offload times (APOT) are calculated for all hospitals who receive patients in Santa Clara County. In 2015, the Health and Safety Code 1797.120 required the California Emergency Medical Services Authority to develop a standard methodology for calculation of, and reporting by, a Local EMS Agency of ambulance patient offload time. The EMS Agency has placed significant effort into working with hospital administrators focusing on the time it takes to get ambulances back into service once they have arrived in their Emergency Departments. Decreases in offload delays will improve the time patients receive definitive care, better pain control and antibiotics when needed.

Report

The expectation is that 9 out of 10 patients are transferred to the care of hospital staff within 25 minutes of ambulance arrival. We have seen considerable improvement throughout the County in ambulance patient offload time over the last year. Current data demonstrates that all hospitals except one have met Santa Clara County's benchmarks over the last five months. The county's aggregate 90th percentile time was 0:19:55 minutes with 93.9% of EMS transports being offloaded within 25 minutes. Comparatively, 91.1% of EMS transports were offloaded within the state's benchmark of 20 minutes. Sentinel events totaled 55, which are patients held greater than 60 minutes.

Ambulance Patient Offload Time (APOT) - 90th Percentile



	SHC	ECH	KSC	RMC	OCH	VMC	GSH	KSJ	SLH	LGH
Jul-19	0:09:40	0:13:49	0:21:45	0:15:51	0:14:13	0:33:11	0:20:25	0:16:21	0:16:38	0:08:46
Aug-19	0:12:11	0:14:05	0:20:08	0:14:37	0:16:40	0:34:05	0:18:50	0:17:32	0:18:36	0:09:05
Sep-19	0:12:24	0:14:34	0:22:43	0:15:27	0:17:43	0:33:30	0:21:27	0:20:12	0:17:02	0:08:37
Oct-19	0:11:30	0:14:44	0:23:14	0:15:57	0:17:43	0:34:33	0:20:54	0:19:10	0:17:24	0:08:20
Nov-19	0:10:56	0:14:28	0:19:31	0:14:24	0:17:12	0:32:35	0:19:55	0:16:47	0:15:04	0:09:09
Dec-19	0:10:34	0:14:17	0:21:55	0:16:24	0:17:36	0:36:57	0:19:16	0:20:40	0:14:01	0:08:27

APOT 2 - Dec 2019

	≤ 20 minutes	21-60 minutes	61-120 minutes	121-180 minutes	>180 minutes	Total Patients
SHC	499 98.6%	7 1.4%	0 0.0%	0 0.0%	0 0.0%	506
ECH	847 98.5%	12 1.4%	1 0.1%	0 0.0%	0 0.0%	860
KSC	682 89.2%	81 10.6%	2 0.3%	0 0.0%	0 0.0%	765
RMC	1230 94.7%	68 5.2%	1 0.1%	0 0.0%	0 0.0%	1299
OCH	602 94.7%	34 5.3%	0 0.0%	0 0.0%	0 0.0%	636
VMC	1029 77.8%	246 18.6%	39 3.0%	5 0.4%	3 0.2%	1322
GSH	750 91.6%	69 8.4%	0 0.0%	0 0.0%	0 0.0%	819
KSJ	677 90.4%	69 9.2%	3 0.4%	0 0.0%	0 0.0%	749
SLH	314 95.2%	15 4.5%	1 0.3%	0 0.0%	0 0.0%	330
LGH	109 100.0%	0 0.0%	0 0.0%	0 0.0%	0 0.0%	109
TOTAL	6739 91.1%	601 8.1%	47 0.6%	5 0.1%	3 0.0%	7395

	≤25 minutes
SHC	502 99.2%
ECH	852 99.1%
KSC	717 93.7%
RMC	1266 97.5%
OCH	622 97.8%
VMC	1095 82.8%
GSH	774 94.5%
KSJ	695 92.8%
SLH	315 95.5%
LGH	109 100.0%
TOTAL	6947 93.9%

County of Santa Clara Emergency Medical Services System



Emergency Medical Services Agency
700 Empey Way
San Jose, CA 95126
408.794.0600 voice | www.sccemsagency.org
www.facebook.com/SantaClaraCountyEMS

Date: January 30, 2020
To: Santa Clara County Emergency Medical Care Committee
From: Michael Cabano, EMS Specialist, All Hazards / Medical-Health Mutual Aid Unit
Subject: EMS System Initiatives: Preparedness and Significant Events

History and Issue

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

Report

Since the last reporting period there are currently no updates in reference to the Public Safety Narcan Program.

Since the last reporting period the following significant events have occurred that were mitigated without significant impact to the EMS System:

December 4, 2019- San Benito County Mutual Aid Response