

**EMERGENCY MEDICAL SERVICES AUTHORITY**

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September 28, 2020

Travis Kusman, Director  
San Mateo County EMS Agency  
801 Gateway Blvd 2nd Floor  
South San Francisco, CA 94080

Dear Mr. Kusman:

After a review, the Emergency Medical Services Authority has determined that the San Mateo County EMS Agency Quality Improvement Program is in compliance with Title 22, Division 9, Chapter 12 EMS System Quality Improvement.

An update is due 12 months from the date of this letter, September 28, 2020. If you have any questions regarding the plan review, please contact Adrienne Kim at (916) 322-4336, extension 3742.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Tom McGinnis', written over a blue circular stamp.

Tom McGinnis, EMT-P  
EMS Systems Division Chief

TM:ak



COUNTY OF SAN MATEO

Emergency Medical Services  
San Mateo County Health  
801 Gateway Boulevard  
2<sup>nd</sup> Floor  
South San Francisco, CA 94080  
[smchealth.org/ems](http://smchealth.org/ems)

April 28, 2020

Tom McGinnis, EMT-P  
EMS Systems Division Chief  
California EMS Authority

*Via Electronic Mail*

Mr. McGinnis,

Attached please find the annual update to our San Mateo County EMS Quality Improvement Plan (EMSQIP) in accordance with Title 22, Division 9, Chapter 12 regarding EMS System Quality Improvement. Since our 2019 submission last April, we have submitted STEMI, Stroke, and Trauma Plans which have been approved by the Authority; therefore, additional details regarding these program areas are not included in this submission.

I am at your service should the Authority have any associated need for additional information.

Sincerely,

Travis Kusman, MPH, Paramedic  
Director



SAN MATEO  
COUNTY HEALTH



SAN MATEO COUNTY HEALTH  
**EMERGENCY  
MEDICAL SERVICES**

# 2020 EMSQIP



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# Introduction

The EMS System depends on many different elements working seamlessly, from an informed public able to recognize medical emergencies to a network of public safety communication centers, fire departments, ambulance providers, and hospitals providing specialized care to sick or injured people.

To achieve this, a collaborative system with many stakeholders comes together. These stakeholders include our County operated Public Safety Communications (PSC) emergency medical dispatch (EMD) center, our fire department based first responders, American Medical Response (AMR) and South San Francisco Fire Department which are our 911 ambulance transport providers, and our hospitals including specialty care centers.

The purpose of the San Mateo County EMSQIP is to ensure that quality delivered throughout the system is at the highest level including clinical care and customer service.

## Mission Statement

To ensure the highest quality emergency medical care to the people of San Mateo County through an integrated and coordinated system of services, and to foster the medical and health resiliency of our community during disasters and emergencies.

## Structure & Organizational Description

The San Mateo County EMS Agency (EMS Agency) serves as the designated LEMSA for the County of San Mateo.

Under the direction of our EMS Agency leadership, we value:

- Patient & community-oriented system
- A caring environment to inspire and produce teamwork
- Work is based on research, scientific examination, and focused process improvement
- We promote candor, integrity, and mutual respect
- Multidisciplinary partnerships with our system stakeholders help us produce excellence
- Promotion and provision of community education on injury prevention, CPR and first aid including Stop the Bleed, fall prevention, emergency preparedness, and many other topics.

The EMS Agency leads EMS system activity including the following:

- Serve as an advocate for patients and resolve or facilitate complaint resolution
- Collaborate with others to ensure a unified, collaborative approach to patient care
- Implement, evaluate, and provide feedback regarding California EMS regulations
- Certify EMTs and provide local accreditation for Paramedics
- Authorize, evaluate, and develop local EMS training programs
- Develop, approve, and evaluate medical treatment protocols and policies for the EMS Agency and system stakeholders
- Establish and maintain communication systems regarding EMS
- Collaborate with public health in developing local medical and health disaster plans for local and regional mutual aid and mutual assistance.
- Provide coordination and support of Medical Health Branch activities via the Medical Health Operational Area Coordination program
- Designate and evaluate hospital specialty care centers
- Facilitate and provide oversight of EMS system quality improvement program
- Collect, analyze, and report data to the California Emergency Medical Services Authority (EMSA)

EMS System Goals are principally to reduce morbidity and mortality from illnesses and injuries through both prevention and the delivery of high-quality patient care. This is achieved by:

- Developing and maintaining methods of evaluation focusing on identifying the root cause and solving the problem to root (see below)
- Continually search for opportunities to improve, educate, and resolve problems prospectively
- Strive for effective communication with our stakeholders
- Educate EMS system stakeholders regarding the importance of the quality improvement process

Our EMSQIP program is a method of evaluation comprised of structure, process, and outcome focusing on improvement efforts, to identify root causes of problems, intervening to reduce or eliminate these causes, and implement steps towards corrective action. Additionally, recognizing excellence in performance and identifying and sharing best practices in the performance and delivery of care are integral to our program.

San Mateo County EMS in conjunction with County Health has implemented the LEAP process. Based on the structural foundation of LEAN, the LEAP process uses a real-time problem-solving guide with two key principles in mind: to solve problems to their root cause, and to build awareness of the problems our system stakeholders face.

The EMS Agency has utilized the real-time problem-solving methodology several times recently to address high utilizers, communication, and potential for patient harm events.

The County has one exclusive operational area (EOA) awarded through a competitive process. This EOA includes the entire County except for the City of South San Francisco. American Medical Response (AMR) currently holds a five-year contract (2019-2024) with the County to provide ALS ambulance services for the EOA. Through the RFP process in 2018, AMR was awarded this contract. The second operational area is the City of South San Francisco. The South San Francisco Fire Department (SSFFD) has provided paramedic ambulance services within the City since 1975.

All fire first responder Advanced Life Support (ALS) services provided within the EOA are coordinated through the San Mateo County Pre-Hospital Emergency Medical Services Medical Group (JPA). The JPA is a joint powers authority comprised of fire agencies and districts within the County. For coordination of education, trainings and quality improvement, fire agencies and districts within the JPA are categorized by primarily geographical region: (North, Central, South and Coastside) and assigned to one of four JPA EMS Supervisors. The San Mateo County EMS Agency holds performance-based contracts with both American Medical Response (AMR) and the JPA. These contracts include both operational and clinical QI measures.

System indicators that address the components found in Title 22 are included in our program. All our EMS providers are using the same ePCR (MEDS) to document patient care. Aside from frequency indicators such as the number of transports, the number of AED activations, the EMS Agency is involved in the following:

- Development of policies and treatment protocols
- Submission of the Core Measures to EMSA
- Compliance review and oversight
- Skill competency initial and ongoing evaluation
- Contract compliance

Further, our EMS CQI program includes the following which are outlined in our ambulance contract.

- Clinical Performance including but not limited to patient care, outcome, inventories (medication, procedure, skills maintenance), documentation, and transportation.
- Customer-Patient Satisfaction
- Injury/Illness Prevention and Community Education
- Resilience for Healthcare Providers
- Human Resources
- Safety
- Fleet, Equipment Performance and Materials Management
- Finance
- Unusual occurrences or incidents, sentinel events, complaint management & risk management
- Leadership
- Public Safety Communications (Emergency Medical Dispatch)

## SMC Emergency Medical Services Quality Improvement Program (EMSQIP)

The goal of San Mateo County's Quality Improvement Plan (EMSQIP) is to ensure that the highest quality emergency medical care is provided throughout our EMS system. This goal requires a comprehensive approach to quality improvement and includes participation from all key system stakeholders.

The EMS Agency staff in collaboration with our system stakeholders leads most internal quality improvement efforts and activities. All Agency staff participate in quality improvement activities pertinent to their respective assigned areas of responsibility.

Quality improvement is a key and detailed component of on-going contractual agreements with the fire first responder (JPA), the ALS ambulance provider (AMR), specialty care centers and base hospitals. The structure of the EMS system lends itself to communication and coordination of all quality improvement activities. The EMS Agency utilizes a committee structure via several standing committees to assist with the planning and implementation of the many components of our local EMS system, as well as participating in the external evaluation of regional systems of care such as trauma and on-going system quality improvement processes. These committees are multi-disciplinary and are composed of key system stakeholders. Committees have been structured to provide the EMS Agency with both system/operational and medical guidance promoting highly functional systems. Standing QI committees include the following:

### Emergency Medical Care Committee (EMCC)

The EMCC is an advisory committee to both the San Mateo County Board of Supervisors and the EMS Agency on issues pertaining to the EMS system, with a focus on public policy and overall performance evaluation. This committee meets bi-yearly. Membership is through appointment by the Board of Supervisors and includes representation from the following groups and organizations:

- Hospital Consortium of San Mateo County
- ALS ambulance provider paramedic
- Fire First responder (JPA)
- San Mateo County Police Chiefs' Association
- San Mateo County Fire Chiefs' Association
- California Highway Patrol
- San Mateo County Medical Association
- American Heart Association
- American Red Cross
- Consumers
- Field paramedic
- Emergency nursing
- Emergency physicians

Additionally, there are categorical members of the EMCC:

- County Health Officer

- County Director of Public Safety Communications
- Director of Office of Emergency Services
- Office of Emergency Services Coordinator
- Executive Leader of the Hospital Consortium
- Executive Leader of the County-wide ambulance contract

## Executive Steering Council (ESC)

Established in 2009 to promote transparency in the system, the ESC drives strategic planning and system priorities, establishes and monitors key performance indicators for each component of the EMS system. A major goal for this committee is to promote system evolution while doing so in a fiscally sound manner.

## Medical Advisory Committee (MAC)

The MAC advises the EMS Medical Director and the EMS Agency on medical policies, procedures and protocols and provides a forum for communication between emergency medical care providers and receiving hospitals. The committee serves as the system's Quality Technical Advisory Committee for clinical issues between receiving hospitals and prehospital providers. The MAC also functions as the system's Trauma Advisory Committee and provides medical advice to the EMCC, as it formulates recommendations on policy.

The committee meets every two months and membership is comprised of receiving hospital physicians and nurses, fire departments, ambulance transport, law enforcement, public safety communication, hospital consortium representative, the American Heart Association, the EMS Medical Director and EMS agency staff.

## Quality Leadership Committee (QLC)

QLC is a peer-based quality improvement committee that develops, and monitors identified key clinical performance indicators (KPI's), provides input for clinical protocols, policies and procedures pertaining to prehospital emergency care provided in San Mateo County. The committee is a forum for issue identification, discussion and resolution utilizing system data, benchmarks and evidence-based practices. Recently, the QLC went through a LEAN/LEAP process with a professional facilitator to understand challenges with the video laryngoscopy product using a scientific method of problem solving.

In conjunction with the Medical Advisory Committee, the QLC serves as the system's Quality Technical Advisory Committee for clinical issues. The QLC also develops standardized educational programs and trainings as indicated for EMS responders. This committee meets monthly and its membership includes the EMS Medical Director and EMS staff, EMS Battalion Chiefs, contracted transport agency clinical leadership team, and public safety communications.

## Operations Committee (OPS)

The OPS Committee is a peer-based committee which meets monthly and provides a forum for problem identification, discussion, and resolution of operational issues affecting the EMS system. This committee serves as the system's Quality Technical Advisory Committee for operational issues. The committee also assists in the development, implementation and evaluation of EMS operational-related policies and issues, data system, responses to mass casualty incidents, equipment, and supplies.

## Stroke Quality Improvement Committee

The Stroke Quality Improvement Committee is a confidential committee which meets quarterly. The committee is comprised of receiving hospital stroke medical directors, receiving hospital stroke coordinators, ED physicians, the American Heart Association, and the EMS Agency Medical Director and staff.

Implementing the recent EMSA regulations, the committee reviews cases, looks at policy, best practices and makes recommendations for systems of care. San Mateo County was one of the first to implement a tiered destination policy to either a comprehensive, thrombectomy capable, or primary stroke center based on last known well time (LKWT). The pilot study with the Mobile Stroke Unit or (MSU) continues and has evolved to include rendezvous sites to facilitate rapid assessment, treatment, and transport.

Get with The Guidelines (GWTG) ® has been fully implemented allowing the EMS Agency to look at performance both in our system and benchmark nationally.

## ST-Elevated Myocardial Infarction (STEMI) Quality Improvement Committee

The STEMI Quality Improvement Committee is a confidential committee which meets quarterly. The committee is comprised of both interventional and non-interventional cardiologists, ED physicians, the EMS Medical Director, and EMS Agency Staff. Evaluative criteria for re-designation as a STEMI Receiving Center (SRC) were developed by the committee. During the past year, site visits were conducted at all SRCs with resultant re-designation.

Implementing the recent EMSA regulations, the committee reviews cases, looks at data for both walk-in, ambulance transport, and transfer cases from a STEMI Referral Hospital (SRH) of which we have two in our County, to a STEMI Receiving Hospital (SRC). Additionally, the committee discusses best practices and current literature. A pilot trial extracorporeal membrane oxygenation or ECMO continues for out of hospital refractory ventricular tachycardia/fibrillation patients with certain inclusion criteria in a specific catchment area. The committee prepared a guiding document to assist SRCs wishing to start an EMCO program.

## Nurse Managers

The Nurse Managers Committee is a forum for collaboration and information sharing between hospitals, transport agencies, and the EMS Agency. Best practices and information sharing are hallmarks of this committee. An educational component is often part of this meeting.

## Triple P (Policies, Procedures, and Protocols)

Comprised of a cross section of clinical system stakeholders, the Triple P does the initial review of policies, procedures, and protocols, makes recommendations for change, which are then sent to the entire system for clinical review. Through this committee, all patient care protocols and procedures have been reviewed and updated. Currently, policies are being reviewed through this committee.

### PRIMARY IMPRESSIONS

The EMS Agency has redesigned all the patient treatment protocols to align with the EMSA list of primary impressions. The primary and secondary impression drop down choices across countywide ePCR platform, MEDS has been modified to reflect this.

### SYSTEM ENHANCEMENTS

The EMS Agency utilizes First Pass® to augment our EMSQIP program. First Pass® sits “on top” of MEDS. The EMS Agency is reviewing clinical compliance with protocols for pain, cardiac, stroke, refusal of medical treatment or against medical advice, and STEMI and the Online Compliance Utility Module (OCU) to monitor response times (see next page).

# Response Volume and Speed

## REQUIRED 911 EMERGENCY RESPONSE TIMES

<b>Urban/Suburban – Response to 90 percent of calls each month shall be compliant</b>		
Code Type	JPA ALS First Responder	AMR Emergency Ambulance
Code 3	6:59 minutes	12:59 minutes
Code 2	14:59 minutes	22:59 minutes
<b>Rural – Response to 90 percent of calls each month shall be compliant</b>		
Code Type	JPA ALS First Responder	AMR Emergency Ambulance
Code 3	11:59 minutes	19:59 minutes
Code 2	24:59 minutes	59:59 minutes
<b>Remote – Response to 90 percent of calls each month shall be compliant</b>		
Code Type	JPA ALS First Responder	AMR Emergency Ambulance
Code 3	21:59 minutes	39:59 minutes
Code 2	29:59 minutes	59:59 minutes

*The table above outlines the response times with which our emergency medical responders are required to comply. These times depend on the urgency of the case (priority of the response), the region of the county (area type), and whether the response is by fire first responders or ambulance.*

*Based on the priority of the response and the patient’s location, AMR and the paramedic fire EMS providers are required to respond within the response times listed above 90% of the time in each of the response time zones (excluding South San Francisco).*

All late calls are reviewed for the causative reason. The EMS Agency’s Contract Compliance Officer meets monthly to review late calls with the provider. With the new computer aided dispatch (CAD) system which will come on-line later this year, the Online Compliance Utility (OCU) will be fully implemented. The OCU will provide a real-time web enabled tool to monitor compliance in real time as part of our contract compliance efforts, promoting optimal deployment of resources to meet the needs of our community.

# Opiate Crisis

The misuse and abuse of opioid pain medication is a national public health problem and the majority of drug overdose deaths are from an opioid pain medication. To put the problem in perspective, more people died of opioid overdoses than in motor vehicle crashes in 2015. The Center for Disease Control (CDC) reports 91 Americans die every day because of an opioid overdose.

San Mateo County is actively monitoring the morbidity and mortality from the misuse of opioids. This is accomplished by ongoing surveillance via our electronic patient care records as well as a review by the county epidemiologists reviewing Emergency Department (ED) data, data from multiple other sources, and medical examiner data. This data is shared amongst our system stakeholders to assess, monitor, and look at solutions to this public health crisis in our community.

The EMS Agency has worked extensively with law enforcement agencies on Naloxone training for their use in the field.

In 2018, the San Mateo County Age-Adjusted rate for all opioid deaths was 4.8/100,000 residents.

The next page shows a summary of how San Mateo County Health utilizes opioid surveillance.

## San Mateo County Drug Surveillance

December

(prepared 1/27/2020)

Drug/Doses/Data	Month 12/1/19 to 12/31/19	Prior month comparison	Rolling Year to Date 1/1/2019 to 12/31/19	Prior Years	
				2018	2017
<b>First Watch</b>					
Narcan # of doses (total mg):					
2 (4 mg), 2 (4 mg), 2 (2 mg), 2 (3 mg), 2 (4 mg)	5	-	65	52	51
<b>ESSENCE</b>					
Analysis in process					
<b>CA Poison Control</b>					
edible marijuana; oxycodone + xanax; Opioids + wellbutrin, sertaline, benzodiazepines; valium + hydroxyzine; valium; percocet; Xanax + MS04; marijuana+gabapentin, alcohol; Norco + tequila; ecstasy	9	↑	88	112	124
<b>Coroner</b>					
Referred cases	3	-	38	28	34
<b>VRBIS</b>					
Drug-related	0	-	N/A	N/A	N/A
Pending investigations	29	↓	N/A	N/A	N/A
<b>Narcotics Task Force</b>					
Referred cases <i>no additional comments</i>	0	-	N/A	N/A	N/A
<b>Crime Lab Specimens</b>					
Heroin	18	↓	N/A	N/A	N/A
Heroin + cocaine	1	↑	N/A	N/A	N/A
Heroin + methamphetamine	0	-	N/A	N/A	N/A
Fentanyl	14	↓	N/A	N/A	N/A
Methamphetamine	135	↓	N/A	N/A	N/A
Total items submitted	284	↓	N/A	N/A	N/A

### Summary of drug overdose activity in San Mateo County

Legend - prior month comparison:	
increase vs prior month	↑
decrease vs prior month	↓
same as prior month	-

**Data Sources:**

- First Watch: Patient cases with use of 2 or more doses of Naloxone/Narcan
- ESSENCE: Hospital report of ED cases with dx of drug overdose for confirmed or suspected opioids (i.e. fentanyl, heroin, Norco) marijuana, other illicit drugs
- CA Poison Control: Resident self-report of potential overdose on opioids, marijuana, illicit drugs
- Coroner: Drug-related deaths with suspected/confirmed dx including fentanyl, heroin, other drugs
- VRBIS: monthly confirmed drug-related & pending investigation deaths
- Narcotics Task Force: updates regarding any unusual drug-related activity, referred cases highlight current activity
- Crime Lab: drug specimens tested by the crime lab and total specimens submitted

# Specialty Care – Cardiac Patients

San Mateo County participates in the Cardiac Arrest Registry to Enhance Survival or CARES program and data are displayed below for 2019.

Approximately four years ago, the EMS Agency implemented high-performance CPR across our system. Since that time, all cardiac arrests (removing obvious death) are reviewed every Thursday by a multi-disciplinary team led by the EMS Medical Director. This type of collaboration leads to an open, transparent communication focusing on how to improve both individual crew performance, but also system performance.

As a result of these weekly calls, many system enhancements have been implemented. To include: metronomes on all calls, Code Stat ® monitoring key performance metrics such as compression rate, depth, time on chest, working with facilities to have Code Status information via a POLST, DNR, or Advanced Directive for Healthcare readily available upon first responder arrival. Extracorporeal membrane oxygenation as a pilot study for out of hospital refractory ventricular fibrillation is continues to be studied with one of our high-volume STEMI receiving facilities. LEAN/LEAP for real-time problem solving has been utilized to decrease the time metric from EMS at Patient Side to acquisition of the 12-lead EKG in patients with suspected ischemic chest pain with a goal of EKG acquisition < 5 minutes. Using this process, we have been able to decrease this metric and we monitor this monthly.

## CARDIAC ARREST- CARES

2019 CARDIAC ARREST FACTS
360 CASES
64.2% MALE
35.8% FEMALE
MEAN AGE OF 67.1
27% OF THE TIME, AN AED WAS APPLIED PRIOR TO EMS ARRIVAL
36% OF THE TIME, A BYSTANDER INITIATED CPR

# Specialty Care – Stroke CY 2019

San Mateo County has a well-established, evidence-based stroke triage and patient destination system designed to quickly deliver patients to the most appropriate hospital for definitive care. Ambulance paramedics have the ability to identify patients as having a stroke and alert the hospitals of their arrival via a “stroke alert.” Three hospitals serve San Mateo County patients as primary stroke centers, two are recognized as comprehensive centers and one as a thrombectomy-capable center or TSC. The tiered system allows patients to receive assessment and treatment at either a primary, TSC, or comprehensive center depending on the time of symptom onset and the type of stroke.

San Mateo County’s Stroke CQI Committee is comprised of neuro-interventionalists, neurologists, emergency medicine physicians, stroke coordinator nurses, and EMS Agency staff who participate in the stroke system all working together to improve quality. The committee reviews care and makes recommendations to the EMS Medical Director on best practices for stroke care.

Please see the recently submitted Stroke Plan for additional details.

# Specialty Care – Trauma CY 2019

Although San Mateo County does not have any designated trauma centers located within the boundaries of the County, we do have a trauma system. San Mateo patients are routed to either Zuckerberg San Francisco General (ZSFG) or Stanford, depending on geographical location of the incident.

To assist in the evaluation of our system, EMS clinical staff participate in both Santa Clara and San Francisco County's trauma quality improvement processes. The results QI issues/efforts are reported back to our committees.

The revised the red box/blue box criteria in consultation with both of our receiving trauma hospitals has helped the SMC receiving hospitals with destination decisions by guiding our local receiving hospitals on whether to accept a patient or refer to a trauma center when paramedics make the initial notification or "ring down". Additionally, this serves as a resource tool to help ED physicians expedite transfer to trauma center when the patient presents at a non-trauma hospital.

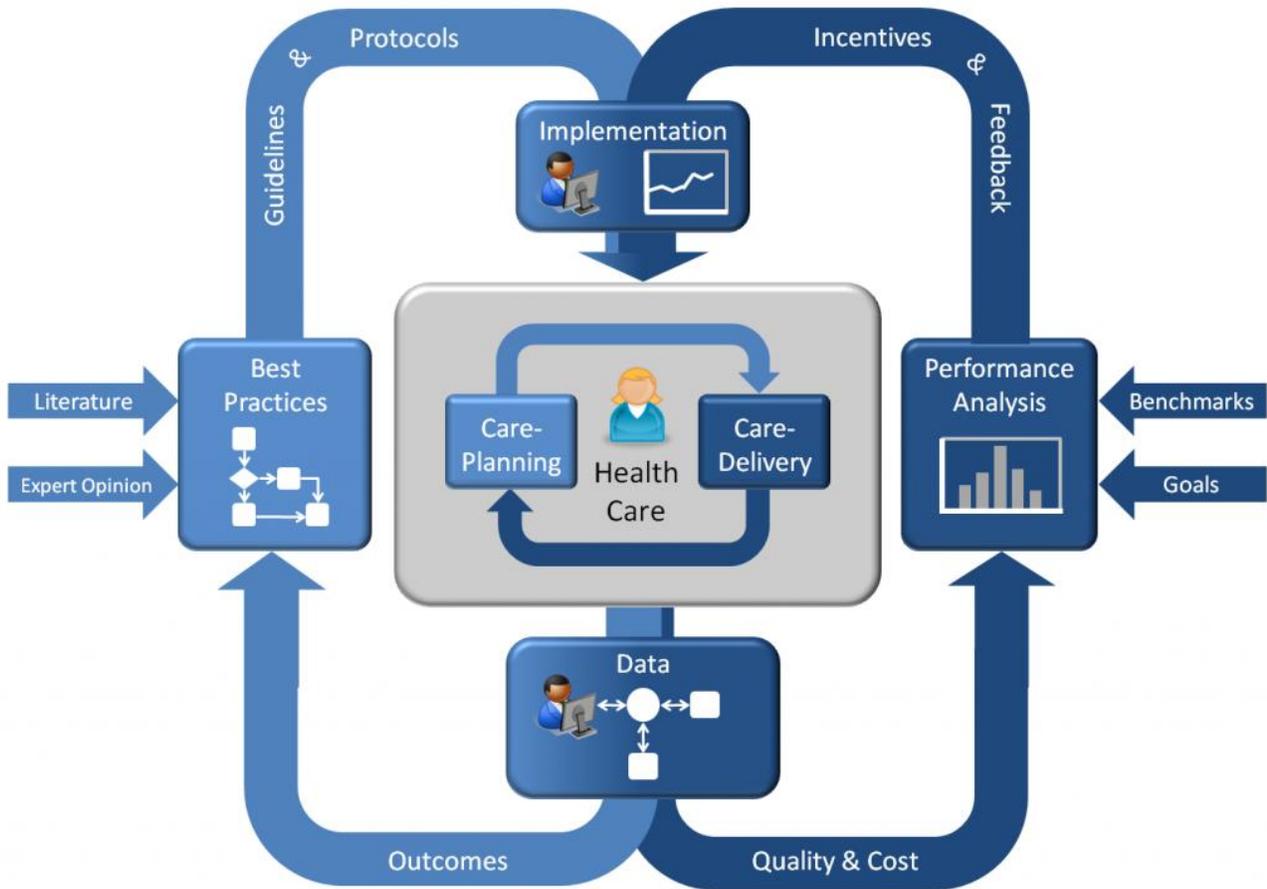
San Mateo County clinical staff participated in the American College of Surgeons (ACS) trauma designation surveys for both Stanford and ZSFG.

We continue to monitor the scene time for trauma patients since our last submission with a goal of getting off scene and to the trauma center as quickly as possible.

Please see the Trauma report recently submitted for additional details.

# Action to Improve

The EMS Agency largely follows Deming's Circle concept of Plan-Do-Study-Act (PSDA), which is reviewed with our clinical system stakeholders.



Striving to create best practices, the EMS Agency focuses on clinical research, recommendations by the California EMS Medical Director's Association of California (EMDAC) and EMS Administrators Association of California (EMSAAAC). Additionally, information is shared via the LEMSA CQI committee.

Throughout the year, reports are shared at the appropriate committee level with our stakeholders. Representatives from those committees share information with line EMTs and paramedics.

The EMS Agency reviews all sentinel events and creates an action plan. The EMS Medical Director along with the clinical staff reviews and makes recommendations on remedial education if indicated.

# Training and Education

Through the AMR and JPA contracts, measures are identified for standardized training, orientation, skills maintenance and education. Standards for maintaining paramedic skills and required trainings are developed and implemented by the QLC with the approval of the EMS Medical Director. An annual training calendar is developed and shared with all system stakeholders.

Skills labs offering hands-on experience and demonstration of proficiency in skills that are not frequently used or are optional scope are held annually. Joint training opportunities among JPA and AMR staff are encouraged. AMR has a mobile training unit utilized for off-site trainings. Any additional training such as changes in treatment protocols, new EMS policies/procedures, and new skills/equipment is developed with system input. The addition of any new piece of equipment or medication is vetted through the ESC if an anticipated increase cost to the system is to occur (including cost of trainings). These trainings are incorporated into the quarterly training schedule. Education and training methodologies utilized may include any of the following:

- Didactic
- Classroom-based
- Web-based
- Skills labs
- Cadaver labs
- Virtual labs
- Scheduled clinical experience
- Receiving hospitals
- Specialty care centers

Protocols and procedures related to patient care are reviewed utilizing the Agency's standing committees. Any system stakeholder including our specialty committees may request clinical protocol reviews. The Triple P committee reviews clinical policies and makes recommendations on how best to provide updated education and training methodologies for disseminating the changes to field personnel. All policies, procedures and protocols are posted on the EMS Agency website and on the widely used San Mateo County EMS mobile application which is available on iOS and Android platforms.

The EMS Agency is responsible for ensuring that on-going training is appropriate to the skill level and service goals as defined by contracts and best practices. Annual infrequent skills labs are conducted to evaluate skills of prehospital providers. Each contractor (JPA and AMR) is responsible for the scheduling of quarterly educational and training programs for their staff. JPA EMS Supervisors, AMR Clinical Manager and AMR/JPA Training Coordinator are responsible for ensuring that all their staff successfully complete education and trainings as required per their respective contracts with the County. They are also responsible for maintaining supporting documentation that all training and educational requirements have been completed. Joint education and training programs among contractors occur often. Compliance to contractual trainings and education are reviewed periodically by EMS clinical

staff, in addition to comprehensive compliance reviews conducted by the Agency bi-annually of both contractors.

# Annual Update

The EMSQIP plan is updated every year. Goals for the upcoming year are identified by a retrospective analysis, planning, and forecasting future changes focusing on best practices.

The EMSQIP update is shared annually with our stakeholders.