#### CALIFORNIA EMERGENCY MEDICAL SERVICES AUTHORITY

10901 GOLD CENTER DR., SUITE 400 RANCHO CORDOVA, CA 95670 (916) 322-4336 FAX (916) 322-1441



August 1, 2023

Travis Kusman, MPH, EMS Director San Mateo County Emergency Medical Services Agency 801 Gateway Blvd, 2<sup>nd</sup> Floor South San Francisco, Ca 94080

Dear Mr. Kusman,

This letter is in response to the San Mateo County Emergency Medical Services (EMS) Agency's 2020-2022 EMS, Trauma, St-Elevation Myocardial Infarction (STEMI), Stroke, and Quality Improvement (QI) plan submissions to the EMS Authority on January 30, 2023.

The EMS Authority has reviewed the EMS plan based on compliance with statutes, regulations, and case law. It has been determined that the plan meets all EMS system components identified in Health and Safety Code (HSC) § 1797.103 and is <u>approved</u> for implementation pursuant to HSC § 1797.105(b). Based on the transportation documentation provided, please find enclosed the ground exclusive operating area status, as compiled by the EMS Authority.

The EMS Authority has also reviewed the Trauma, STEMI, Stroke, and QI plans based on compliance with Chapters 7, 7.1, 7.2, and 12 of the California Code of Regulations, Title 22, Division 9, and has <u>approved</u> for implementation.

Per HSC § 1797.254, EMS Plans must be submitted to the EMS Authority annually. San Mateo County EMS Agency will only be considered current if an EMS Plan is submitted each year.

Your 2023 EMS plan will be due on or before August 1, 2024. Concurrently with the EMS plan, please submit an annual Trauma, STEMI, Stroke, and QI plan.

If you have any questions regarding the EMS Plan review, please contact Mr. Mark Olivas, Interim EMS Plans Coordinator, at (916) 204-7885 or <a href="mark.olivas@emsa.ca.gov">mark.olivas@emsa.ca.gov</a>.

Sincerely,

Tom McGinnis

Tom McGinnis

Chief, EMS Systems Division

Enclosure AW: mo

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San Mateo 2020-2022 EMS Plan Ground Exclusive Operating Areas	Non-Exclusive	Exclusive	Method to Achieve Exclusivity	Emergency Ambulance	ALS	LALS	All Emergency Ambulance Services	9-1-1 Emergency Response	7-digit Emergency Response	ALS Ambulance	All CCT Ambulance Services	BLS Non-Emergency and IFT	Standby Service with Transport Authorization
ZONE		EXC	LUSIVITY		TYPE					LEVEL			
San Mateo County, except the City of South San Francisco		Х	Competitive	Х				Х	Х	Х			
City of South San Francisco		Х	Non- Competitive	Х				Х	Х	Х			

2020-2022

# EMS SYSTEM PLAN UPDATE



San Mateo County EMS Agency

801 Gateway Boulevard, Second Floor South San Francisco, California 94080

May 2023



#### San Mateo County 2020-2022 EMS Plan Executive Summary

Despite an unprecedented response to the COVID-19 pandemic, historic wildfire and severe weather events within the County, the San Mateo County EMS system remained stable and continued to make progress toward achieving our systems' long-term goals. The EMS Agency continued to experience successful collaborations with key system partners including our ALS Fire First Responder Agencies, authorized ALS ambulance providers American Medical Response (AMR) and South San Francisco Fire Department, and our receiving and specialty care centers, several of which are located within neighboring EMS agency jurisdictions.

#### Accomplishments Since Our Last Report

- Establishment of an Alternative Care Site ("ACS") in Burlingame that cared for more than 200 minimally to moderately ill COVID+ patients, helping to free up critical hospital beds for acute patients in our local hospitals.
- Establishment of 10 surge Intensive Care Unit ("ICU") beds made available to the Bay Area region for COVID+ patients.
- Coordinated through the MHOAC, local hospitals accepted multiple COVID-19 patients from other mutual aid regions in response to decompression efforts across the State.
- Implementation of a new computer aided dispatch system for law, fire, and EMS by San Mateo County Public Safety Communications.
- Implementation of an online licensing portal built by ImageTrend to facilitate all EMT certification/ recertification, paramedic accreditation/ reaccreditation, and Continuing Education provider applications.
- San Mateo County STEMI system of care received the American Heart Association Mission: Lifeline Gold award, the first time our system has been recognized at this performance level.
- EMS Agency continues leadership and management of the County's Health System Emergency Preparedness Program, including HPP, PHEP and CRI programs ..
- Completed and implemented new and updated EMS system policies.
- Participated in National Cardiac Arrest to Enhance Survival (CARES) registry system.
- Continue to utilize a high-performance cardiopulmonary resuscitation (CPR) response protocol with the goal of continued improvement in overall survival of cardiac arrest.
- Continue to broaden capability and use of ReddiNet® as our broader healthcare system emergency communication platform, ensuring access by all skilled nursing facilities within San Mateo County.
- Expanded access to ReddiNet® during the COVID-19 pandemic to all congregate care facilities.
- Conducted on-site facility assessments of infection control practices and supply integrity and sustainability at healthcare facilities Countywide provided training, supply and care support as necessary.
- Provided mutual aid resources, including RDMHC support services, to the Northern California wildfires.
- Successfully completed the development of the SAFR Health Information Exchange system, a



grant project funded by the California Department of Health Care Services as part of a Center for Medicare/Medicaid Services 90/10 funding and CARESTAR Foundation matching funds for the +EMS Health Information Exchange.

- Participated in bi-monthly county-wide death review committee with the goal of identifying
  preventable deaths and systematically addressing root causes. The review committee led by the
  County Health Leadership team has representatives of San Mateo Older Adults Program, Public
  Health, Family Health, Behavioral Health and Recovery Services, Correctional Health, and EMS.
- Established a Medical Reserve Corps, including a comprehensive training program for all members.

#### **Emergency Medical Dispatch**

The San Mateo County EMS system utilizes San Mateo County Public Safety Communications ("PSC") as the single point of EMS communication and emergency medical dispatch ("EMD") for all fire department and 911 emergency ambulance activity countywide. PSC is a public safety agency and provides EMD services through utilization of the Medical Priority Dispatch System, approved by the San Mateo County EMS Agency, in compliance with Health and Safety Codes 1797.223 and 1798.8 and California Code of Regulations ("CCR") 100170.

Additionally, PSC dispatches EMS aircraft, which utilize countywide frequencies and standard hospital communication capabilities, in compliance with local EMS policies and procedures and CCR 100306.

#### Disaster Medical Response

- 1. The EMS Agency continued development of the San Mateo County Operational Area Medical Health Emergency Operations Plan (EOP), which provides general guidance for preparation, response, and recovery to all-hazard events which pose risk to the healthcare system and/or result in illness or injury amongst the population within San Mateo County.
- 2. EMS Director Travis Kusman, MPH, Paramedic continues to serve as the County's Medical Health Operational Area Coordinator (MHOAC). The EMS Agency maintains an on-call EMS Duty Officer 24-hours a day who also serves as the MHOAC's designee when the EMS Director is unavailable. Director Kusman also serves as the Regional Disaster Medical Health Coordinator for the Coastal Mutual Aid Region.
- 3. The San Mateo County Healthcare Coalition (HCC) was established in 1999 to coordinate strategic planning activities amongst healthcare facilities of various healthcare delivery sectors, public health agencies, other government entities, and community partners to prepare for, respond to, and recover from emergencies and other incidents that impact the public's health. The HCC meets regularly and was active during the Public Safety Power Shutoff events of 2019 that affected the majority of the Bay Area, the COVID-19 pandemic response, as well as local wildfires and severe weather events.



San Mateo County's HCC membership was comprised of:

- 8 Acute care hospitals
- 3 Ambulatory surgical centers
- 15 Intermediate care facilities for individuals with intellectual disabilities
- 8 Dialysis centers
- All EMS providers agencies serving within the 9-1-1 system
- 14 Home health agencies
- 1 Public health department
- 13 Programs of all-inclusive care for the elderly
- 10 Long-term care facilities
- 8 Hospice inpatient and outpatient facilities
- 4 Federally qualified healthcare facility

#### Public Information and Education

The EMS Agency continues its effort to provide community education and training. Highlights for the past reporting period include:

- Hands-Only CPR training of hundreds of members of the public across San Mateo County;
- Stop the Bleed training of hundreds of members of the public across San Mateo County; and
- COVID-19 mass vaccination by EMTs and paramedics.



Date: 2022 EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. <u>Please include a separate form for each exclusive</u> and/or nonexclusive ambulance zone.

Local EMS Agency or County Name: San Mateo County

**Area or Subarea (Zone) Name or Title:** San Mateo County, except the City of South San Francisco

Name of Current Provider(s): American Medical Response – West (AMR) Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

AMR has provided service under this name since January 1999. The company was the selected proposer per a Request for Proposal ("RFP") competitive process conducted in 1997/98, 2007/2008, and again in 2018. This provider had been the contract holder since 1990 under the names of Baystar, Medtrans/ Laidlaw, and AMR. Therefore, AMR has provided uninterrupted emergency ambulance since January 1990.

**Area or Subarea (Zone) Geographic Description:** San Mateo County, except the City of South San Francisco

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Include intent of local EMS agency and Board action.

Competitive Process – Section 1797.224. Emergency ambulance service – all emergencies. Until 1989, exclusivity language contained in the plan was "advanced life support." Language in the plan was amended to "emergency ambulance service" in 1989 with the approval of the EMS Authority. The San Mateo County Board of Supervisors approved both the RFP and the contract in 1998 and granted a five-year contract extension in 2003. Contract included emergency ambulance service and paramedic first response (fire service was a subcontractor to the contractor). A subsequent five-year contract was awarded through an RFP competitive process in 2008 and went into effect in July 2009, was extended in June 2014 and expired June 2019. Current contract was awarded through an RFP competitive process in 2018 and went into effect in July 2019. Current contract does not include paramedic first response. There is a separate contract with the San Mateo County Pre-Hospital Emergency Medical Services Group ("JPA") for paramedic fire first response services that went into effect July 2019. The EMS Agency plans to conduct future ambulance RFPs at periodic intervals to ensure the most appropriate level of ambulance service is available to meet the needs of San Mateo County.

Type of Exclusivity ("Emergency Ambulance," "ALS," or "LALS" [HS 1797.85]):

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (e.g., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Type of Exclusivity = Emergency Ambulance. Levels of Exclusivity = Limited Ambulance Services.



Emergency Response: 1) 9-1-1 Emergency Response and 2) 7-Digit Emergency Response. ALS Ambulance.

#### Method to achieve exclusivity, if applicable (HS 1797.224):

If <u>grandfathered</u>, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If <u>competitively-determined</u>, method of competition, intervals, and selection process. Attach copy/ draft of last competitive process used to select provider or providers.

The emergency ALS ambulance transport services competitive process was approved by and is on file with EMSA. The EMS Agency concluded an RFP competitive process for ALS emergency ambulance services and negotiated a new contract prior to the expiration of the June 2019 contract. The current contract began July 1, 2019.



Local EMS Agency or County Name: San Mateo County

Area or Subarea (Zone) Name or Title: City of South San Francisco

Name of Current Provider(s): City of South San Francisco Fire Department Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or Subarea (Zone) Geographic Description: City of South San Francisco

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):

Include intent of local EMS agency and Board action.

The City of South San Francisco qualifies for exclusivity within its jurisdiction.

#### Type of Exclusivity ("Emergency Ambulance," "ALS," or "LALS" [HS 1797.85]):

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (e.g., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Emergency ambulance. Emergency Response = 911 Emergency Response, 7-Digit Emergency Response. Transport Services = ALS Ambulance Services.

#### Method to achieve exclusivity, if applicable (HS 1797.224):

If <u>grandfathered</u>, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If <u>competitively-determined</u>, method of competition, intervals, and selection process. Attach copy/ draft of last competitive process used to select provider or providers.

Non-Competitive (grandfathering). The EMS Agency believes South San Francisco Fire meets the criteria for "grandfathering" in Section 1797.224, and as such qualifies for exclusivity within its jurisdiction. On March 4, 1975, the San Mateo County Board of Supervisors approved Resolution No. 34702 authorizing an agreement with City of South San Francisco to establish a paramedic response and transport unit in cooperation with the County, and its effort to establish a comprehensive emergency medical system. Since that time South San Francisco Fire Department has provided continuous paramedic transport services within the County for the City of South San Francisco. This has been documented in EMS Plans, internal documents, and various media publications going back to 1974.



#### A. SYSTEM ORGANIZATION AND MANAGEMENT

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short- range plan	Long- range plan		
Agen	cy Administration:							
1.01	LEMSA Structure		Х					
1.02	LEMSA Mission		Х					
1.03	Public Input		Х					
1.04	Medical Director		Х	Х				
Plann	ing Activities:							
1.05	System Plan		Х					
1.06	Annual Plan Update		Х					
1.07	Trauma Planning*		Х	X				
1.08	ALS Planning*		Х					
1.09	Inventory of Resources		X					
1.10	Special Populations		X	X				
1.11	System Participants		Х					
Regul	latory Activities:							
1.12	Review & Monitoring		Х					
1.13	Coordination		Х					
1.14	Policy & Procedures Manual		Х					
1.15	Compliance w/Policies		Х					
Syste	m Finances:							
1.16 Mecha	Funding anism		Х					
Medic	cal Direction:							
1.17	Medical Direction*		Х					
1.18	QA/QI		Х	Х				



1.19	Policies, Procedures,	Х	Х	
	Protocols			



# A. SYSTEM ORGANIZATION AND MANAGEMENT (continued)

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long- range plan				
1.20	DNR Policy		Χ							
1.21	Determination of Death		X							
1.22	Reporting of Abuse		Х							
1.23	Interfacility Transfer		Χ							
Enhai	Enhanced Level: Advanced Life Support									
1.24	ALS Systems		X	X						
1.25	On-Line Medical Direction		Х	Х						
Enhai	nced Level: Trauma Ca	re System:								
1.26	Trauma System Plan		Χ							
Enhai	Enhanced Level: Pediatric Emergency Medical and Critical Care System:									
1.27	Pediatric System Plan		Χ							
Enhai	Enhanced Level: Exclusive Operating Areas:									
1.28	EOA Plan		Χ							



#### **B. STAFFING/TRAINING**

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Local	EMS Agency:					
2.01	Assessment of Needs		Х			
2.02	Approval of Training		X			
2.03	Personnel		X			
Dispa	tchers:					
2.04	Dispatch Training		Х	Х		
First	Responders (non-trar	nsporting):				
2.05	First Responder Training		X	X		
2.06	Response		X			
2.07	Medical Control		X			
Trans	sporting Personnel:					
2.08	EMT-I Training		Х	Х		
Hosp	ital:					
2.09	CPR Training		Χ			
2.10	Advanced Life Support		Х			
Enha	nced Level: Advance	d Life Support:				
2.11	Accreditation Process		Х			
2.12	Early Defibrillation		Χ			
2.13	Base Hospital Personnel		Х			



#### C. COMMUNICATIONS

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan				
Comn	Communications Equipment:									
3.01	Communication Plan*		X	Х						
3.02	Radios		Χ	X						
3.03	Interfacility Transfer*		Х							
3.04 Cente	Dispatch r		X							
3.05	Hospitals		Χ	X						
3.06	MCI/Disasters		Х							
Public	c Access:									
3.07	9-1-1 Planning/ Coordination		Х	Х						
3.08	9-1-1 Public Education		X							
Resou	Resource Management:									
3.09	Dispatch Triage		Х	Х						
3.10 Dispat	Integrated tch		Х	Х						



#### D. RESPONSE/TRANSPORTATION

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan			
Universal Level:								
4.01 Service Area Boundaries*		Х	X					
4.02 Monitoring		Х	X					
4.03 Classifying Medical Requests		Х						
4.04 Prescheduled Responses		Х						
4.05 Response Time*		Х						
4.06 Staffing		Х						
4.07 First Responder Agencies		Х						
4.08 Medical & Rescue Aircraft*		Х						
4.09 Air Dispatch Center		Х						
4.10 Aircraft Availability*		Х						
4.11 Specialty Vehicles*		X	X					
4.12 Disaster Response		X						
4.13 Intercounty Response*		Х						
4.14 Incident Command System		Х						
4.15 MCI Plans		Х						
Enhanced Level: Advan	ced Life Support	:						
4.16 ALS Staffing		Х	Х					
4.17 ALS Equipment		Х						
Enhanced Level: Ambul	Enhanced Level: Ambulance Regulation:							
4.18 Compliance		Х						
Enhanced Level: Exclus	ive Operating Pe	ermits:						



4.19	Transportation Plan	Х		
4.20	"Grandfathering"	Х		
4.21	Compliance	Х		
4.22	Evaluation	Х		



#### E. FACILITIES/CRITICAL CARE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan			
Universal Le	evel:								
1	ssment of bilities		Х	Х					
5.02 Triage Transfer Proto			Х						
5.03 Trans Guide	fer lines*		Х						
5.04 Speci Facilit	alty Care ties*		X						
	Casualty gement		X	X					
5.06 Hospi Evacu	tal uation*		Х						
Enhanced L	evel: Adv	anced Life Supp	oort:						
	Hospital nation*		X						
Enhanced L	evel: Tra	uma Care Systei	m:						
5.08 Traun System Desig			X						
5.09 Public	Input		Χ						
Enhanced L	evel: Ped	liatric Emergenc	y Medical and	Critical Care Sys	tem:				
5.10 Pedia System Desig			Х						
	gency rtments		X	X					
5.12 Public	Input		Х						
Enhanced L	Enhanced Level: Other Specialty Care Systems:								
5.13 Speci System Desig			Х						
5.14 Public	Input		X						



#### F. DATA COLLECTION/SYSTEM EVALUATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan			
Unive	ersal Level:								
6.01	QA/QI Program		X	X					
6.02	Prehospital Records		Х						
6.03	Prehospital Care Audits		X						
6.04	Medical Dispatch		X						
6.05 Mana	Data gement System*		Х						
6.06	System Design Evaluation		X						
6.07	Provider Participation		X						
6.08	Reporting		Х						
Enha	nced Level: Advanc	ed Life Supp	ort:						
6.09	ALS Audit		Х	Х					
Enha	Enhanced Level: Trauma Care System:								
6.10	Trauma System Evaluation		Х						
6.11	Trauma Center Data		Х	X					



#### G. PUBLIC INFORMATION AND EDUCATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan			
Unive	Universal Level:								
7.01 Inform	Public nation Materials		Х	X					
7.02	Injury Control		Χ	X					
7.03	Disaster Preparedness		Х	Х					
7.04	First Aid & CPR Training		X	X					



#### H. DISASTER MEDICAL RESPONSE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan		
Unive	rsal Level:							
8.01	Disaster Medical Planning*		X					
8.02	Response Plans		Χ	X				
8.03	HazMat Training		Х					
8.04 Comm	Incident nand System		Х	X				
8.05	Distribution of Casualties*		Х					
8.06 Asses	Needs sment		Х	Х				
8.07	Disaster Communications*		Х					
8.08	Inventory of Resources		Х	Х				
8.09	DMAT Teams		Χ	X				
8.10	Mutual Aid Agreements*		Х					
8.11 Desig	CCP nation*		X					
8.12	Establishment of CCPs		Х					
8.13	Disaster Medical Training		X	X				
8.14	Hospital Plans		Χ	X				
8.15	Interhospital Communications		Х					
8.16 Agend	Prehospital cy Plans		X	X				
Enhai	nced Level: Advan	ced Life Support:						
8.17	ALS Policies		Х					
Enhai	Enhanced Level: Specialty Care Systems:							
8.18	Specialty Center Roles		Х					
Enhai	nced Level: Exclus	ive Operating Area	as/Ambulance	Regulations:				



Fxclusivity	- ' ' '		Х			
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# **TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT**

Repo	orting Year: 2022	
<b>NOTI</b> agen	<b>E:</b> Number (1) below is to be completed for each county. The balance of Table 2 refers cy.	to each
1.	Percentage of population served by each level of care by county: (Identify for the maximum level of service offered; the total of a, b, and c should equal 1	100%.)
	County: San Mateo County	
	A. Basic Life Support (BLS) B. Limited Advanced Life Support (LALS) C. Advanced Life Support (ALS)	0% 0% 100%
2.	Type of agency:  ☐ Public Health Department  ☑ County Health Services Agency  ☐ Other (non-health) County Department  ☐ Joint Powers Agency  ☐ Private Non-Profit Entity  ☐ Other:	
3.	The person responsible for day-to-day activities of the EMS agency reports to:  □ Public Health Officer  ☑ Health Services Agency Director/ Administrator  □ Board of Directors  □ Other:	
4.	Indicate the non-required functions which are performed by the agency:  ☑ Implementation of exclusive operating areas (ambulance franchising)  ☑ Designation of trauma centers/trauma care system planning  ☑ Designation/approval of pediatric facilities  ☑ Designation of other critical care centers  ☐ Development of transfer agreements  ☐ Enforcement of local ambulance ordinance  ☑ Enforcement of ambulance service contracts  ☐ Operation of ambulance service  ☑ Continuing education	



	☑ Operation of oversight of EMS dispatch center		
	☑ Non-medical disaster planning		
	☐ Administration of critical incident stress debriefing team (CISD)		
	□ Administration of disaster medical assistance team (DMAT)		
	☑ Administration of EMS Fund [Senate Bill (SB) 12/612]		
	□ Other:		
	□ Other:		
	□ Other:		
j.	EXPENSES		
	Salaries and benefits (All but contract personnel)	\$	<u>1,617,160</u>
	Contract Services (e.g., medical director)		<u>5,490,973</u>
	postage, facilities)		231,056
	Travel	\$	11,288
	Fixed assets	\$	<u>36,627</u>
	Indirect expenses (overhead) Ambulance subsidy	\$ \$	<u>151,681</u> <u>0</u>
	EMS Fund payments to physicians/hospital	\$	<u>o</u> 997,414
	Dispatch center operations (non-staff)	Ψ	<u>0</u>
	Training program operations		<u>0</u>
	Other: Fees to EMSA (EMT and paramedic)	\$	<u>20,864</u>
	TOTAL EXPENSES	\$	<u>8,582,063</u>
<b>.</b>	SOURCES OF REVENUE		
	Special project grant(s) [from EMSA]	\$	<u>0</u>
	Preventive Health and Health Services (PHHS) Block Grant	\$	<u>0</u>
	Office of Traffic Safety (OTS)	\$	<u>0</u>
	State general fund (Maddy, Richie)	\$	997,414
	County general fund	\$	<u>0</u>
	Other local tax funds (Measure K)	\$	80,736
	County contracts (e.g., multi-county agencies)	\$	1,035,365.54
	Certification fees	\$	41,209



Training program approval fees	\$ <u>0</u>
Training program tuition/Average daily attendance funds (ADA)	\$ <u>0</u>
Job Training Partnership ACT (JTPA) funds/other payments	\$ <u>0</u>
Base hospital application fees	\$ <u>0</u>
Trauma center application fees	\$ <u>0</u>
Trauma center designation fees	\$ <u>75,000</u>
Pediatric facility approval fees	\$ <u>0</u>
Pediatric facility designation fees	\$ <u>0</u>
Other critical care center application fees	\$ <u>0</u>
STEMI facility designation fees	\$ 125,000
Stroke receiving center designation fees	\$ <u>165,000</u>
Thrombectomy Capable Stroke Center application fee	\$
Ambulance service/vehicle fees	\$ <u>0</u>
Contributions	\$ <u>0</u>
EMS Fund (SB 12/612)	\$ 365,982
Other: AMR pass-through for ALS Fire Service First Response	\$ <u>5,296,231</u>
Other: AMR pass-through for FirstWatch services	\$ <u>47,126</u>
Other: Medi-Cal admin activities (MAA)	\$ 200,000
Other: Inter-department transfers (Health Admin Support: Staffing)	\$ <u>153,000</u>
TOTAL REVENUE	\$ <u>8,582,063</u>

TOTAL REVENUE SHOULD EQUAL TOTAL EXPENSES.

IF THEY DON'T, PLEASE EXPLAIN.



# 7. <u>Fee structure</u>

 $\hfill \square$  We do not charge any fees

○ Our fee structure is:

First responder certification	\$ <u>N/A</u>
EMS dispatcher certification	\$ <u>N/A</u>
EMT-I certification	\$ <u>125</u>
EMT-I recertification	\$ <u>87</u>
EMT-defibrillation certification	\$ N/A
EMT-defibrillation recertification	\$ N/A
AEMT certification	\$ N/A
AEMT recertification	\$ N/A
EMT-P accreditation	\$ <u>50</u>
Mobile Intensive Care Nurse/Authorized Registered Nurse certification	\$ N/A
MICN/ARN recertification	\$ N/A
EMT-I training program approval	\$ <u>N/A</u>
AEMT training program approval	\$ N/A
EMT-P training program approval	\$ <u>N/A</u>
MICN/ARN training program approval	\$ N/A
Base hospital application	\$ N/A
Base hospital designation	\$ N/A
Trauma center application	\$ N/A
Trauma center designation (Adult)	\$ 50,000
Trauma center designation (Pediatric)	\$ <u>25,000</u>
Pediatric facility approval	\$ <u>N/A</u>
Pediatric facility designation	\$ N/A
Other critical care center application	
Type: <u>STEMI</u>	\$ N/A
Type: Thrombectomy Capable Stroke Center	\$ <u>7,500</u>
Other critical care center designation	
Type: <u>STEMI</u>	\$ <u>27,496</u>
Type: Primary Stroke Center	\$ <u>25,000</u>
Type: Thrombectomy Capable Stroke Center	\$ 35,000



Type: Comprehensive Stroke Center	\$ 40,000
Ambulance service licence	\$ <u>N/A</u>
Ambulance vehicle permits	\$ <u>N/A</u>
Other:	\$ <u>N/A</u>
Other:	\$ <u>N/A</u>
Other:	\$ N/A



# TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

Category	Actual Title	FTE Positions (EMS only)	Top Salary by hourly equivalent	Benefits (% of salary)	Comments
EMS Admin./Coord. /Director	EMS Director	1.0	\$103.58	40%	
Asst. Admin. or Admin. Asst. or Admin. Mgr.	Clinical Services Manager II	1.0	\$93.71	40%	
Asst. Admin. or Admin. Asst. or Admin. Mgr.	Health Services Manager I	1.0	\$70.01	40%	
ALS Coord. /Field Coord. /Training Coordinator	Clinical Nurse	1.0	\$86.30	40%	
Program Coordinator/Field Liaison (Non-clinical)	EMS Management Analyst	1.0	\$63.57	40%	
Trauma Coordinator	See Clinical Nurse above				
Medical Director	EMS Medical Director	0.33	\$200.00	0%	MD is a contractor (not an EMS Agency employee)
Other MD/Medical Consult/Training Medical Director					
Disaster Medical Planner	Health Emergency Preparedness Program Manager	1.0	\$73.59	40%	
Dispatch Supervisor					
Medical Planner					
Data Evaluator/Analyst					
QA/QI Coordinator	See Clinical Services Manager II above				
Public Info. & Education Coordinator	See Clinical Nurse				
Executive Secretary	See Management Analyst				

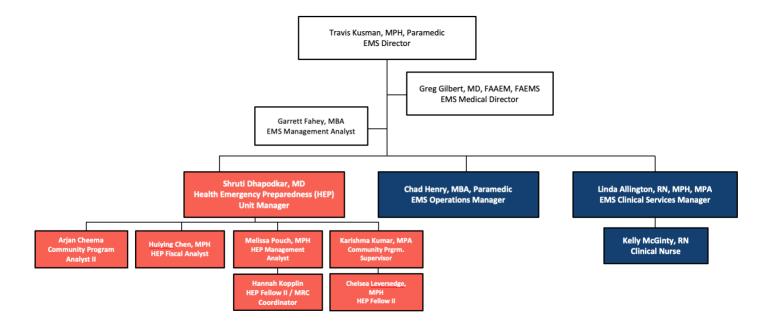


Other Clerical					
Data Entry Clerk					
Other	Community Program Supervisor	1.0	\$60.76	40%	
Other	Health Emergency Preparedness Management Analyst	1.0	\$63.57	40%	
Other	Health Emergency Preparedness Fiscal Analyst (Community Program Analyst II)	1.0	\$55.21	40%	
Other	Health Emergency Preparedness Analyst (Community Program Analyst II)	1.0	\$55.21	40%	
Other	Health Emergency Preparedness Intern/Fellow II/MRC Coordinator	1.0	\$25.34	40%	
Other	Health Emergency Preparedness Intern/Fellow II	1.0	\$25.34	40%	

Include an organizational chart of the local EMS agency and a county organization chart(s) indicating how the LEMSA fits within the county/multi-county structure.



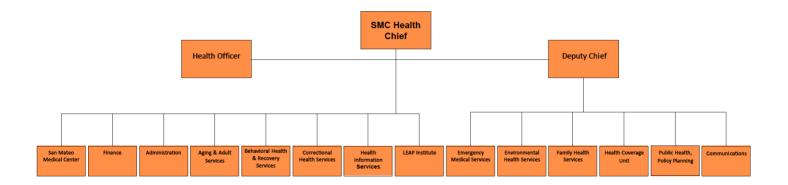
# San Mateo County EMS Agency



FY 2022-23



# San Mateo County Health



FY 2022-23



# TABLE 3: SYSTEM RESOURCES AND OPERATIONS - Personnel/Training

EMS System: San Mateo County

Reporting Year: 2022

**NOTE:** Table 3 is to be reported by agency.

	EMT - Is	EMT - IIs	EMT - Ps	MICN
Total Certified	374	N/A		N/A
Number newly certified this year	92	N/A		N/A
Number recertified this year	282	N/A		N/A
Total number of accredited personnel on July 1 of the reporting year			388	N/A
Number of certification reviews resul	ting in:			
a) formal investigations	5	N/A		N/A
b) probation	0	N/A	N/A	N/A
c) suspensions	0	N/A	N/A	N/A
d) revocations	2	N/A		N/A
e) denials	1	N/A		N/A
f) denials of renewal	0	N/A		N/A
g) surrenders	0	N/A	N/A	N/A
h) no action taken	1	N/A	N/A	N/A

1.	Number of EMS dispatch agencies utilizing EMD Guidelines:	1
2.	Early defibrillation: a) Number of EMT=I (defib) certified	N/A
	b) Number of public safety (defib) certified (non-EMT-I)	N/A
3.	Do you have a first responder training program	□ yes ⊠ no



# **TABLE 4: COMMUNICATIONS**

**Note:** Table 4 is to be answered for each county.

Count	ty:	San Mateo		
Repoi	rting Year:	2022		
1.	Number of	primary Public Servi	ce Answering Points (PSAP)	14
2.	Number of	secondary PSAPs		1
3.	Number of	dispatch centers dire	ectly dispatching ambulances	1
4.	Number of	EMS dispatch agend	cies utilizing EMD guidelines	1
5.	Number of	designated dispatch	centers for EMS Aircraft	1
6.	•	r primary dispatch a County Public Safet	gency for day-to-day emergencies?  y Communications	
7.	•	ır primary dispatch a County Public Safet	gency for a disaster?  y Communications	
8.	Do you hav	e an operational are	a disaster communication system?	⊠ Yes □ No
	a. Radio pr	rimary frequency	700MHz trunked	
	b. Other me	ethods	Microwave (21.8 – 22.4 GHz; 23.0 – 23.6 GHz); Fire VHF radio channels	
		medical response un nications system?	its communicate on the same disaster	⊠ Yes □ No
	d. Do you p (OASIS)	•	erational Area Satellite Information System	⊠ Yes □ No
	•	nave a plan to utilize s) as a back-up comr	the Radio Amateur Civil Emergency Services munication system?	⊠ Yes □ No
	1) With	in the operational are	ea?	⊠ Yes □ No
	2) Betwe	een operation area a	nd the region and/or state?	⊠ Yes □ No



#### **TABLE 5: RESPONSE/TRANSPORTATION**

Reporting Year: 2022

**Note:** Table 5 is to be reported by agency.

# **Early Defibrillation Providers**

1. Number of EMT-Defibrillation providers  $\underline{0}$ 

# SYSTEM STANDARD RESPONSE TIMES (90<sup>TH</sup> PERCENTILE)

Enter the response times in the appropriate boxes:

	METRO/URBAN	SUBURBAN/ RURAL	WILDERNESS	SYSTEMWIDE
BLS and CPR capable first responder	n/a	n/a	n/a	n/a
Early defibrillation responder	6:59 minutes	11:59 minutes	21:59 minutes	6:59 – 21:59 minutes
Advanced life support responder	6:59 minutes	11:59 minutes	21:59 minutes	6:59 – 21:59 minutes
Transport Ambulance	12:59 minutes	19:59 minutes	39:59 minutes	12:59 – 39:59 minutes



#### **TABLE 6: FACILITIES/CRITICAL CARE**

Reporting Year: CY 2022

**NOTE**: Table 6 is to be reported by agency.

#### **Trauma**

Trauma patients:  1. Number of patients meeting trauma triage criteria	<u>1,923</u>
<ol> <li>Number of major trauma victims transported directly to a trauma center by ambulance</li> </ol>	1,923

3. Number of major trauma patients transferred to a trauma center4. Number of patients meeting triage criteria who weren't treated

N/A – Non-trauma centers do not submit data to LEMSA

<u>19</u>

# **Emergency Departments**

at a trauma center

Total number of emergency departments  1. Number of referral emergency services	12 (include 6 out of county) 0
2. Number of standby emergency services	<u>1</u>
3. Number of basic emergency services	12 (includes 6 out of county)
4. Number of comprehensive emergency services	<u>0</u>

# **Receiving Hospitals**

Number of receiving hospitals with written agreements	<u>9</u>
2. Number of base hospitals with written agreements	<u>1</u>



# **TABLE 7: DISASTER MEDICAL**

Reporting	Year:	2022
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County: San Mateo

**NOTE:** Table 7 is to be answered for each county.

# **SYSTEM RESOURCES**

1.	. Casualty Collections Points (CCP)			
	a. Where are your CCPs located? CCPs are located adjacent to each hosp	oital. Alternate sites		
	designated as needed.			
	. How are they staffed? Staffed by hospital and volunteer healthcare personnel.			
	c. Do you have a supply system for supporting them for 72 hours?	☐ Yes ⊠ No		
2.	CISD			
	Do you have a CISD provider with 24-hour capability?			
3.	Medical Response Team			
0.	a. Do you have any team medical response capability?			
	b. For each team, are they incorporated into your local response plan?			
	c. Are they available for statewide response?	oxtimes Yes $oxtimes$ No		
	d. Are they part of a formal out-of-state response system?			
4.	Hazardous Materials			
	a. Do you have any HazMat trained medical response teams?	oxtimes Yes $oxtimes$ No		
	b. At what HazMat level are they trained? <u>First Responder, Technician,</u> and <u>Specialist depending on the fire agency.</u>			
	c. Do you have the ability to do decontamination in an emergency room?			
	d. Do you have the ability to do decontamination in the field?	⊠ Yes □ No		
OPERATIONS				
1.	Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure?	⊠ Yes □ No		
2.	What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster?	<u>20</u>		



3.	Have you tested your MCI Plan this year in a: a. real event? b. exercise?	
4.	List all counties with which you have a written medical mutual aid agreement All counties that have entered into the California Mutual Aid Region II and / o Cooperative Agreement for Emergency Medical and Health Disaster Assistant	r Statewide-
5.	Do you have formal agreements with hospitals in your operational area to participate in disaster planning and response?	⊠ Yes □ No
6.	Do you have a formal agreement(s) with community clinics in your operational areas to participate in disaster planning and response?	⊠ Yes □ No
7.	Are you part of a multi-county EMS system for disaster response?	⊠ Yes □ No
8.	Are you a separate department or agency?	□ Yes ⊠ No
9.	If not, to whom do you report? County Health System Deputy Chief	
8.	If your agency is not in the Health Department, do you have a plan to coordinate public health and environmental health issues with the Health Department?	N/A



**Table 8: Resource Directory** 

Reporting Year: 2022

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Mateo			Provider: American I	onse Zone:	All except City of South San Francisco			
Address: 1510 Rollins Road  Burlingame, California 94041			Number of A	Ambulance	e Vehicles in Fleet:	27		
Phone Number: (650) 235-1333			Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day:  20					
Written Co.	ntract:	Medical Director:	System Available 24	Hours:	<u> </u>	Level of Ser	vice:	
⊠ Yes □	] No	⊠ Yes □ No	⊠ Yes □ No		<ul><li>☑ Transport</li><li>☐ Non-Transport</li></ul>	<ul><li>⋈ ALS</li><li>⋈ BLS</li><li>□ LALS</li></ul>	<ul><li>⋈ 9-1-1</li><li>⋈ Ground</li><li>⋈ 7-Digit</li><li>□ Air</li><li>□ CCT</li><li>□ Water</li><li>□ IFT</li></ul>	
<u>Ownersl</u>	<u>hip:</u>	<u>lf Public:</u>	<u>If Public</u> :		<u>If Air:</u>		Air Classification:	
□ Publi ⊠ Priva		<ul><li>☐ Fire</li><li>☐ Law</li><li>☐ Other</li><li>Explain:</li></ul>	☐ City ☐ Cour ☐ State ☐ Distri ☐ Federal	-	☐ Rotary ☐ Fixed Wing		Auxiliary Rescue Air Ambulance ALS Rescue BLS Rescue	
43,735 Nu	ımber of er	of responses mergency responses on-emergency responses	Transporting A	gencies 38,654 2,886 35,768	Total number of transp Number of emergency Number of non-emerg	transports	orts	
0 Nu	ımber of er	of responses mergency responses on-emergency responses	Air Ambulance	<u>0</u> 0 0	Total number of transp Number of emergency Number of non-emerg	transports	orts	



**Table 8: Resource Directory** 

Reporting Year: 2022

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County:	San Mateo		Provider:	South San Franc Department	isco	Fire I	Respons	e Zone:	City of Francis		h San
Address:	-	Canal Street Francisco, California 94080	Number of Ambulance Vehicles in Fleet:						5		
Phone Number: (650) 829-3950				Average Number At 12:00 p.m. (no					3		
Written	Contract:	Medical Director:	System /	Available 24 Hou	rs:		Lev	el of Ser	vice:		
□ Yes	s ⊠ No	⊠ Yes □ No	⊠ Yes	□ No		⊠ Transport □ Non-Trans	sport D	ALS BLS LALS	<ul><li>⋈ 9-</li><li>□ 7-</li><li>□ C(</li><li>□ IF</li></ul>	Digit CT	<ul><li>☑ Ground</li><li>☐ Air</li><li>☐ Water</li></ul>
0		If Dublic	le le	Duklia.		If Aim.			Air Ole		
$\boxtimes$	ership: Public Private	If Public:  ☑ Fire ☐ Law ☐ Other Explain:	☐ City ☐ State ☐ Federa	Public:  County District		If Air: ☐ Rotary ☐ Fixed V	Ving		Air An	ary R nbula Rescu	escue ince ue
6,054 4,157 1,897	Number of er	r of responses mergency responses on-emergency responses	Trar	1 4,01 313 3,70	17	Total number of the Number of emerging Number of non-e	gency tra	nsports	orts		
0 0	Number of er	r of responses mergency responses on-emergency responses	<u>Air A</u>	Ambulance Service  0 0 0 0	<u>ces</u>	Total number of the Number of emerging Number of non-e	gency tra mergenc	nsports			



**Table 8: Resource Directory** 

Reporting	Year:	2022
i topoi in ig		

#### Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

			•	•			
County:	San Mateo		Provider:	San Mateo County Pr Emergency Medical S (Fire JPA)		onse Zone:	All of county except City of South San Francisco
Address:	1510 Rollir	ns Road		n/a			
	Burlingame	e, California 94041					
Phone Number:	(650) 235-	1255		Average Number of Ai At 12:00 p.m. (noon) o			n/a
Written	Contract:	Medical Director:	System /	Available 24 Hours:	L	evel of Serv	rice:
⊠ Yes	s □ No	⊠ Yes □ No	⊠ Yes	□ No	□ Transport ⊠ Non-Transport	<ul><li>□ ALS</li><li>□ BLS</li><li>□ LALS</li></ul>	<ul><li>⋈ 9-1-1</li><li>⋈ Ground</li><li>⋈ 7-Digit</li><li>⋈ Air</li><li>⋈ CCT</li><li>⋈ Water</li><li>⋈ IFT</li></ul>
<u>Owr</u>	ership:	<u>If Public:</u>	<u>If</u>	Public:	<u>lf Air:</u>		Air Classification:
	Public Private	<ul><li>☑ Fire</li><li>☐ Law</li><li>☐ Other</li><li>Explain:</li></ul>	<ul><li>⊠ City</li><li>□ State</li><li>□ Federa</li></ul>	<ul><li>⊠ County</li><li>⊠ District</li></ul>	□ Rotary □ Fixed Wing		Auxiliary Rescue Air Ambulance ALS Rescue BLS Rescue
51,791		r of responses	Trar	nsporting Agencies	Total number of transpo		
38,428 13,363		mergency responses on-emergency responses		0	Number of emergency Number of non-emerge	•	rts



LIFORM	MEDICAL SERV	IUES					
TABLE 9:	FACILITIES						
-	San Mateo		facility to a second of Market				
Note: Complete information for each facility by county. Make confidence of the confi						992-4000	
Written Contract: Ser			ervice:		Base Hospital:	Burn Center:	
		Referral Emergency Basic Emergency		Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No	
Pediatric Critical Care Center <sup>1</sup> EDAP <sup>2</sup> PICU <sup>3</sup>		□ Yes ⊠ No ⊠ Yes □ No □ Yes ⊠ No		<u>Trauma Center:</u> ☐ Yes ☒ No	If Trauma Cent  ☐ Level I	er what level:	
						☐ Level III	☐ Level IV
	TEMI Center:		Stroke Center:				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



MEDICAL SERVICES								
on for each facility by county. Make of anente Medical Center - South co nino Real francisco, California 94080	Telephone Number:	(650) 742-2200						
<u>Se</u>	rvice:	Base Hospital:	Burn Center:					
<ul><li>□ Referral Emergency</li><li>⋈ Basic Emergency</li></ul>	<ul><li>☐ Standby Emergency</li><li>☐ Comprehensive Emer</li></ul>	☐ Yes ☒ No	☐ Yes ⊠ No					
			•					
Center¹ ☐ Yes ☒ No ☒ Yes ☐ No ☐ Yes ☒ No	Trauma Center  ☐ Yes ☒ No	<u>If Trauma Cent</u> ☐ Level I ☐ Level III	ter what level:   Level II  Level IV					
	on for each facility by county. Make of anente Medical Center - South conino Real francisco, California 94080  Se  □ Referral Emergency □ Basic Emergency □ Yes □ No □ Yes □ No	n for each facility by county. Make copies as needed.  anente Medical Center - South  co nino Real francisco, California 94080  Service:  Referral Emergency Basic Emergency Basic Emergency Standby Emergency Comprehensive Emer	on for each facility by county. Make copies as needed.  anente Medical Center - South co nino Real rancisco, California 94080  Service:  □ Referral Emergency □ Standby Emergency □ Hassic Emergency □ Comprehensive Emergency □ Yes ☑ No □ Yes ☑ No □ Yes ☑ No □ Level I					

**STEMI Center:** 

☐ Yes ☒ No

**Stroke Center:** 

 $\boxtimes$  Yes  $\square$  No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WIEDICA	AL SERVICES	3				
TABLE 9: FACILI	TIES					
County: San Mate	90					
Note: Complete info	ormation for each	h facility by county. Make c	opies	as needed.		
Facility: Mills-P	eninsula Medic	cal Center	Т	elephone Number: (650)	695-5400	
Address: 1501 T	rousdale Drive	,	_			
Burling	ame, California	a 94010	= =			
					-	
Written Contra	<u>ct:</u>	<u>Ser</u>	vice:		Base Hospital:	Burn Center:
	,   <sub> </sub>	Referral Emergency		Standby Emergency	☐ Yes ⊠ No	☐ Yes ☒ No
		Basic Emergency		Comprehensive Emergency		
		,		, 5		
<b>Pediatric Critical</b>	Care Center <sup>1</sup>	□ Yes ⋈ No		Trauma Center:	If Trauma Cente	er what level:
EDAP <sup>2</sup>						
PICU <sup>3</sup>		☐ Yes ⋈ No		☐ Yes ☒ No	□ Level I	□ Level II
					☐ Level III	☐ Level IV
				_		
STEMI C	enter:	Stroke Center:				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES		

TABLE 9: FACILITIES								
County: San Mateo	County: San Mateo							
lote: Complete information for each facility by county. Make copies as needed.								
Facility: San Mateo Medical Center  Address: 222 West 39 <sup>th</sup> Street  San Mateo, California 94403				Telephone Number: <u>(650) </u>	573-2222			
Written Contract:		<u>Ser</u>	vice	<u> </u>	Base Hospital:	Burn Center:		
<ul><li>☑ Yes ☐ No</li><li>☐ Referral Emergency</li><li>☑ Basic Emergency</li></ul>			Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	☐ Yes ☒ No			
	•					ı		
Pediatric Critical Care EDAP <sup>2</sup>	Center <sup>1</sup>	□ Yes ⊠ No ⊠ Yes □ No		Trauma Center:	If Trauma Center what level:			
PICU <sup>3</sup>		□ Yes □ No		□ Yes ⊠ No	□ Level III	☐ Level II ☐ Level IV		
STEMI Center:		Stroke Center:						
☐ Yes ⊠ No		☐ Yes ☒ No						

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



PICU<sup>3</sup>

ΓABLE 9: FACILITIES								
County: San Mateo								
Note: Complete information	n for each facility by county. Make copies	as needed.						
Facility: Sequoia Hos 170 Alameda Redwood City	-	Telephone Number: <u>(650)</u>	367-5561					
Written Contract:	Service:		Base Hospital:	Burn Center:				
⊠ Yes □ No	9	Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No				
Pediatric Critical Care	Center¹ ☐ Yes ☒ No ☒ Yes ☐ No	Trauma Center:	If Trauma Cent	er what level:				

☐ Yes ⊠ No

STEMI Center:	Stroke Center:
	⊠ Yes □ No

☐ Yes ☒ No

☐ Level II

☐ Level IV

☐ Level I

☐ Level III

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



CALIFORNIA	MEDICAL SE	RVICES						
TABLE 9:	FACILITIES							
County: S	San Mateo							
Note: Com	plete informatio	n for each	facility by county. Make o	copies	s as needed.			
Facility: Kaiser Permanente Medical Center - Redwood City				Telephone Number: (	(650) 74	2-2200		
Address:	ess: 1200 El Camino Real							
South San Francisco, California 94080								
						1		<u> </u>
<u>Written</u>	Contract:		Se	rvice:			Base Hospital:	Burn Center:
		eferral Emergency asic Emergency	<ul><li>☐ Standby Emergency</li><li>☐ Comprehensive Emerger</li></ul>		ency	□ Yes ⊠ No	□ Yes ⊠ No	
Pediatric EDAP <sup>2</sup>	Critical Care	Center <sup>1</sup>	□ Yes ⊠ No ⊠ Yes □ No		Trauma Center:		If Trauma Cente	er what level:
PICU <sup>3</sup>			☐ Yes ⊠ No		☐ Yes ☒ No		☐ Level I	☐ Level II
							☐ Level III	☐ Level IV
		T				•		
<u>S</u>	TEMI Center:		Stroke Center:					
[	⊠ Yes □ No							

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WIEDICAL SERVICES										
TABLE 9: FACILITIES										
County: San Mateo										
Note: Complete information	on for each facility by county. Make copies	s as needed.								
Facility: Stanford Hos	spital*	Telephone Number: (650)	723-4000							
Address: 300 Pasteur	Drive									
Stanford, Ca	Stanford, California 94305  *Santa Clara County hospital that serves as an authorized receiving facility, Base Hospital, pediatric Base Hospital, PCCC, and trauma center (designated by San Mateo County LEMSA)									
Written Contract:	Service	<u>:</u>	Base Hospital:	Burn Center:						
⊠ Yes □ No	<ul><li>□ Referral Emergency</li><li>□ Basic Emergency</li><li>□</li></ul>	Standby Emergency Comprehensive Emergency	⊠ Yes □ No	☐ Yes ⊠ No						
Pediatric Critical Care EDAP <sup>2</sup>	Center¹ ⊠ Yes □ No ⊠ Yes □ No	<u>Trauma Center:</u>	If Trauma Cent	er what level:						
PICU <sup>3</sup>	⊠ Yes □ No	⊠ Yes □ No	□ Level III	☐ Level II ☐ Level IV						

**STEMI Center: Stroke Center:**  $\boxtimes$  Yes  $\square$  No  $\boxtimes$  Yes  $\square$  No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



Facility: Seton - Coastside Address: 600 Marine Boulevard

TABLE 9: FACILITIES	
County: San Mateo	
Note: Complete information for each facility by county. Make copies as needed.	

Telephone Number: (650) 723-3921

Moss Beach,	, California 94038					
Written Contract:		Service:		Base Hospital:	Burn Center:	
		•	andby Emergency omprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No	
Pediatric Critical Care EDAP <sup>2</sup>	Center¹ ☐ Yes ⊠ ☐ Yes ⊠	_	Trauma Center:	If Trauma Cent	er what level:	
PICU <sup>3</sup>	□ Yes ⊠		☐ Yes ☒ No	☐ Level I	☐ Level II	

<b>STEMI Center:</b>	Stroke Center:
□ Yes ⊠ No	□ Yes ⊠ No

☐ Level IV

☐ Level III

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards

<sup>&</sup>lt;sup>3</sup> Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES						
County: San Mateo						
Note: Complete informatio	n for each facility	by county. Make	copies	as needed.		
Facility: Palo Alto VA Address: 3801 Mirand	a Avenue		_ _ _	Telephone Number: (650) 4	93-5000	
Palo Alto, Ca	llifornia 94304			*Santa Clara County facility tha receiving hospital	t serves San Mateo C	County as a
Written Contract:		<u>Se</u>	ervice	<u>:</u>	Base Hospital:	Burn Center:
□ Yes ⊠ No		ll Emergency Emergency		Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No
Pediatric Critical Care EDAP <sup>2</sup> PICU <sup>3</sup>	Center <sup>1</sup>	<ul><li>☐ Yes ⋈ No</li><li>☐ Yes ⋈ No</li><li>☐ Yes ⋈ No</li></ul>		Trauma Center:  ☐ Yes ☒ No	If Trauma Cent  ☐ Level I ☐ Level III	er what level:   Level II  Level IV
STEMI Center:		Stroke Center:				
☐ Yes ☒ No		□ Yes ⊠ No				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



ALIFORNI	MEDICAL SE	INVIOL								
TABLE 9: FACILITIES										
County: S		n for each	facility by county. Make	copies a	as needed.					
Facility: Address:	Dominican H 1555 Soquel Santa Cruz, 0	Drive	95065	- - - *(	elephone Number: Santa Cruz County fa eceiving hospital	(831) 40	62-7700 serves San Mateo Co	ounty as a		
					cerving nospital			T		
<u>Written</u>	Contract:		<u>Se</u>	rvice:			Base Hospital:	Burn Center:		
□ Ye	es ⊠ No		Referral Emergency Basic Emergency		Standby Emergency Comprehensive Eme	rgency	□ Yes ⊠ No	□ Yes ⊠ No		
	1					,				
Pediatric EDAP <sup>2</sup> PICU <sup>3</sup>	Critical Care	Center <sup>1</sup>	☐ Yes ☒ No ☒ Yes ☐ No ☐ Yes ☒ No		Trauma Center  ☐ Yes ☒ No	<u>r:</u>	If Trauma Center  ☐ Level I	er what level:		
			L 163 M 140		= :55 = :10		☐ Level III	□ Level IV		
<u>s</u>	STEMI Center: Stroke Center:									

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES									
County: San Mateo									
Note: Complete information	on for each fac	cility by county. Make	copies a	as needed.					
Facility: University of Medical Cen		an Francisco	T	elephone Number: _(415)	353-1611				
Address: 1975 4 <sup>th</sup> Stre		a 94158							
San Francisco, California 94158  *San Francisco County facility that serves San Mateo County as a designated PCCC only									
Written Contract:		<u>s</u>	ervice:		Base Hospital:	Burn Center:			
Written Contract:  ☐ Yes ☒ No		erral Emergency		Standby Emergency	Base Hospital:  ☐ Yes ☒ No	Burn Center:  ☐ Yes ☒ No			
		_		Standby Emergency Comprehensive Emergency					
		erral Emergency							
□ Yes ⋈ No  Pediatric Critical Care	⊠ Bas	erral Emergency sic Emergency ⊠ Yes □ No				☐ Yes ⊠ No			
☐ Yes ⊠ No	⊠ Bas	erral Emergency sic Emergency		Comprehensive Emergency	□ Yes ⊠ No	☐ Yes ⊠ No			
□ Yes ⋈ No  Pediatric Critical Care EDAP²	⊠ Bas	erral Emergency sic Emergency		Comprehensive Emergency  Trauma Center:	☐ Yes ☒ No	☐ Yes ⊠ No			
□ Yes ⋈ No  Pediatric Critical Care EDAP²	⊠ Bas	erral Emergency sic Emergency		Comprehensive Emergency  Trauma Center:	☐ Yes ☒ No  If Trauma Cente	□ Yes ⋈ No er what level: □ Level II			

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES										
County: San Mateo										
Note: Complete information	on for each	facility by county. Make	copies	as needed.						
Facility: California Pa	acific Med	ical Center – Davies	T	Геlephone Number: (415)	600-6464					
Address: Castro and I			_ _							
San Francisco, California 94114  *San Francisco County facility that serves San Mateo County as a designated PCCC only										
Written Contract:		Se	rvice:		Base Hospital:	Burn Center:				
☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency		• •		Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No				
	1									
Pediatric Critical Care EDAP <sup>2</sup>	Center <sup>1</sup>	⊠ Yes □ No ⊠ Yes □ No		<u>Trauma Center:</u>	If Trauma Cent	er what level:				
PICU <sup>3</sup>				☐ Yes ⊠ No	☐ Level III	☐ Level II ☐ Level IV				
STEMI Center:	1	Stroke Center:								

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WIEDICAL SERVICES										
TABLE 9: FACILITIES										
County: San Mateo										
Note: Complete information	n for each	n facility by county. Make co	opies	as needed.						
Address: 1001 Portrer	Facility: Zuckerberg San Francisco General Hospital* Telephone Number: (628) 206-8000  Address: 1001 Portrero Avenue									
San Francisc	San Francisco, California 94110  *San Francisco County facility that serves San Mateo County as a trauma center designated by San Francisco LEMSA									
Written Contract:		Ser	vice:		Base Hospital:	Burn Center:				
⊠ Yes □ No		Referral Emergency Basic Emergency		Standby Emergency Comprehensive Emergency	⊠ Yes □ No	□ Yes ⊠ No				
				T						
Pediatric Critical Care Center <sup>1</sup> ☐ Yes ☒ No ☐ Yes ☒ No ☐ Yes ☒ No				<u>Trauma Center:</u>	If Trauma Cente	er what level:				
PICU <sup>3</sup>		□ Yes ⊠ No		⊠ Yes □ No	□ Level III	<ul><li>□ Level II</li><li>□ Level IV</li></ul>				
STEMI Center:	STEMI Center: Stroke Center:									

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



LIFORM								
TABLE 9:	FACILITIES							
County: S		n for each	facility by county. Make o	copies	s as needed.			
Facility: Address:	St. Francis H 900 Hyde Str San Francisc	eet	rnia 94109	<del>-</del> -	Telephone Number: _(4 *San Francisco County faburn center only	(415) 35 facility th		o County as a
Written	Contract:		Se	rvice	<u>:</u>		Base Hospital:	Burn Center:
☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency			Standby Emergency Comprehensive Emerge	ency	□ Yes ⊠ No	⊠ Yes □ No		
	1							1
EDAP <sup>2</sup>	Critical Care	Center <sup>1</sup>	☐ Yes ☒ No ☐ Yes ☒ No		Trauma Center:  ☐ Yes ☒ No		If Trauma Center  ☐ Level I	er what level:
PICU <sup>3</sup> ☐ Yes ☒ No					_ 103 \( \text{NO} \)		☐ Level III	☐ Level IV
<u>s</u>	STEMI Center: Stroke Center:							

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



LIFORN										
TABLE 9: FACILITIES										
County: San Mateo										
Note: Complete information	on for each facility by county. Make	copies	as needed.							
	Valley Medical Center*	T	elephone Number:	(408) 885-3228						
	ascom Avenue alifornia 95128	_								
			Santa Clara County fac enter only	cility that serves San Mateo C	ounty as a burn					
Written Contract:	<u>S</u>	ervice:		Base Hospital:	Burn Center:					
□ Yes ⊠ No	<ul><li>□ Referral Emergency</li><li>⋈ Basic Emergency</li></ul>		Standby Emergency Comprehensive Emerg	□ Yes ⊠ No gency	⊠ Yes □ No					
			ı							
Pediatric Critical Care EDAP <sup>2</sup>	Center¹ ☐ Yes ☒ No ☐ Yes ☒ No		Trauma Center:	If Trauma Cente	er what level:					
PICU <sup>3</sup>	☐ Yes ⊠ No		□ Yes ⊠ No	☐ Level II	☐ Level II ☐ Level IV					
STEMI Center:	STEMI Center: Stroke Center:									

☐ Yes ⊠ No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



#### **TABLE 10: APPROVED TRAINING PROGRAMS**

County: San Mateo Reporting Year: 2022

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Ins Address:	stitution:	1700 V	e of San Mat West Hillsdald lateo, Califor	e Bouleva	-	Telephone Number:	(650) 574-6347
Student Eligibility*:	Open to g	jeneral	Cost of Prog		**Program Level <u>EMT-I</u>		
			Basic:	\$977	<ul> <li>Number of students completing training per year</li> <li>Initial training</li> </ul>	: 34	
			Refresher:	\$154	miliai training	J <del>4</del>	
					Refresher:	0	
					Continuing Education:	n/a	
					Expiration Date:	6/30/202	23
					Number of courses:		
					Initial training:	2	
					Refresher:	1	
					Continuing Education:	n/a	

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



Training Institution: Address:	3300 (	e College College Drive runo, Califorr		6	Telephone Number:	(650) 738-4284
Student Open to gublic public	general	Cost of Prog Basic: Refresher:	\$476 \$80	**Program Level EMT-I  Number of students completing training per year:     Initial training  Refresher:     Continuing Education:     Expiration Date:  Number of courses:     Initial training:     Refresher:     Continuing Education:	39 0 0 9/30/2025 3 0 0	

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



Training Institution: Address:	South San 480 North South San	Canal Str	eet		Telephone Number:	(650) 877-8664
Student Open to go Eligibility*: public	eneral Co	ost of Progr	am:	**Program Level <u>EMT-I</u>		
	Ba	asic:	\$1,650	Number of students completing training per year Initial training	:	
	Re	efresher:	\$500	3	0	
				Refresher:	0	
				Continuing Education:	Not reported	
				Expiration Date:	6/30/2023	
				Number of courses:		
				Initial training:	_1-2 year	
				Refresher:	10 per year	
				Continuing Education:	Varies	
***************************************						

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



#### **TABLE 11: DISPATCH AGENCY**

County: San Mateo Reporting Year: 2022

**NOTE:** Make copies to add pages as needed. Complete information for each provider by county.

Name:	San Mateo Cou	nty Public Safety Comm	unications	3	Primary	Contact:	Elise Mod Manager	eck, EMS D	ispatch
Address:	501 Winslow Str	eet			-		Ü		
	Redwood City, 0	California 94063			-				
Telephone Number:	(650) 363-4900				<del>-</del>				
Written Contract:	Medical Director:	☑ Day-to-Day	Number	of Pe	rsonnel Pr	oviding	Services:		
⊠ Yes □ No		□ Disaster	<u>30</u> 0	EMD BLS	Training	<u>0</u> 0	EMT-D LALS	<u>0</u> n/a	ALS Other
Ownership:		If Public:							
□ Private		⊠ Fire	If Public	: 🗆 (	City 🗵 C	ounty [	□ State □	Fire Distri	ct □ Federal
		⊠ Law							
		□ Other							
		Explain:							

# STEMI Data – Calendar Year 2022

STEMI Receiving Centers	EMS	Walk-in	Transfer In	Total
Seton	21	14	50	86
Mills-Peninsula	49	27	13	89
Sequoia	8	11	0	19
Kaiser Redwood City	11	9	0	20
Stanford	8	1	0	9
Total	97	62	63	222
STEMI Referral Hospitals	EMS	Walk-in	Transfer In	Total
Kaiser South San Fran.	14	36	0	50
San Mateo Medical Center	0	13	0	13
Total	14	49	0	63

# Stroke Data – Calendar Year 2022

Stroke Hospitals	EMS	Walk-in	Transfer In	MSU	Total
Seton	78	40	0	0	118
Kaiser South San Fran.	43	53	12	0	108
Mills-Peninsula	184	94	103	19	400
Sequoia	27	38	0	0	65
Kaiser Redwood City	78	63	349	0	490
Stanford	143	134	260	0	537
Total	553	422	724	19	1718

## Data Collection-Calendar Year 2022

Stanford received 1,484 patients from San Mateo County during this twelve-month period. Based on data provided by Stanford, this number represents over 40% of all trauma patients that the hospital received via 911 system-initiated transports and the largest number of patients that Stanford received from any County.

During the same time period, 439 trauma patients were transported by the SMC EMS system to ZSFG, representing approximately 14% of all trauma patients that the hospital received via 911 system-initiated transport. Burn patients are stratified separately with an n=2.

Stanford	Zuckerberg (ZSFG)	Total
Total n from SMC = 1,484	Total n from SMC =439	1,923
Blunt trauma = 1,411 (95%)	Blunt trauma = 403 (91.7%)	
Penetrating trauma = (5%)	Penetrating trauma = 34 (8.4%)	

## **Activation Levels**

Major Trauma activations of all trauma patients:

Stanford: 133 or 9%ZSFG:95 or 22%

## **Admission Rates**

Of the 1,484 trauma patients originating in San Mateo County, transported from SMC to Stanford, 68% were admitted. Additionally, Stanford has an observation unit, of which 4% patients were admitted to. ZSFG admitted 69% of the trauma patients originating from San Mateo County.

## Mechanism of Injury

The top three mechanisms of injuries for trauma patients treated at Stanford consisted of falls at 47%, motor vehicle crashes at 23%, and bicycle crashes at 7%. The top three mechanisms of injury were consistent with the injury data we saw in 2021 for this facility.

ZSFG is located within the urban area of San Francisco. At this facility, falls surpassed motor vehicle injury this year at 33%, followed by motor vehicle injury 27%, and pedestrian-related injuries at 13%.

2020

# EMS SYSTEM PLAN UPDATE



San Mateo County EMS Agency

801 Gateway Boulevard, Second Floor South San Francisco, California 94080

September 2021



#### San Mateo County 2020 EMS Plan Executive Summary

Despite an unprecedented response to the COVID-19 pandemic, the San Mateo County EMS system remained stable and continues to make progress toward achieving several of our systems' long-term goals. The EMS Agency continues to experience successful collaborations with key system partners including our ALS Fire First Responder Agencies, contracted ALS ambulance provider, American Medical Response (AMR) and South San Francisco Fire Department, and our receiving and specialty care centers, several of which are located within other EMS agency jurisdictions.

#### Accomplishments Since Our Last Report

- Establishment of an Alternative Care Site ("ACS") in Burlingame that cared for more than 200 minimally to moderately ill COVID+ patients, helping to free up critical hospital beds for acute patients in our local hospitals.
- Establishment of 10 surge ICU beds made available to the Bay Area region for COVID+ patients.
- Coordinated through the MHOAC, local hospitals took in multiple patients from other regions across the state in response the COVID-19 pandemic response and decompression efforts in Southern California.
- Implementation of a new computer aided dispatch system for law, fire and EMS by San Mateo County Public Safety Communications.
- Recognition by the American Heart Association as a recipient of the Mission: Lifeline system
  performance award at the Silver Plus level, the first such recognition for the San Mateo County
  STEMI system.
- Implementation of an online licensing portal built by ImageTrend to handle all EMT certification/ recertification, paramedic accreditation/ reaccreditation, and Continuing Education provider applications.
- San Mateo County STEMI system of care received the American Heart Association Mission: Lifeline Gold award, the first time our system has been recognized at this performance level.
- EMS Agency continues management of the Health System Emergency Preparedness Program merging the HPP and PHEP programs under the EMS Division in San Mateo County.
- Completed and implemented new and updated EMS system policies.
- Participated in National Cardiac Arrest to Enhance Survival (CARES) registry system.
- Continue to utilize a high-performance cardiopulmonary resuscitation (CPR) response protocol with the goal of continued improvement in overall survival of cardiac arrest.
- Continue to expand healthcare participation using ReddiNet® as our emergency communication system and expanded the system to all skilled nursing facilities within San Mateo County.
- Expanded the use of ReddiNet® during the COVID-19 pandemic to reach all congregate care
  facilities, including conducting on-site facility assessment for infection control practices and
  supply integrity and sustainability.
- Provided mutual aid resources, including RDMHC services, to the Northern California wildfires.
- Successfully completed the development of the SAFR Health Information Exchange system, a
  grant project funded by the California Department of Health Care Services as part of a Center for



- Medicare/Medicaid Services 90/10 funding and CARESTAR Foundation matching funds for the +EMS Health Information Exchange.
- Participated in quarterly county-wide death review committee with the goal of identifying preventable deaths. The review committee led by the County Health Leadership team has representatives of San Mateo Older Adults Program, Public Health, Family Health, Behavioral Health and Recovery Services, Correctional Health and EMS.

#### Disaster Medical Response

- 1. The EMS Agency continued development of the San Mateo County Operational Area Medical Health Emergency Operations Plan (EOP), which provides general guidance for preparation, response, and recovery to all-hazard events which pose risk to the healthcare system and/or result in illness or injury amongst the population within San Mateo County.
- 2. The San Mateo County Public Health Officer and the San Mateo County EMS Agency Administrator, at the direction of the Chief of San Mateo County Health have appointed the EMS Administrator to serve as the Medical Health Operational Area Coordinator (MHOAC). The EMS Agency maintains an on-call EMS Duty Officer 24-hours a day to serve as the MHOAC's designee after hours or when the MHOAC is unavailable.
- 3. The San Mateo County Healthcare Coalition (HCC) was established in 1999 to coordinate strategic planning activities amongst healthcare facilities of various healthcare delivery sectors, public health agencies, other government entities, and community partners to prepare for, respond to, and recover from emergencies and other incidents that impact the public's health. The HCC meets regularly and was active during the Public Safety Power Shutoff events of 2019 that affected the majority of the Bay Area and the COVID-19 pandemic response.

San Mateo County's HCC membership was comprised of:

- 8 Acute care hospitals
- 3 Ambulatory surgical centers
- 15 Intermediate care facilities for individuals with intellectual disabilities
- 8 Dialysis centers
- EMS providers agencies serving within the 9-1-1 system
- 14 Home health agencies
- 1 Public health department
- 13 Programs of all-inclusive care for the elderly
- 10 Long-term care facilities
- 8 Hospice inpatient and outpatient facilities
- 4 Federally qualified healthcare facility

Public Information and Education



The EMS Agency continues its effort to provide community education and training. Highlights for the past year include:

- Hands-Only CPR training of hundreds of pubic participants across San Mateo County
- Stop the Bleed training of hundreds of public participants across San Mateo County
- Continue to host the Bay Area Paramedic Journal Club for EMS providers



Date: 2020 EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. <u>Please include a separate form for each exclusive</u> and/or nonexclusive ambulance zone.

**Local EMS Agency or County Name:** San Mateo County

**Area or Subarea (Zone) Name or Title:** San Mateo County, except the City of South San Francisco

Name of Current Provider(s): American Medical Response – West (AMR) Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

AMR has provided service under this name since January 1999. The company was the selected proposer per a Request for Proposal (RFP) competitive process conducted in 1997/98, 2007/2008, and again in 2018. This provider had been the contract holder since 1990 under the names of Baystar, Medtrans/ Laidlaw, and AMR. Therefore, AMR has provided uninterrupted emergency ambulance since January 1990.

**Area or Subarea (Zone) Geographic Description:** San Mateo County, except the City of South San Francisco

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):

Include intent of local EMS agency and Board action.

Competitive Process – Section 1797.224. Emergency ambulance service – all emergencies. Until 1989, exclusivity language contained in the plan was "advanced life support." Language in plan was amended to "emergency ambulance service" in 1989 with the approval of the EMS Authority. The San Mateo County Board of Supervisors approved both the RFP and the contract in 1998 and granted a five-year contract extension in 2003. Contract included emergency ambulance service and paramedic first response (fire service was a subcontractor to the contractor). A subsequent five-year contract was awarded through an RFP competitive process in 2008 and went into effect in July 2009, was extended in June 2014 and expired June 2019. Current contract was awarded through an RFP competitive process in 2018 and went into effect in July 2019. Current contract does not include paramedic first response. There is a separate contract with the San Mateo County Pre-Hospital Emergency Medical Services Group (JPA) for paramedic fire first response services that went into effect July 2019. The EMS Agency plans to conduct future ambulance RFPs at periodic intervals to ensure the most appropriate level of ambulance service is available to meet the needs of San Mateo County.

Type of Exclusivity ("Emergency Ambulance," "ALS," or "LALS" [HS 1797.85]):

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (e.g., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Type of Exclusivity = Emergency Ambulance. Levels of Exclusivity = Limited Ambulance Services.



Emergency Response: 1) 9-1-1 Emergency Response and 2) 7-Digit Emergency Response. ALS Ambulance.

#### Method to achieve exclusivity, if applicable (HS 1797.224):

If <u>grandfathered</u>, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If <u>competitively-determined</u>, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

Emergency ALS ambulance transport services competitive process was approved by and is on file with EMSA. The EMS Agency concluded an RFP competitive process for ALS emergency ambulance services and negotiated a new contract prior to the expiration of the June 2019 contract. The current contract began July 1, 2019.



Local EMS Agency or County Name: San Mateo County

Area or Subarea (Zone) Name or Title: City of South San Francisco

Name of Current Provider(s): City of South San Francisco Fire Department Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or Subarea (Zone) Geographic Description: City of South San Francisco

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):

Include intent of local EMS agency and Board action.

City of South San Francisco qualifies for exclusivity within its jurisdiction.

#### Type of Exclusivity ("Emergency Ambulance," "ALS," or "LALS" [HS 1797.85]):

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (e.g., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Emergency ambulance. Emergency Response = 911 Emergency Response, 7-Digit Emergency Response. Transport Services = ALS Ambulance Services.

#### Method to achieve exclusivity, if applicable (HS 1797.224):

If <u>grandfathered</u>, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If <u>competitively-determined</u>, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

Non-Competitive (grandfathering). The EMS Agency believes South San Francisco Fire meets the criteria for "grandfathering" in Section 1797.224, and as such qualifies for exclusivity within its jurisdiction. On March 4, 1975, the San Mateo County Board of Supervisors approved Resolution No. 34702 authorizing an agreement with City of South San Francisco to establish a paramedic response and transport unit in cooperation with the County, and its effort to establish a comprehensive emergency medical system. Since that time South San Francisco Fire Department has provided continuous paramedic transport services within the County for the City of South San Francisco. This has been documented in EMS Plans, internal documents, and various media publications going back to 1974.



#### TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

#### A. SYSTEM ORGANIZATION AND MANAGEMENT

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short- range plan	Long- range plan	
Agen	cy Administration:						
1.01	LEMSA Structure		Х				
1.02	LEMSA Mission		Х				
1.03	Public Input		Х				
1.04	Medical Director		Х	Х			
Plann	ing Activities:						
1.05	System Plan		Х				
1.06	Annual Plan Update		Х				
1.07	Trauma Planning*		X	X			
1.08	ALS Planning*		Х				
1.09	Inventory of Resources		Х				
1.10	Special Populations		Х	X			
1.11	System Participants		Х				
Regul	latory Activities:						
1.12	Review & Monitoring		Х				
1.13	Coordination		X				
1.14	Policy & Procedures Manual		Х				
1.15	Compliance w/Policies		X				
Syste	m Finances:						
1.16 Mecha	Funding anism		X				
Medic	cal Direction:						
1.17	Medical Direction*		Х				
1.18	QA/QI		Х	Х			



#### TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

1.19	Policies, Procedures,	Х	Х	
	Protocols			



#### **TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES**

#### A. SYSTEM ORGANIZATION AND MANAGEMENT (continued)

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long- range plan		
1.20	DNR Policy		Х					
1.21	Determination of Death		Х					
1.22	Reporting of Abuse		Х					
1.23	Interfacility Transfer		Х					
Enhai	nced Level: Advanced	Life Support						
1.24	ALS Systems		Х	X				
1.25	On-Line Medical Direction		Х	Х				
Enhai	nced Level: Trauma Ca	re System:						
1.26	Trauma System Plan		X					
Enhai	Enhanced Level: Pediatric Emergency Medical and Critical Care System:							
1.27	Pediatric System Plan		X					
Enhai	nced Level: Exclusive	Operating Areas	:			_		
1.28	EOA Plan		X					



#### **B. STAFFING/TRAINING**

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Local	I EMS Agency:					
2.01	Assessment of Needs		Х			
2.02	Approval of Training		X			
2.03	Personnel		X			
Dispa	atchers:					
2.04	Dispatch Training		Х	Х		
First	Responders (non-trar	nsporting):				
2.05	First Responder Training		X	X		
2.06	Response		X			
2.07	Medical Control		X			
Trans	sporting Personnel:					
2.08	EMT-I Training		Х	Х		
Hosp	ital:					
2.09	CPR Training		Х			
2.10	Advanced Life Support		Х			
Enhanced Level: Advanced Life Support:						
2.11	Accreditation Process		Х			
2.12	Early Defibrillation		Х			
2.13	Base Hospital Personnel		X			



#### C. COMMUNICATIONS

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Comn	nunications Equip	oment:				
3.01	Communication Plan*		X	Х		
3.02	Radios		Χ	X		
3.03	Interfacility Transfer*		Х			
3.04 Cente	Dispatch r		X			
3.05	Hospitals		Χ	X		
3.06	MCI/Disasters		Х			
Public	c Access:					
3.07	9-1-1 Planning/ Coordination		Х	Х		
3.08	9-1-1 Public Education		X			
Resou	urce Management	t:				
3.09	Dispatch Triage		Х	Х		
3.10 Dispat	Integrated tch		Х	Х		



# D. RESPONSE/TRANSPORTATION

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:					
4.01 Service Area Boundaries*		X	X		
4.02 Monitoring		Х	X		
4.03 Classifying Medical Requests		Х			
4.04 Prescheduled Responses		Х			
4.05 Response Time*		Χ			
4.06 Staffing		Х			
4.07 First Responder Agencies		Х			
4.08 Medical & Rescue Aircraft*		Х			
4.09 Air Dispatch Center		Х			
4.10 Aircraft Availability*		Х			
4.11 Specialty Vehicles*		Х	Х		
4.12 Disaster Response		Х			
4.13 Intercounty Response*		Х			
4.14 Incident Command System		Х			
4.15 MCI Plans		Х			
Enhanced Level: Advance	ced Life Support				
4.16 ALS Staffing		X	X		
4.17 ALS Equipment		Х			
Enhanced Level: Ambul	ance Regulation				
4.18 Compliance		Х			
Enhanced Level: Exclus	ive Operating Pe	ermits:			



4.19	Transportation Plan	Х		
4.20	"Grandfathering"	X		
4.21	Compliance	Х		
4.22	Evaluation	Х		



#### E. FACILITIES/CRITICAL CARE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	rsal Level:					
5.01	Assessment of Capabilities		X	X		
5.02 Transf	Triage & fer Protocols*		Х			
5.03	Transfer Guidelines*		X			
5.04	Specialty Care Facilities*		Х			
5.05	Mass Casualty Management		Х	X		
5.06	Hospital Evacuation*		Х			
Enhar	nced Level: Adv	vanced Life Supp	oort:			
5.07	Base Hospital Designation*		X			
Enhar	nced Level: Tra	uma Care Syste	m:			
5.08 Syster	Trauma m Design		Х			
5.09	Public Input		Χ			
Enhar	nced Level: Ped	diatric Emergenc	y Medical and	Critical Care Sys	tem:	
5.10 Syster	Pediatric m Design		Х			
5.11	Emergency Departments		Х	Х		
5.12	Public Input		Х			
Enhar	nced Level: Oth	er Specialty Car	e Systems:			
5.13 Syster	Specialty m Design		Х			
5.14	Public Input		X			



#### F. DATA COLLECTION/SYSTEM EVALUATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	ersal Level:					
6.01	QA/QI Program		X	X		
6.02	Prehospital Records		Х			
6.03	Prehospital Care Audits		X			
6.04	Medical Dispatch		X			
6.05 Mana	Data gement System*		Х			
6.06	System Design Evaluation		X			
6.07	Provider Participation		X			
6.08	Reporting		Х			
Enha	nced Level: Advanc	ed Life Supp	ort:			
6.09	ALS Audit		Х	Х		
Enhanced Level: Trauma Care System:						
6.10	Trauma System Evaluation		Х			
6.11	Trauma Center Data		Х	X		



#### G. PUBLIC INFORMATION AND EDUCATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	ersal Level:					
7.01 Inform	Public nation Materials		Х	X		
7.02	Injury Control		Х	X		
7.03	Disaster Preparedness		Х	Х		
7.04	First Aid & CPR Training		X	X		



#### H. DISASTER MEDICAL RESPONSE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	rsal Level:					
8.01	Disaster Medical Planning*		X			
8.02	Response Plans		Χ	X		
8.03	HazMat Training		Х			
8.04 Comm	Incident nand System		Х	X		
8.05	Distribution of Casualties*		Х			
8.06 Asses	Needs sment		Х	Х		
8.07	Disaster Communications*		Х			
8.08	Inventory of Resources		Х	Х		
8.09	DMAT Teams		Χ	X		
8.10	Mutual Aid Agreements*		Х			
8.11 Desig	CCP nation*		X			
8.12	Establishment of CCPs		Х			
8.13	Disaster Medical Training		X	X		
8.14	Hospital Plans		Χ	X		
8.15	Interhospital Communications		X			
8.16 Agend	Prehospital cy Plans		X	X		
Enhai	nced Level: Advan	ced Life Support:				
8.17	ALS Policies		Х			
Enhai	nced Level: Specia	Ity Care Systems:				
8.18	Specialty Center Roles		Х			
Enhai	nced Level: Exclus	ive Operating Area	as/Ambulance	Regulations:		



Fxclusivity	- ' ' '		Х			
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#### **TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT**

Repo	orting Year: 2020	
<b>NOT</b> l agen	<b>E:</b> Number (1) below is to be completed for each county. The balance of Table 2 refers cy.	to each
1.	Percentage of population served by each level of care by county: (Identify for the maximum level of service offered; the total of a, b, and c should equal 10	00%.)
	County: San Mateo County	
	A. Basic Life Support (BLS) B. Limited Advanced Life Support (LALS) C. Advanced Life Support (ALS)	0% 0% 100%
2.	Type of agency:  ☐ Public Health Department  ☑ County Health Services Agency  ☐ Other (non-health) County Department  ☐ Joint Powers Agency  ☐ Private Non-Profit Entity  ☐ Other:	
3.	The person responsible for day-to-day activities of the EMS agency reports to:  ☐ Public Health Officer  ☐ Health Services Agency Director/Administrator  ☐ Board of Directors  ☐ Other:	
4.	Indicate the non-required functions which are performed by the agency:  ☑ Implementation of exclusive operating areas (ambulance franchising)  ☑ Designation of trauma centers/trauma care system planning  ☑ Designation/approval of pediatric facilities  ☑ Designation of other critical care centers  ☑ Development of transfer agreements  ☑ Enforcement of local ambulance ordinance  ☑ Enforcement of ambulance service contracts  ☑ Operation of ambulance service  ☑ Continuing education  ☑ Personnel training	



	Operation of oversight of EMS dispatch center		
	☑ Non-medical disaster planning		
	□ Administration of critical incident stress debriefing team (CISD)		
	□ Administration of disaster medical assistance team (DMAT)		
	☑ Administration of EMS Fund [Senate Bill (SB) 12/612]		
	□ Other:		
	Other:		
	□ Other:		
j.	<u>EXPENSES</u>		
	Salaries and benefits (All but contract personnel)	\$	1,448,752
	Contract Services (e.g., medical director)	\$	4,977,907
	Operations (e.g., copying, postage, facilities)	\$	<u>138,048</u>
	Travel		<u>12,550</u>
	Fixed assets	\$	0
	Indirect expenses (overhead)		113,342
	Ambulance subsidy EMS Fund payments to physicians/hospital	\$ \$	<u>0</u> 1,146,012
	Dispatch center operations (non-staff)	Ψ	0
	Training program operations		<u>0</u>
	Other: Fees to EMSA (EMT and paramedic)	\$	<u>19,408</u>
	TOTAL EXPENSES	\$	<u>7,856,019</u>
<b>).</b>	SOURCES OF REVENUE		
	Special project grant(s) [from EMSA]	\$	<u>0</u>
	Preventive Health and Health Services (PHHS) Block Grant	\$	<u>0</u>
	Office of Traffic Safety (OTS)	\$	<u>0</u>
	State general fund (Maddy, Richie)	\$	<u>1,146,012</u>
	County general fund	\$	<u>0</u>
	Other local tax funds (e.g., EMS district)	\$	79,423
	County contracts (e.g., multi-county agencies)	\$	<u>941,130</u>
	Certification fees	\$	28.020



Training progra	am approval fees	\$	<u>0</u>
Training progra	am tuition/Average daily attendance funds (ADA)	\$	<u>0</u>
Job Training Pa	\$	<u>0</u>	
Base hospital application fees			
Trauma center	application fees	\$	<u>0</u>
Trauma center	designation fees	\$	<u>75,000</u>
Pediatric facility	y approval fees	\$	<u>0</u>
Pediatric facility	y designation fees	\$	<u>0</u>
Other critical ca	\$	<u>0</u>	
STEMI facility	\$	<u>125,000</u>	
Stroke receivin	\$	<u>150,000</u>	
Thrombectomy	Capable Stroke Center application fee	\$	
Ambulance ser	vice/vehicle fees	\$	<u>0</u>
Contributions		\$	<u>0</u>
EMS Fund (SB	12/612)	\$	<u>276,518</u>
Other fees:	AMR pass-through to JPA	\$	<u>4,815,508</u>
Other fees:	Medi-Cal admin activities (MAA)	\$	200,000
Other fees:	EMSA portion of certification fees	\$	<u>19,408</u>
TOTAL REVE	NUE	\$	<u>7,856,019</u>

TOTAL REVENUE SHOULD EQUAL TOTAL EXPENSES.

IF THEY DON'T, PLEASE EXPLAIN.



# 7. <u>Fee structure</u>

 $\hfill \square$  We do not charge any fees

○ Our fee structure is:

First responder certification	\$	<u>N/A</u>
EMS dispatcher certification	\$	<u>N/A</u>
EMT-I certification	\$	<u>125</u>
EMT-I recertification	\$	<u>87</u>
EMT-defibrillation certification	\$	N/A
EMT-defibrillation recertification	\$	<u>N/A</u>
AEMT certification	\$	<u>N/A</u>
AEMT recertification	\$	N/A
EMT-P accreditation	\$	<u>50</u>
Mobile Intensive Care Nurse/Authorized Registered Nurse certification	\$	N/A
MICN/ARN recertification	\$	N/A
EMT-I training program approval	\$	<u>N/A</u>
AEMT training program approval	\$	N/A
EMT-P training program approval	\$	<u>N/A</u>
MICN/ARN training program approval	\$	N/A
Base hospital application	\$	<u>N/A</u>
Base hospital designation	\$	N/A
Trauma center application	\$	N/A
Trauma center designation	\$	<u>75,000</u>
Pediatric facility approval	\$	N/A
Pediatric facility designation	\$	N/A
Other critical care center application		
Type: <u>STEMI</u>	\$	N/A
Type: Thrombectomy Capable Stroke Center	\$	<u>7,500</u>
Other critical care center designation		
Type: <u>STEMI</u>	\$	<u>25,000</u>
Type: Primary Stroke Center	\$	<u>25,000</u>
Type: Thrombectomy Capable Stroke Center	\$	<u>35,000</u>
Type: Comprehensive Stroke Center	\$	<u>40,000</u>
San Mateo County FMS P	lan	I Indate -



Ambulance service licence	\$ <u>N/A</u>
Ambulance vehicle permits	\$ <u>N/A</u>
Other:	\$ <u>N/A</u>
Other:	\$ <u>N/A</u>
Other:	\$ N/A



# TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

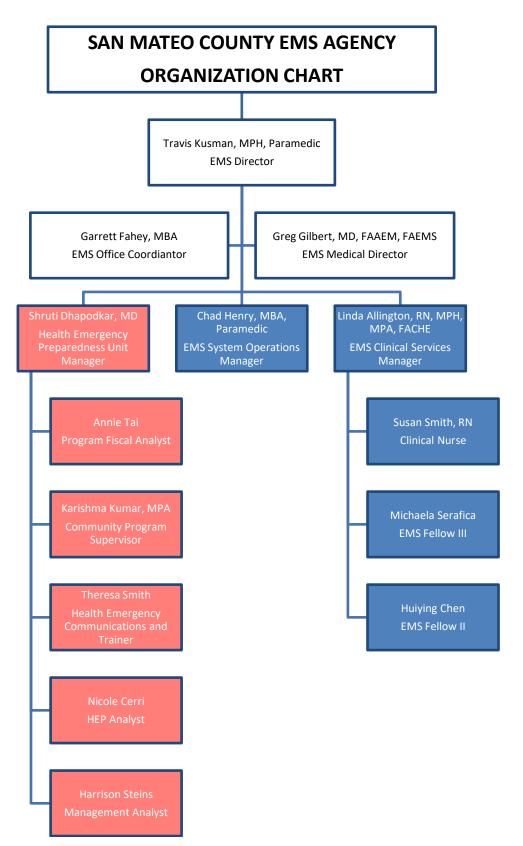
Category	Actual Title	FTE Positions (EMS only)	Top Salary by hourly equivalent	Benefits (% of salary)	Comments
EMS Admin./Coord. /Director	EMS Director	1.0	\$97.63	40%	
Asst. Admin. or Admin. Asst. or Admin. Mgr.	Clinical Services Manager II	1.0	\$92.98	40%	
Asst. Admin. or Admin. Asst. or Admin. Mgr.	Health Services Manager I	1.0	\$66.08	40%	
ALS Coord. /Field Coord. /Training Coordinator	Clinical Nurse	1.0	\$77.23	40%	
Program Coordinator/Field Liaison (Non-clinical)	Management Analyst	1.0	\$59.92	40%	
Trauma Coordinator	See Clinical Nurse above				
Medical Director	EMS Medical Director	0.33	\$200.00	0%	MD is a contractor (not an EMS Agency employee)
Other MD/Medical Consult/Training Medical Director					
Disaster Medical Planner	Health Emergency Preparedness Program Manager	1.0	\$69.37	40%	
Dispatch Supervisor					
Medical Planner					
Data Evaluator/Analyst					
QA/QI Coordinator	See Clinical Services Manager II above				
Public Info. & Education Coordinator	See Clinical Nurse				
Executive Secretary	Administrative Assistant II	1.0	\$42.45	40%	



Other Clerical					
Data Entry Clerk					
Other	Community Program Supervisor	1.0	\$57.27	40%	
Other	Community Program Analyst II	1.0	\$52.04	40%	
Other	Community Program Specialist II/Health Emergency Communications and Trainer	1.0	\$44.35	40%	
Other	Health Emergency Preparedness Intern/Fellow III/Health Emergency Preparedness Analyst	1.0	\$33.62	40%	
Other	Health Emergency Preparedness Intern/Fellow III	1.0	\$33.62	40%	
Other	Health Emergency Preparedness Intern/Fellow II	1.0	\$23.11	40%	

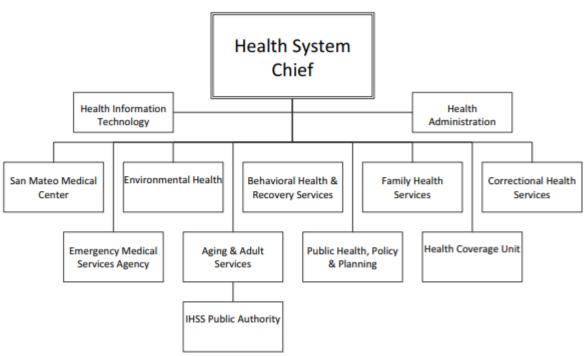
Include an organizational chart of the local EMS agency and a county organization chart(s) indicating how the LEMSA fits within the county/multi-county structure.







# San Mateo Health System



FY 2019-20



# TABLE 3: SYSTEM RESOURCES AND OPERATIONS - Personnel/Training

EMS System: San Mateo County

Reporting Year: 2020

**NOTE:** Table 3 is to be reported by agency.

	EMT - Is	EMT - IIs	EMT - Ps	MICN
Total Certified	392	N/A		N/A
Number newly certified this year	103	N/A		N/A
Number recertified this year	289	N/A		N/A
Total number of accredited personnel on July 1 of the reporting year			560	N/A
Number of certification reviews resul	ting in:			
a) formal investigations	37	N/A		N/A
b) probation	5	N/A	N/A	N/A
c) suspensions	0	N/A	N/A	N/A
d) revocations	3	N/A		N/A
e) denials	0	N/A		N/A
f) denials of renewal	2	N/A		N/A
g) surrenders	4	N/A	N/A	N/A
h) no action taken	23	N/A	N/A	N/A

1.	Number of EMS dispatch agencies utilizing EMD Guidelines:	<u>1</u>
2.	Early defibrillation: a) Number of EMT=I (defib) certified	N/A
	b) Number of public safety (defib) certified (non-EMT-I)	N/A
3.	Do you have a first responder training program	□ yes ⊠ no



#### **TABLE 4: COMMUNICATIONS**

**Note:** Table 4 is to be answered for each county.

County:	San Mateo		
Reporting Yea	r: 2020		
1. Number	of primary Public Ser	rvice Answering Points (PSAP)	14
2. Number	Number of secondary PSAPs		1
3. Number	of dispatch centers d	lirectly dispatching ambulances	1
4. Number	of EMS dispatch age	encies utilizing EMD guidelines	1
5. Number	of designated dispate	ch centers for EMS Aircraft	1
•	our primary dispatch eo County Public Saf	agency for day-to-day emergencies? fety Communications	
	your primary dispatch eo County Public Saf	agency for a disaster?  fety Communications	
8. Do you	nave an operational a	rea disaster communication system?	
a. Radio	primary frequency	700MHz trunked	
b. Othe	methods	Microwave (21.8 – 22.4 GHz; 23.0 – 23.6 GHz); Fire VHF radio channels	i
	all medical response on the second of the se	units communicate on the same disaster	
d. Do yo (OAS	•	Operational Area Satellite Information System	⊠ Yes □ No
•	•	ze the Radio Amateur Civil Emergency Services mmunication system?	⊠ Yes □ No
1) V	ithin the operational	area?	⊠ Yes □ No
2) Be	tween operation area	a and the region and/or state?	⊠ Yes □ No



#### **TABLE 5: RESPONSE/TRANSPORTATION**

Reporting Year: 2020

**Note:** Table 5 is to be reported by agency.

# **Early Defibrillation Providers**

1. Number of EMT-Defibrillation providers  $\underline{0}$ 

# SYSTEM STANDARD RESPONSE TIMES (90<sup>TH</sup> PERCENTILE)

Enter the response times in the appropriate boxes:

	METRO/URBAN	SUBURBAN/ RURAL	WILDERNESS	SYSTEMWIDE
BLS and CPR capable first responder	n/a	n/a	n/a	n/a
Early defibrillation responder	6:59 minutes	11:59 minutes	21:59 minutes	6:59 – 21:59 minutes
Advanced life support responder	6:59 minutes	11:59 minutes	21:59 minutes	6:59 – 21:59 minutes
Transport Ambulance	12:59 minutes	19:59 minutes	39:59 minutes	12:59 – 39:59 minutes



#### **TABLE 6: FACILITIES/CRITICAL CARE**

Reporting Year: CY 2020

**NOTE**: Table 6 is to be reported by agency.

#### **Trauma**

Trauma patients:

	Number of patients meeting trauma triage criteria  Number of major trauma victims transported directly to a trauma	<u>1,726</u>
	center by ambulance	<u>1,603</u>
3.	Number of major trauma patients transferred to a trauma center	<u>123</u>
1	Number of nationts meeting triage criteria who weren't treated	

4. Number of patients meeting triage criteria who weren't treated at a trauma center

N/A – Non-trauma centers do not submit data to

LEMSA

#### **Emergency Departments**

Total number of emergency departments	11 (including 4 out of county)
Number of referral emergency services	0
2. Number of standby emergency services	<u>1</u>
3. Number of basic emergency services	10 (includes 4 out of county)
4. Number of comprehensive emergency services	<u>0</u>

#### **Receiving Hospitals**

1. Number of receiving hospitals with written agreements	<u>7</u>
2. Number of base hospitals with written agreements	<u>1</u>



#### **TABLE 7: DISASTER MEDICAL**

Reporting	Year:	2020
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County: San Mateo

**NOTE:** Table 7 is to be answered for each county.

#### **SYSTEM RESOURCES**

1.	Casualty Collections Points (CCP)	
	a. Where are your CCPs located? CCPs are located adjacent to each hosp	oital. Alternate sites
	designated as needed.	
	b. How are they staffed? Staffed by hospital and volunteer healthcare pers	sonnel.
	c. Do you have a supply system for supporting them for 72 hours?	☐ Yes ⊠ No
2.	CISD	
	Do you have a CISD provider with 24-hour capability?	$oxtimes$ Yes $\Box$ No
2	Medical Despense Teem	
3.	Medical Response Team  a. Do you have any team medical response capability?	⊠ Yes □ No
	b. For each team, are they incorporated into your local response plan?	⊠ Yes □ No
	c. Are they available for statewide response?	
	d. Are they part of a formal out-of-state response system?	
4.	Hazardous Materials	
	a. Do you have any HazMat trained medical response teams?	
	b. At what HazMat level are they trained? First Responder, Technician,	
	and Specialist depending on the fire agency.	
	c. Do you have the ability to do decontamination in an emergency room?	
	d. Do you have the ability to do decontamination in the field?	
ΟP	ERATIONS	
1.	Are you using a Standardized Emergency Management System (SEMS)	
	that incorporates a form of Incident Command System (ICS) structure?	
2.	What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster?	20
	interact with in a disaster!	<u>20</u>



3.	Have you tested your MCI Plan this year in a:	
	a. real event?	⊠ Yes □ No
	b. exercise?	$oxtimes$ Yes $\Box$ No
4.	List all counties with which you have a written medical mutual aid agreement	
	All counties that have entered into the California Mutual Aid Region II - Assis	tance Cooperative
	Agreement for Emergency Medical and Health Disaster Assistance agreement	<u>nt</u>
5.	Do you have formal agreements with hospitals in your operational area	
	to participate in disaster planning and response?	oxtimes Yes $oxtimes$ No
6.	Do you have a formal agreement(s) with community clinics in your	
	operational areas to participate in disaster planning and response?	⊠ Yes □ No
7.	Are you part of a multi-county EMS system for disaster response?	⊠ Yes □ No
-		
8.	Are you a separate department or agency?	$\square$ Yes $\boxtimes$ No
9.	If not, to whom do you report? Health System Chief	
٥.	Thou, to whom do you report: <u>Hould' Oystem Onier</u>	
8.	If your agency is not in the Health Department, do you have a plan to	
	coordinate public health and environmental health issues with the Health	NI/A
	Department?	N/A



**Table 8: Resource Directory** 

Reporting Year: 2020

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Mateo						All except City of South San Francisco	
	510 Rollin urlingame	s Road , California 94041	Number of A	Ambulance	e Vehicles in Fleet:		31
Phone Number: (6	50) 235-1	333			mbulances on Duty on Any Given Day:		19
Written Con	tract:	Medical Director:	System Available 24	Hours:	]	Level of Ser	vice:
⊠ Yes □	No	⊠ Yes □ No	⊠ Yes □ No		<ul><li>☑ Transport</li><li>☐ Non-Transport</li></ul>	<ul><li>⋈ ALS</li><li>⋈ BLS</li><li>□ LALS</li></ul>	<ul><li>⋈ 9-1-1</li><li>⋈ Ground</li><li>⋈ 7-Digit</li><li>□ Air</li><li>□ CCT</li><li>□ Water</li><li>□ IFT</li></ul>
	_						
<u>Ownersh</u>	ip:	If Public:	<u>If Public</u> :		<u>If Air:</u>		Air Classification:
□ Public ⊠ Privat		<ul><li>☐ Fire</li><li>☐ Law</li><li>☐ Other</li><li>Explain:</li></ul>	☐ City ☐ Cour ☐ State ☐ Distri ☐ Federal	-	☐ Rotary ☐ Fixed Wing		Auxiliary Rescue Air Ambulance ALS Rescue BLS Rescue
42,161 Num	nber of en	of responses nergency responses on-emergency responses	Transporting A	gencies 30,837 2,432 28,405	Total number of transp Number of emergency Number of non-emerg	transports	orts
<ul> <li>Total number of responses</li> <li>Number of emergency responses</li> <li>Number of non-emergency responses</li> </ul>			<u>Air Ambulance</u>	<u>0</u> 0 0	Total number of transp Number of emergency Number of non-emerg	transports	orts



**Table 8: Resource Directory** 

Reporting Year: 2020

#### Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County:	San Mateo		Provider:	South San Fra	ncisco	Fire Re	sponse	Zone:	City of So Francisco	
Address:	-	Canal Street Francisco, California 94080	Number of Ambulance Vehicles in Fleet:					3		
Phone Number:	(650) 829-3	3950				nbulances on Duty n Any Given Day:			2	
Written	Contract:	Medical Director:	System A	Available 24 Ho	ours:		Leve	l of Ser	vice:	
☐ Yes ☒ No ☒ Yes ☐ No		⊠ Yes	□ No		⊠ Transport □ Non-Transp	ort 🗵	ALS BLS LALS	<ul><li>⋈ 9-1-1</li><li>□ 7-Dig</li><li>□ CCT</li><li>□ IFT</li></ul>	⊠ Ground it □ Air □ Water	
Ownership: If Public:		<u>If</u>	Public:		If Air:			Air Classif	ication:	
	Public Private	☐ Law ☐ Other Explain:	☐ City ☐ State ☐ Federa	☐ County ☐ District		□ Rotary □ Fixed Wi	ng		Auxiliary Air Ambu ALS Res BLS Res	lance cue
5,219 4,617 602	Number of er	r of responses mergency responses on-emergency responses	<u>Trar</u>	1	ncies ,340 78 ,162	Total number of tra Number of emerge Number of non-em	ncy tran	sports	rts	
<ul> <li>Total number of responses</li> <li>Number of emergency responses</li> <li>Number of non-emergency responses</li> </ul>			<u>Air A</u>	mbulance Ser 0 0 0		Total number of transports  Number of emergency transports  Number of non-emergency transports				



**Table 8: Resource Directory** 

Reporting	Year:	2020

#### Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

		110101 74270 0 70 10 20 0		r odom provide	n by oour	ny. Wako oopioo ao	1100000	••		
County:	San Mateo		Provider: San Mateo County Pr Emergency Medical S (Fire JPA)							
Address:	1510 Rollin	s Road		lumber of An	nbulance	Vehicles in Fleet:			n/a	
	Burlingame	e, California 94041								
Phone Number:	(650) 235-	1255				nbulances on Duty n Any Given Day:	n/a			
Written	Contract:	Medical Director:	System /	Available 24 F	lours:		<u>Leve</u>	l of Serv	vice:	
⊠ Yes	□ No	⊠ Yes □ No	⊠ Yes	□ No		□ Transport ⊠ Non-Transpo	rt 🗆	ALS BLS LALS	<ul><li>⋈ 9-1-1</li><li>□ 7-Digit</li><li>□ CCT</li><li>□ IFT</li></ul>	<ul><li>☑ Ground</li><li>☐ Air</li><li>☐ Water</li></ul>
<u>Own</u>	ership:	<u>lf Public:</u>	<u>If</u>	Public:		<u>lf Air:</u>		,	Air Classific	ation:
	Public Private	<ul><li>☑ Fire</li><li>☐ Law</li><li>☐ Other</li><li>Explain:</li></ul>	<ul><li>⊠ City</li><li>□ State</li><li>□ Federa</li></ul>	<ul><li>⊠ County</li><li>⊠ District</li></ul>		☐ Rotary ☐ Fixed Win	g		Auxiliary R Air Ambula ALS Rescu BLS Rescu	nce e
42,185 42,185 0	Number of er	of responses mergency responses on-emergency responses	Trar		encies 0 0 0	Total number of trar Number of emergen Number of non-eme	cy tran	•	rts	
0 0 0	Number of er	of responses mergency responses on-emergency responses	<u>Air A</u>	_	ervices 0 0 0	Total number of trar Number of emergen Number of non-eme	cy tran	•	rts	



FORN	MEDICAL SERV	IICE2					
TABLE 9:	FACILITIES						
-	San Mateo aplete information	n for each	facility by county. Make	copies a	as needed.		
Facility: Seton Hospital Address: 1900 Sullivan Avenue Daly City, California 94015					elephone Number: <u>(650) 9</u>	92-4000	
Written Contract: Ser			rvice:		Base Hospital:	Burn Center:	
		eferral Emergency asic Emergency		Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	☐ Yes ⊠ No	
Pediatric Critical Care Center¹ ☐ Yes ☒ No EDAP² ☒ Yes ☐ No PICU³ ☐ Yes ☒ No				Trauma Center:  ☐ Yes ☒ No	If Trauma Cent  ☐ Level I ☐ Level III	er what level:  Level II Level IV	
<u>s</u>	TEMI Center:		Stroke Center:				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WEI MEI	DICAL SERV	ICES					
TABLE 9: FA	ACILITIES						
County: Sar		n for each	facility by county. Make c	onies	s as needed		
Facility: K S Address: 1	Kaiser Perma San Francisc 200 El Cami	nente Me o ino Real	edical Center - South  California 94080	-		)) 742-2200	
Written Contract: Ser   ☑ Yes □ No □ Referral Emergency			vice	<u>:</u> Standby Emergency	Base Hospital:  ☐ Yes ☒ No	Burn Center:  ☐ Yes ☒ No	
		⊠ B	asic Emergency		Comprehensive Emergency	У	
Pediatric Critical Care Center¹ ☐ Yes ☒ No EDAP² ☒ Yes ☐ No		□ Yes ⊠ No ⊠ Yes □ No		Trauma Center:	If Trauma Cent	er what level:	
PICU <sup>3</sup>			☐ Yes ⊠ No		□ Yes ⊠ No	□ Level III	☐ Level II ☐ Level IV
STE	EMI Center:		Stroke Center:				
☐ Yes ☒ No ☒ Yes ☐ No							

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES											
County: San Mateo											
Note: Complete information for each facility by county. Make of	Note: Complete information for each facility by county. Make copies as needed.										
Facility:       Mills-Peninsula Medical Center       Telephone Number:       (650) 695-5400         Address:       1501 Trousdale Drive											
Burlingame, California 94010	- -										
			T								
Written Contract: Ser	vice:	Base Hospital:	Burn Center:								
	☐ Standby Emergency	☐ Yes ☒ No	☐ Yes ☒ No								
	□ Comprehensive Emergency										

	Critical Care Center <sup>1</sup>	☐ Yes ⋈ No	Trauma Center:	If Trauma Cent	er what level:
EDAP <sup>2</sup> PICU <sup>3</sup>			□ Yes ⊠ No	☐ Level III	□ Level II □ Level IV
_			$\neg$		

STEMI Center:	Stroke Center:
⊠ Yes □ No	⊠ Yes □ No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9:	FACILITIES					
County: S	San Mateo					
Note: Com	plete informatio	n for each facility by county. N	Make copies as needed.			
Facility: Address:	222 West 39	ledical Center  h Street California 94403	Telephone Number:	(650) 57	73-2222	
Written	Contract:		Service:		Base Hospital:	Burn Center:

Pediatric Critical Care Center <sup>1</sup> EDAP <sup>2</sup> PICU <sup>3</sup>	☐ Yes ☒ No ☒ Yes ☐ No ☐ Yes ☒ No	Trauma Center:  ☐ Yes ☒ No	If Trauma Cente  ☐ Level I ☐ Level III	er what level:   Level II  Level IV

Standby Emergency

☐ Comprehensive Emergency

<b>STEMI Center:</b>	Stroke Center:
□ Yes ⋈ No	□ Yes ⊠ No

Referral Emergency

**Basic Emergency** 

☐ Yes ☒ No

☐ Yes ☒ No

<sup>&</sup>lt;sup>1</sup> Meets EMSA Pediatric Critical Care Center (PCCC) Standards

<sup>&</sup>lt;sup>2</sup> Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards

<sup>&</sup>lt;sup>3</sup> Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES				
County: San Mateo				
Note: Complete information	n for each facility by county. Make co	ppies as needed.		
	pital a de las Pulgas y, California 94062	Telephone Number: <u>(650)</u>	367-5561	
Written Contract:	<u>Serv</u>	vice:	Base Hospital:	Burn Center:
⊠ Yes □ No	<ul><li>□ Referral Emergency</li><li>⋈ Basic Emergency</li></ul>	<ul><li>□ Standby Emergency</li><li>□ Comprehensive Emergency</li></ul>	□ Yes ⊠ No	□ Yes ⊠ No
			•	
Pediatric Critical Care EDAP <sup>2</sup> PICU <sup>3</sup>	Center¹ ☐ Yes ☒ No ☒ Yes ☐ No ☐ Yes ☒ No	Trauma Center:  ☐ Yes ☒ No	If Trauma Center  ☐ Level I ☐ Level III	er what level:  Level II Level IV

STEMI Center:	Stroke Center:
⊠ Yes □ No	⊠ Yes □ No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



CALIFORNIA	IEDICAL SE	RVICES						
TABLE 9:	FACILITIES							
County: S	an Mateo							
Note: Comp	olete informatio	n for each	facility by county. Make o	opies	as needed.			
Facility: Kaiser Permanente Medical Center - Redwood City  Address: 1200 El Camino Real			Telephone Number: (650) 7		(650) 7	42-2200		
Address:			California 94080	-				
Written	Contract:		<u>Ser</u>	vice	<u> </u>		Base Hospital:	Burn Center:
<ul><li>☑ Yes ☐ No</li><li>☐ Referral Emergency</li><li>☑ Basic Emergency</li></ul>		<ul><li>☐ Standby Emergency</li><li>☐ Comprehensive Emergency</li></ul>		rgency	□ Yes ⊠ No	□ Yes ⊠ No		
	,				T			
		□ Yes ⊠ No ⊠ Yes □ No		Trauma Center	<u>:</u>	If Trauma Cente	er what level:	
PICU <sup>3</sup>			☐ Yes ⊠ No		□ Yes ⊠ No		☐ Level II☐ Level III	□ Level II □ Level IV
<u>S</u> 7	ΓΕΜΙ Center:	_	Stroke Center:					
	☑ Yes □ No							

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TFORM							
TABLE 9: FACILITIES							
County: San Mateo							
Note: Complete information	on for each	facility by county. Make	copies	as needed.			
Facility: Stanford Hos	spital*		Т	elephone Number:	(650) 72	23-4000	
Address: 300 Pasteur				•			
Stanford, Ca	ilifornia 94	1305	<u> </u>				
			fa	Santa Clara County hacility, Base Hospital, enter (designated by	pediatric	Base Hospital, PCCC	•
Written Contract:		Se	ervice:			Base Hospital:	Burn Center:
Written Contract:  ⊠ Yes □ No		_	_	Standby Emergency		Base Hospital:	Burn Center:  ☐ Yes ☒ No
		Seferral Emergency Basic Emergency		Standby Emergency Comprehensive Emel	rgency		
		Referral Emergency			rgency		
		Referral Emergency			rgency		
	⊠ E	Referral Emergency					□ Yes ⊠ No
Yes □ No Pediatric Critical Care EDAP²	⊠ E	Referral Emergency Basic Emergency		Comprehensive Emer		⊠ Yes □ No	☐ Yes ☒ No er what level:
Yes □ No Pediatric Critical Care	⊠ E	Referral Emergency Basic Emergency		Comprehensive Emer		<ul><li>✓ Yes □ No</li><li>If Trauma Center</li><li>✓ Level I</li></ul>	□ Yes ⋈ No  er what level: □ Level II
Yes □ No Pediatric Critical Care EDAP²	⊠ E	Referral Emergency Basic Emergency		Comprehensive Emer		⊠ Yes □ No	☐ Yes ☒ No er what level:
Yes □ No Pediatric Critical Care EDAP²	⊠ E	Referral Emergency Basic Emergency		Comprehensive Emer		<ul><li>✓ Yes □ No</li><li>If Trauma Center</li><li>✓ Level I</li></ul>	□ Yes ⋈ No  er what level: □ Level II

 $\boxtimes$  Yes  $\square$  No

 $\boxtimes$  Yes  $\square$  No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES		
Occupies Con Mates		

☐ Yes ☒ No

County: S	San Mateo						
•	•		h facility by county. Make o	·		00.0004	
Facility: Address:	600 Marine B	n - Coastside Marine Boulevard s Beach, California 94038			Telephone Number: <u>(650) 7</u>	23-3921	
Written	Contract:		<u>Sei</u>	rvice	<u>:</u>	Base Hospital:	Burn Center:
<ul><li>☑ Yes ☐ No</li><li>☐ Referral Emergency</li><li>☐ Basic Emergency</li></ul>			Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No		
EDAP <sup>2</sup> ☐ Yes ☒ N		□ Yes ⊠ No □ Yes ⊠ No □ Yes ⊠ No		Trauma Center:  ☐ Yes ☒ No	If Trauma Cente  ☐ Level I	er what level:	
00						☐ Level III	☐ Level IV
<u>s</u>	TEMI Center:		Stroke Center:				

☐ Yes ☒ No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



VIEDICAL SE	RVICES				
TABLE 9: FACILITIES					
County: San Mateo					
Note: Complete information for each facility by county. Make copies as needed.  Facility: Palo Alto VA Hospital* Telephone Number: (650) 493-5000  Address: Palo Alto, California 94304  *Santa Clara County facility that serves San Mateo County as a					
Writton Contract			receiving hospital	Page Hoonital	Purn Contor
Written Contract:  ☐ Yes ☒ No	<ul><li>□ Referral Emergend</li><li>☑ Basic Emergend</li></ul>	-	Standby Emergency Comprehensive Emergency	Base Hospital:  ☐ Yes ☒ No	Burn Center:  ☐ Yes ☒ No
Pediatric Critical Care Center¹ ☐ Yes ☒ No EDAP² ☐ Yes ☒ No PICU³ ☐ Yes ☒ No			Trauma Center:  ☐ Yes ☒ No	If Trauma Center  ☐ Level I ☐ Level III	er what level:  □ Level II □ Level IV
STEMI Center:	Stroke	Center:			

☐ Yes ☒ No

☐ Yes ☒ No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



LIFORM							
TABLE 9:	FACILITIES						
County: S		n for each	facility by county. Make	conies :	as needed		
	Dominican Ho 1555 Soquel Santa Cruz, C	ospital* Drive		_ T _ *		62-7700 t serves San Mateo C	ounty as a
Written Contract: Se				Base Hospital: Burn Center			Burn Center:
☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency		• •		Standby Emergency Comprehensive Emergency	□ Yes ⊠ No		
Pediatric Critical Care Center¹       □ Yes ⋈ No         EDAP²       ⋈ Yes □ No         PICU³       □ Yes ⋈ No					Trauma Center:  ☐ Yes ☒ No	If Trauma Center what level:  □ Level II □ Level IV	
<u>s</u>	TEMI Center:		Stroke Center:				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



101					
TABLE 9: FACILITIES					
County: San Mateo					
Note: Complete information	on for each facility by cou	nty. Make copies	as needed.		
Facility: University of Medical Cen	California San Francis ter*	sco T	elephone Number: _(415);	353-1611	
Address: 1975 4 <sup>th</sup> Stre	eet co, California 94158				
San Flancis	co, Camorna 94136		San Francisco County facility designated PCCC only	that serves San Matec	County as a
Written Contract:				Base Hospital:	Burn Center:
□ Yes ⊠ No	□ Referral Emer ⊠ Basic Emerge	•	Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No
				ı	1
Pediatric Critical Care EDAP <sup>2</sup>		s □ No s □ No	Trauma Center:	If Trauma Cente	er what level:
PICU <sup>3</sup>		s □ No	□ Yes ⊠ No	□ Level II □ Level III	☐ Level II ☐ Level IV
STEMI Center:	Strok	e Center:	1		
<u> </u>	<u> </u>				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



100							
TABLE 9: FACILITIES							
County: San Mateo							
Note: Complete information	on for each facility by county. Make	e copies as needed.					
Facility: California Pa	acific Medical Center – Davies	Telephone Number: (415)	600-6464				
Address: Castro and Dan Francisco	Duboce Avenue co, California 94114						
*San Francisco County facility that serves San Mateo County as a designated PCCC only							
Written Contract:	<u>s</u>	Service:	Base Hospital:	Burn Center:			
□ Yes ⊠ No	<ul><li>□ Referral Emergency</li><li>⋈ Basic Emergency</li></ul>	<ul><li>☐ Standby Emergency</li><li>☐ Comprehensive Emergency</li></ul>	□ Yes ⊠ No	□ Yes ⊠ No			
Pediatric Critical Care		<u>Trauma Center:</u>	If Trauma Cent	er what level:			
Pediatric Critical Care EDAP <sup>2</sup> PICU <sup>3</sup>	Center¹	Trauma Center:  ☐ Yes ☒ No	If Trauma Center  ☐ Level I ☐ Level III	er what level:  Level II  Level IV			

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WIEDICAL SE	ERVICES						
TABLE 9: FACILITIES							
County: San Mateo							
Note: Complete information	on for each	facility by county. Make co	opies a	as needed.			
		cisco General Hospital*	Т	elephone Number:	(628) 2	206-8000	
Address: 1001 Portrer San Francisc							
<u> </u>	oo, Gamoi	THA 0 1110				that serves San Mated San Francisco LEMSA	County as a
Written Contract:		<u>Ser</u>	vice:			Base Hospital:	Burn Center:
⊠ Yes □ No	□ F	Referral Emergency		☐ Standby Emergency		⊠ Yes □ No	☐ Yes ⊠ No
	⊠ E	Basic Emergency		Comprehensive Eme	ergency		
Pediatric Critical Care	Center <sup>1</sup>	☐ Yes ⊠ No		Trauma Cente	<u>r:</u>	If Trauma Cente	er what level:
EDAP <sup>2</sup>		☐ Yes ☒ No		⊠ Yes □ No		⊠ Level I	□ Level II
PICU <sup>3</sup>		□ Yes ⊠ No		⊠ res □ no		□ Level III	☐ Level IV
				1			
STEMI Center:		Stroke Center:					

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



L/FORV				
TABLE 9: FACILITIES				
County: San Mateo  Note: Complete information	for each facility by county. Make copie	es as needed.		
Facility: St. Francis Ho 900 Hyde Stre San Francisco		*San Francisco County facility burn center only	53-6300 that serves San Mated	o County as a
Written Contract:	<u>Servic</u>	<u>e:</u>	Base Hospital:	Burn Center:
□ Yes ⊠ No	3	<ul><li>☐ Standby Emergency</li><li>☐ Comprehensive Emergency</li><li>☐ Yes ☒ No</li><li>☒ Yes ☐ I</li></ul>		
				1
Pediatric Critical Care C	Center¹ □ Yes ⊠ No □ Yes ⊠ No	Trauma Center:	If Trauma Cent	er what level:
PICU <sup>3</sup>	□ Yes ⊠ No	□ Yes ⊠ No	□ Level II □ Level III	☐ Level II ☐ Level IV
STEMI Center:	Stroke Center:			

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



CIFORI						
TABLE 9: FACILITIES						
County: San Mateo						
Note: Complete information  Facility: Santa Clara Address: 751 South B San Jose, Complete information	Valley Me ascom Av	edical Center* renue	_ T	elephone Number: (408) 8	385-3228 ot sonves San Mates C	County as a burn
				Santa Clara County facility the enter only	at serves Sari Mateo C	ounty as a bum
Written Contract:		<u>Sei</u>	rvice: <u>Base Hospital:</u> <u>Burn Center:</u>			
□ Yes ⊠ No		Referral Emergency Basic Emergency		Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	⊠ Yes □ No
	1					
Pediatric Critical Care EDAP <sup>2</sup>	Center <sup>1</sup>	<ul><li>☐ Yes</li><li>⊠ No</li><li>☐ Yes</li><li>☒ No</li></ul>		Trauma Center:	If Trauma Cente	er what level:
PICU <sup>3</sup>		☐ Yes ⊠ No		☐ Yes ⊠ No	□ Level II	☐ Level II ☐ Level IV
STEMI Center:		Stroke Center:				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



## **TABLE 10: APPROVED TRAINING PROGRAMS**

County: San Mateo Reporting Year: 2020

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: Address:	1700	le of San Mat West Hillsdal lateo, Califor	e Bouleva		Telephone Number:	(650) 574-6347
Student Open to Eligibility*: public	general	Cost of Prog Basic: Refresher:	982 \$982 \$139	**Program Level EMT-I  Number of students completing training per year Initial training  Refresher:     Continuing Education:     Expiration Date: Number of courses:     Initial training:     Refresher:     Continuing Education:	70 8 n/a 6/30/202 2 1 n/a	23

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



Training Ins Address:	stitution:	3300 (	e College College Drive runo, Califor		6	Telephone Number:	(650) 738-4284
Student Eligibility*:	Open to g	general	Cost of Prog Basic:	gram: \$720	**Program Level <u>EMT-I</u> Number of students completing training per year Initial training	;	
			Refresher:	\$50	Refresher: Continuing Education: Expiration Date: Number of courses: Initial training: Refresher: Continuing Education:	Not reported Not reported Not reported 9/30/2025  3 1 Varies	

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



Training Ins Address:	titution:	480 N	San Franciso orth Canal St San Franciso	reet		_ Telephone Number: - -	(650) 877-8664
Student Eligibility*:	Open to g	general	Cost of Prog	ram:	**Program Level <u>EMT-I</u>		
			Basic:	\$1,650	Number of students completing training per year Initial training	r:	
			Refresher:	\$500	miliai training	Not reported	
					Refresher:	Not reported	
					Continuing Education:	Not reported	
					Expiration Date:	6/30/2023	
					Number of courses:		
					Initial training:	1-2 year	
					Refresher:	10 per year	
					Continuing Education:	Varies	

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



## **TABLE 11: DISPATCH AGENCY**

County: San Mateo Reporting Year: 2020

**NOTE:** Make copies to add pages as needed. Complete information for each provider by county.

Name:	San Mateo Cour	nty Public Safety Comm	unications	i	Primary C	ontact:	Lisa Lucett, Manager	Fire/EMS	Dispatch
Address:	501 Winslow Str	eet					· ·		
	Redwood City, 0	California 94063							
Telephone Number:	(650) 363-4900								
Written Contract:	Medical Director:	□ Day-to-Day	Number	of Pe	rsonnel Pro	viding S	ervices:		
⊠ Yes □ No	⊠ Yes □ No	□ Disaster		EMD BLS	Training	<u>0</u> 0	EMT-D LALS	<u>0</u> n/a	ALS Other
Ownership:		If Public:	<u>~</u>			<u>~</u>		<u></u>	
⊠ Public □ Private		<ul><li>☑ Fire</li><li>☑ Law</li><li>☐ Other</li><li>Explain:</li></ul>	If Public:		City ⊠ Co	ounty 🗆	State □ F	ïre Distric	t □ Federal



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

January 30, 2023

Tom McGinnis, Paramedic EMS Systems Division Chief California EMS Authority

Via Electronic Mail

Mr. McGinnis,

Accessible via the box.com link provided, please find San Mateo County's 2022 EMS Plan Update. Given the COVID-19 related EMS Plans extension provided by EMSA, this update contains the following:

2020 EMS System Plan Update

2021 EMS System Plan Update

2021 EMSQIP Update

2021 STEMI Update

2021 Stroke Update

2021 Trauma Update

Since our most recent EMS System Plan Update, we have submitted STEMI, Stroke, Trauma and EMSQIP updates which have been approved by the Authority; therefore, this comprehensive 2022 EMS Plan Update submission contains specialty care and EMSQIP updates for only the most recent calendar year. Our 2023 EMS Plan Update will be submitted at the time that comprehensive data for calendar year 2022 is available.

I am at your service should the Authority have any associated questions or require additional information.

Respectfully,

Travis Kusman, MPH, Paramedic

Director

Cc: Angela Wise



2021

# EMS SYSTEM PLAN UPDATE



San Mateo County EMS Agency

801 Gateway Boulevard, Second Floor South San Francisco, California 94080

December 2022



#### San Mateo County 2021 EMS Plan Executive Summary

Despite the ongoing response to the COVID-19 pandemic and the return of EMS system call volume, the San Mateo County EMS system remained stable and continues to make progress toward achieving our systems' long-term goals. The EMS Agency continued to experience successful collaborations with key system partners including our ALS Fire First Responder Agencies, authorized ALS ambulance providers American Medical Response (AMR) and South San Francisco Fire Department, and our receiving and specialty care centers, several of which are located within neighboring EMS agency jurisdictions.

#### Accomplishments Since Our Last Report

- Established a Medical Reserve Corps, including a comprehensive training program for all members.
- The EMS Agency continues to lead the County's public health and medical emergency preparedness and response program, including HPP, PHEP and CRI programs
- Completed and implemented new and updated EMS system policies.
- Participated in National Cardiac Arrest to Enhance Survival (CARES) registry system.
- Continue to utilize a high-performance cardiopulmonary resuscitation (CPR) response protocol with the goal of continued improvement in overall survival of cardiac arrest.
- Continued to expand healthcare coalition participation using ReddiNet® as our emergency communication system.
- Continue to expand the use of ReddiNet®, our emergency communication system. Expanded
  the system to include medical health resource requesting and tracking and patient reunification
  functionality.
- Provided mutual aid resources, including RDMHC services within Region 2.
- Successfully implemented the SAFR Health Information Exchange system, a grant project funded via EMSA by the California Department of Health Care Services as part of a Center for Medicare/Medicaid Services 90/10 funding and CARESTAR Foundation matching funds for the +EMS Health Information Exchange.
- Participated in quarterly county-wide death review committee with the goal of identifying and
  reducing preventable deaths in the future. The review committee led by the County Health
  Leadership team has representatives of San Mateo Older Adults Program, Public Health, Family
  Health, Behavioral Health and Recovery Services, Correctional Health, and EMS.

#### **Emergency Medical Dispatch**

The San Mateo County EMS system utilizes San Mateo County Public Safety Communications ("PSC") as the single point of EMS communication and emergency medical dispatch ("EMD") for all fire department and ambulance responses countywide. PSC is a public safety agency and provides EMD services through utilization of the Medical Priority Dispatch System, approved by the San Mateo County EMS Agency, in compliance with Health and Safety Codes 1797.223 and 1798.8 and California Code of Regulations ("CCR") 100170.



Additionally, PSC dispatches EMS aircraft, who utilize countywide frequencies and standard hospital communication capabilities, in compliance with local EMS policies and procedures and CCR 100306.

#### Disaster Medical Response

- 1. The EMS Agency continued development of the San Mateo County Operational Area Medical Health Emergency Operations Plan (EOP), which provides general guidance for preparation, response, and recovery to all-hazard events which pose risk to the healthcare system and/or result in illness or injury amongst the population within San Mateo County.
- 2. EMS Director Travis Kusman, MPH, Paramedic continues to serve as the County's Medical Health Operational Area Coordinator (MHOAC). The EMS Agency maintains an on-call EMS Duty Officer 24-hours a day who also serves as the MHOAC's designee when the EMS Director is unavailable.
- 3. The San Mateo County Healthcare Coalition (HCC) was established in 1999 to coordinate strategic planning activities amongst healthcare facilities of various healthcare delivery sectors, public health agencies, other government entities, and community partners to prepare for, respond to, and recover from emergencies and other incidents that impact the public's health. The HCC meets regularly and was active during the Public Safety Power Shutoff events of 2019 that affected the majority of the Bay Area and the COVID-19 pandemic response.

San Mateo County's HCC membership was comprised of:

- 8 Acute care hospitals
- 3 Ambulatory surgical centers
- 15 Intermediate care facilities for individuals with intellectual disabilities
- 8 Dialysis centers
- All EMS providers agencies serving within the 9-1-1 system
- 14 Home health agencies
- 1 Public health department
- 13 Programs of all-inclusive care for the elderly
- 10 Long-term care facilities
- 8 Hospice inpatient and outpatient facilities
- 4 Federally qualified healthcare facility

#### Public Information and Education

The EMS Agency continues its effort to provide community education and training. Highlights for the past year include:

- Hands-Only CPR training of hundreds of members of the public across San Mateo County
- Stop the Bleed training of hundreds of members of the public across San Mateo County
- COVID-19 mass vaccination by EMTs and paramedics



Date: 2021 EMS PLAN
AMBULANCE ZONE SUMMARY FORM

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. <u>Please include a separate form for each exclusive</u> and/or nonexclusive ambulance zone.

Local EMS Agency or County Name: San Mateo County

**Area or Subarea (Zone) Name or Title:** San Mateo County, except the City of South San Francisco

Name of Current Provider(s): American Medical Response – West (AMR) Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

AMR has provided service under this name since January 1999. The company was the selected proposer per a Request for Proposal ("RFP") competitive process conducted in 1997/98, 2007/2008, and again in 2018. This provider had been the contract holder since 1990 under the names of Baystar, Medtrans/ Laidlaw, and AMR. Therefore, AMR has provided uninterrupted emergency ambulance since January 1990.

**Area or Subarea (Zone) Geographic Description:** San Mateo County, except the City of South San Francisco

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Include intent of local EMS agency and Board action.

Competitive Process – Section 1797.224. Emergency ambulance service – all emergencies. Until 1989, exclusivity language contained in the plan was "advanced life support." Language in the plan was amended to "emergency ambulance service" in 1989 with the approval of the EMS Authority. The San Mateo County Board of Supervisors approved both the RFP and the contract in 1998 and granted a five-year contract extension in 2003. Contract included emergency ambulance service and paramedic first response (fire service was a subcontractor to the contractor). A subsequent five-year contract was awarded through an RFP competitive process in 2008 and went into effect in July 2009, was extended in June 2014 and expired June 2019. Current contract was awarded through an RFP competitive process in 2018 and went into effect in July 2019. Current contract does not include paramedic first response. There is a separate contract with the San Mateo County Pre-Hospital Emergency Medical Services Group ("JPA") for paramedic fire first response services that went into effect July 2019. The EMS Agency plans to conduct future ambulance RFPs at periodic intervals to ensure the most appropriate level of ambulance service is available to meet the needs of San Mateo County.

# Type of Exclusivity ("Emergency Ambulance," "ALS," or "LALS" [HS 1797.85]):

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (e.g., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Type of Exclusivity = Emergency Ambulance. Levels of Exclusivity = Limited Ambulance Services.



Emergency Response: 1) 9-1-1 Emergency Response and 2) 7-Digit Emergency Response. ALS Ambulance.

#### Method to achieve exclusivity, if applicable (HS 1797.224):

If <u>grandfathered</u>, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If <u>competitively-determined</u>, method of competition, intervals, and selection process. Attach copy/ draft of last competitive process used to select provider or providers.

The emergency ALS ambulance transport services competitive process was approved by and is on file with EMSA. The EMS Agency concluded an RFP competitive process for ALS emergency ambulance services and negotiated a new contract prior to the expiration of the June 2019 contract. The current contract began July 1, 2019.



Local EMS Agency or County Name: San Mateo County

Area or Subarea (Zone) Name or Title: City of South San Francisco

Name of Current Provider(s): City of South San Francisco Fire Department Include company name(s) and length of operation (uninterrupted) in specified area or subarea.

Area or Subarea (Zone) Geographic Description: City of South San Francisco

Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6):

Include intent of local EMS agency and Board action.

The City of South San Francisco qualifies for exclusivity within its jurisdiction.

#### Type of Exclusivity ("Emergency Ambulance," "ALS," or "LALS" [HS 1797.85]):

Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (e.g., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).

Emergency ambulance. Emergency Response = 911 Emergency Response, 7-Digit Emergency Response. Transport Services = ALS Ambulance Services.

#### Method to achieve exclusivity, if applicable (HS 1797.224):

If <u>grandfathered</u>, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If <u>competitively-determined</u>, method of competition, intervals, and selection process. Attach copy/ draft of last competitive process used to select provider or providers.

Non-Competitive (grandfathering). The EMS Agency believes South San Francisco Fire meets the criteria for "grandfathering" in Section 1797.224, and as such qualifies for exclusivity within its jurisdiction. On March 4, 1975, the San Mateo County Board of Supervisors approved Resolution No. 34702 authorizing an agreement with City of South San Francisco to establish a paramedic response and transport unit in cooperation with the County, and its effort to establish a comprehensive emergency medical system. Since that time South San Francisco Fire Department has provided continuous paramedic transport services within the County for the City of South San Francisco. This has been documented in EMS Plans, internal documents, and various media publications going back to 1974.



#### A. SYSTEM ORGANIZATION AND MANAGEMENT

currently meet standard recommended guidelines  Agency Administration:	hort- Long- ge plan range plan
1.01 LEMSA Structure X	
1.02 LEMSA Mission X	
1.03 Public Input X	
1.04 Medical Director X X	
Planning Activities:	<u>.</u>
1.05 System Plan X	
1.06 Annual Plan X Update	
1.07 Trauma Planning* X X	
1.08 ALS Planning* X	
1.09 Inventory of X Resources	
1.10 Special X X Populations	
1.11 System X Participants	
Regulatory Activities:	
1.12 Review & X Monitoring	
1.13 Coordination X	
1.14 Policy & X Procedures Manual	
1.15 Compliance X W/Policies	
System Finances:	
1.16 Funding X Mechanism	
Medical Direction:	
1.17 Medical Direction* X	
1.18 QA/QI X X	



1.19 Policies, Procedures, Protocols		Х	Х		
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## A. SYSTEM ORGANIZATION AND MANAGEMENT (continued)

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long- range plan
1.20	DNR Policy		Х			
1.21	Determination of Death		Х			
1.22	Reporting of Abuse		Х			
1.23	Interfacility Transfer		Х			
Enhai	nced Level: Advanced	Life Support				
1.24	ALS Systems		Х	X		
1.25	On-Line Medical Direction		Х	Х		
Enhai	nced Level: Trauma Ca	re System:				
1.26	Trauma System Plan		X			
Enhai	nced Level: Pediatric E	mergency Medic	cal and Critica	l Care System:		
1.27	Pediatric System Plan		X			
Enhai	nced Level: Exclusive	Operating Areas	:			
1.28	EOA Plan		X			



#### **B. STAFFING/TRAINING**

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Local	I EMS Agency:					
2.01	Assessment of Needs		Х			
2.02	Approval of Training		X			
2.03	Personnel		X			
Dispa	atchers:					
2.04	Dispatch Training		Х	Х		
First	Responders (non-trar	nsporting):				
2.05	First Responder Training		X	X		
2.06	Response		X			
2.07	Medical Control		X			
Trans	sporting Personnel:					
2.08	EMT-I Training		Х	Х		
Hosp	ital:					
2.09	CPR Training		Х			
2.10	Advanced Life Support		Х			
Enha	nced Level: Advance	d Life Support:				
2.11	Accreditation Process		Х			
2.12	Early Defibrillation		Х			
2.13	Base Hospital Personnel		X			



## C. COMMUNICATIONS

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Comn	nunications Equip	oment:				
3.01	Communication Plan*		X	Х		
3.02	Radios		X	X		
3.03	Interfacility Transfer*		Х			
3.04 Cente	Dispatch r		X			
3.05	Hospitals		Х	Х		
3.06	MCI/Disasters		Х			
Public	Access:					
3.07	9-1-1 Planning/ Coordination		Х	Х		
3.08	9-1-1 Public Education		X			
Resou	urce Management	t:				
3.09	Dispatch Triage		Х	Х		
3.10 Dispat	Integrated tch		Х	Х		



## D. RESPONSE/TRANSPORTATION

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:					
4.01 Service Area Boundaries*		X	X		
4.02 Monitoring		X	X		
4.03 Classifying Medical Requests		Х			
4.04 Prescheduled Responses		Х			
4.05 Response Time*		X			
4.06 Staffing		Х			
4.07 First Responder Agencies		Х			
4.08 Medical & Rescue Aircraft*		Х			
4.09 Air Dispatch Center		Х			
4.10 Aircraft Availability*		X			
4.11 Specialty Vehicles*		X	X		
4.12 Disaster Response		X			
4.13 Intercounty Response*		X			
4.14 Incident Command System		Х			
4.15 MCI Plans		Χ			
Enhanced Level: Advance	ced Life Support	:			
4.16 ALS Staffing		Х	Х		
4.17 ALS Equipment		Х			
Enhanced Level: Ambul	ance Regulation				
4.18 Compliance		Х			
Enhanced Level: Exclus	ive Operating Pe	ermits:			



4.19	Transportation Plan	Х		
4.20	"Grandfathering"	X		
4.21	Compliance	Х		
4.22	Evaluation	Х		



## E. FACILITIES/CRITICAL CARE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	rsal Level:					
5.01	Assessment of Capabilities		X	X		
5.02 Trans	Triage & fer Protocols*		Х			
5.03	Transfer Guidelines*		X			
5.04	Specialty Care Facilities*		Х			
5.05	Mass Casualty Management		X	X		
5.06	Hospital Evacuation*		Х			
Enhai	nced Level: Adv	anced Life Supp	oort:			
5.07	Base Hospital Designation*		Х			
Enhai	nced Level: Tra	uma Care Syste	m:			
5.08 Syster	Trauma m Design		Х			
5.09	Public Input		Χ			
Enhai	nced Level: Ped	liatric Emergenc	y Medical and	Critical Care Sys	tem:	
5.10 Syster	Pediatric m Design		Х			
5.11	Emergency Departments		Х	Х		
5.12	Public Input		Х			
Enhai	nced Level: Oth	er Specialty Car	e Systems:			
5.13 Syster	Specialty m Design		Х			
5.14	Public Input		Х			



## F. DATA COLLECTION/SYSTEM EVALUATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	ersal Level:					
6.01	QA/QI Program		X	X		
6.02	Prehospital Records		Х			
6.03	Prehospital Care Audits		X			
6.04	Medical Dispatch		X			
6.05 Mana	Data gement System*		Х			
6.06	System Design Evaluation		X			
6.07	Provider Participation		Х			
6.08	Reporting		Х			
Enha	nced Level: Advanc	ed Life Supp	ort:			
6.09	ALS Audit		Х	Х		
Enhai	nced Level: Trauma	a Care Systen	n:			
6.10	Trauma System Evaluation		Х			
6.11	Trauma Center Data		Х	X		



#### G. PUBLIC INFORMATION AND EDUCATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	ersal Level:					
7.01 Inform	Public nation Materials		Х	X		
7.02	Injury Control		Х	X		
7.03	Disaster Preparedness		Х	Х		
7.04	First Aid & CPR Training		X	X		



#### H. DISASTER MEDICAL RESPONSE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Unive	rsal Level:					
8.01	Disaster Medical Planning*		X			
8.02	Response Plans		Χ	X		
8.03	HazMat Training		Х			
8.04 Comm	Incident nand System		Х	X		
8.05	Distribution of Casualties*		Х			
8.06 Asses	Needs sment		Х	Х		
8.07	Disaster Communications*		Х			
8.08	Inventory of Resources		Х	Х		
8.09	DMAT Teams		Χ	X		
8.10	Mutual Aid Agreements*		Х			
8.11 Desig	CCP nation*		X			
8.12	Establishment of CCPs		Х			
8.13	Disaster Medical Training		X	X		
8.14	Hospital Plans		Χ	X		
8.15	Interhospital Communications		Х			
8.16 Agend	Prehospital cy Plans		X	X		
Enhai	nced Level: Advan	ced Life Support:				
8.17	ALS Policies		Х			
Enhai	nced Level: Specia	Ity Care Systems:				
8.18	Specialty Center Roles		Х			
Enhai	nced Level: Exclus	ive Operating Area	as/Ambulance	Regulations:		



Fxclusivity	- ' ' '		Х			
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## **TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT**

Repo	orting Year: 2021	
<b>NOT</b> I agen	<b>E:</b> Number (1) below is to be completed for each county. The balance of Table 2 refers cy.	to each
1.	Percentage of population served by each level of care by county: (Identify for the maximum level of service offered; the total of a, b, and c should equal 10	00%.)
	County: San Mateo County	
	A. Basic Life Support (BLS) B. Limited Advanced Life Support (LALS) C. Advanced Life Support (ALS)	0% 0% 100%
2.	Type of agency:  ☐ Public Health Department  ☑ County Health Services Agency  ☐ Other (non-health) County Department  ☐ Joint Powers Agency  ☐ Private Non-Profit Entity  ☐ Other:	
3.	The person responsible for day-to-day activities of the EMS agency reports to:  ☐ Public Health Officer  ☐ Health Services Agency Director/ Administrator  ☐ Board of Directors  ☐ Other:	
4.	Indicate the non-required functions which are performed by the agency:  ☑ Implementation of exclusive operating areas (ambulance franchising)  ☑ Designation of trauma centers/trauma care system planning  ☑ Designation/approval of pediatric facilities  ☑ Designation of other critical care centers  ☐ Development of transfer agreements  ☐ Enforcement of local ambulance ordinance  ☑ Enforcement of ambulance service contracts  ☐ Operation of ambulance service  ☑ Continuing education  ☑ Personnel training	



	☑ Operation of oversight of EMS dispatch center		
	☑ Non-medical disaster planning		
	☐ Administration of critical incident stress debriefing team (CISD)		
	□ Administration of disaster medical assistance team (DMAT)		
	☑ Administration of EMS Fund [Senate Bill (SB) 12/612]		
	□ Other:		
	□ Other:		
	□ Other:		
<b>5.</b>	<u>EXPENSES</u>		
	Salaries and benefits (All but contract personnel)	\$	<u>1,484,156</u>
	Contract Services (e.g., medical director)		<u>5,363,034</u>
	Operations (e.g., copying, postage, facilities)		204,692
	Travel		<u>6,993</u>
	Fixed assets		30,972
	Indirect expenses (overhead)  Ambulance subsidy	\$ \$	<u>128,644</u> <u>0</u>
	EMS Fund payments to physicians/hospital		<u>o</u> 814,727
	Dispatch center operations (non-staff)	Ψ	<u>0</u>
	Training program operations		<u>0</u>
	Other: Fees to EMSA (EMT and paramedic)	\$	<u>16,505</u>
	TOTAL EXPENSES	\$	8,049,723
<b>).</b>	SOURCES OF REVENUE		
	Special project grant(s) [from EMSA]	\$	<u>0</u>
	Preventive Health and Health Services (PHHS) Block Grant	\$	<u>0</u>
	Office of Traffic Safety (OTS)	\$	<u>0</u>
	State general fund (Maddy, Richie)	\$	814,727
	County general fund	\$	<u>0</u>
	Other local tax funds (Measure K)	\$	<u>80,736</u>
	County contracts (e.g., multi-county agencies)	\$	983,917.53
	Certification fees	\$	32 599



Training program approval fees	\$ <u>0</u>
Training program tuition/Average daily attendance funds (ADA)	\$ <u>0</u>
Job Training Partnership ACT (JTPA) funds/other payments	\$ <u>0</u>
Base hospital application fees	\$ <u>0</u>
Trauma center application fees	\$ <u>0</u>
Trauma center designation fees	\$ <u>75,000</u>
Pediatric facility approval fees	\$ <u>0</u>
Pediatric facility designation fees	\$ <u>0</u>
Other critical care center application fees	\$ <u>0</u>
STEMI facility designation fees	\$ <u>125,000</u>
Stroke receiving center designation fees	\$ <u>190,000</u>
Thrombectomy Capable Stroke Center application fee	\$
Ambulance service/vehicle fees	\$ <u>0</u>
Contributions	\$ <u>0</u>
EMS Fund (SB 12/612)	\$ 230,430
Other: AMR pass-through for ALS Fire Service First Response	\$ 5,034,440
Other: AMR pass-through for FirstWatch support	\$ <u>27,625</u>
Other: Medi-Cal admin activities (MAA)	\$ 200,000
Other: Inter-department transfers (HIE and EMS Fellow)	\$ <u>253,321</u>
Other: Medical Mutual Aid Reimbursement (Lake County)	\$ <u>1,927</u>
TOTAL REVENUE	\$ 8,049,723

TOTAL REVENUE SHOULD EQUAL TOTAL EXPENSES.
IF THEY DON'T, PLEASE EXPLAIN.



# 7. <u>Fee structure</u>

 $\hfill\Box$  We do not charge any fees

○ Our fee structure is:

First responder certification	\$	<u>N/A</u>
EMS dispatcher certification	\$	<u>N/A</u>
EMT-I certification	\$	<u>125</u>
EMT-I recertification	\$	<u>87</u>
EMT-defibrillation certification	\$	N/A
EMT-defibrillation recertification	\$	N/A
AEMT certification	\$	N/A
AEMT recertification	\$	N/A
EMT-P accreditation	\$	<u>50</u>
Mobile Intensive Care Nurse/Authorized Registered Nurse certification	\$	N/A
MICN/ARN recertification	\$	<u>N/A</u>
EMT-I training program approval	\$	N/A
AEMT training program approval	\$	N/A
EMT-P training program approval	\$	N/A
MICN/ARN training program approval	\$	N/A
Base hospital application	\$	N/A
Base hospital designation	\$	N/A
Trauma center application	\$	N/A
Trauma center designation (Adult)	\$	50,000
Trauma center designation (Pediatric)	\$	25,000
Pediatric facility approval	\$	N/A
Pediatric facility designation	\$	N/A
Other critical care center application		
Type: <u>STEMI</u>	\$	N/A
Type: Thrombectomy Capable Stroke Center	\$	<u>7,500</u>
Other critical care center designation		
Type: <u>STEMI</u>	\$	25,000
Type: Primary Stroke Center	\$	<u>25,000</u>
Type: Thrombectomy Capable Stroke Center	\$	<u>35,000</u>
Can Material Country EMO D	1	Lladate



Type: Comprehensive Stroke Center	\$ 40,000
Ambulance service licence	\$ <u>N/A</u>
Ambulance vehicle permits	\$ <u>N/A</u>
Other:	\$ <u>N/A</u>
Other:	\$ <u>N/A</u>
Other:	\$ N/A



# TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

Category	Actual Title	FTE Positions (EMS only)	Top Salary by hourly equivalent	Benefits (% of salary)	Comments
EMS Admin./Coord. /Director	EMS Director	1.0	\$100.56	40%	
Asst. Admin. or Admin. Asst. or Admin. Mgr.	Clinical Services Manager II	1.0	\$95.77	40%	
Asst. Admin. or Admin. Asst. or Admin. Mgr.	Health Services Manager I	1.0	\$68.06	40%	
ALS Coord. /Field Coord. /Training Coordinator	Clinical Nurse	1.0	\$83.79	40%	
Program Coordinator/Field Liaison (Non-clinical)	Management Analyst	1.0	\$61.72	40%	
Trauma Coordinator	See Clinical Nurse above				
Medical Director	EMS Medical Director	0.33	\$200.00	0%	MD is a contractor (not an EMS Agency employee)
Other MD/Medical Consult/Training Medical Director					
Disaster Medical Planner	Health Emergency Preparedness (HEP) Program Manager	1.0	\$71.45	40%	
Dispatch Supervisor					
Medical Planner					
Data Evaluator/Analyst					
QA/QI Coordinator	See Clinical Services Manager II above				
Public Info. & Education Coordinator	See Clinical Nurse				

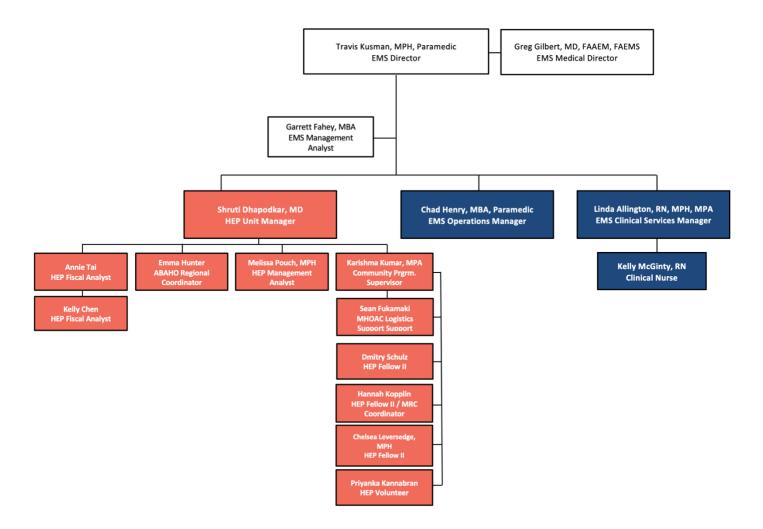


Executive Secretary	See Management Analyst above				
Other Clerical	Health Emergency Preparedness Support Volunteer				Not a paid position
Data Entry Clerk					
Other	Community Program Supervisor	1.0	\$58.99	40%	
Other	Management Analyst	1.0	\$61.72	40%	
Other	Community Program Analyst II (Fiscal Analyst)	1.0	\$53.60	40%	
Other	Community Program Analyst II (Fiscal Analyst)	1.0	\$53.60	40%	
Other	Health Emergency Preparedness Intern/Fellow II	1.0	\$24.60	40%	
Other	Health Emergency Preparedness Intern/Fellow II	1.0	\$24.60	40%	
Other	Health Emergency Preparedness Intern/Fellow II	1.0	\$24.60	40%	
Other	Association of Bay Area Health Officers (ABAHO) Regional Coordinator	1.0	\$72.80	0%	Contractor
Other	MHOAC Logistics Support Specialist	1.0	\$41.46	0%	Contractor

Include an organizational chart of the local EMS agency and a county organization chart(s) indicating how the LEMSA fits within the county/multi-county structure.

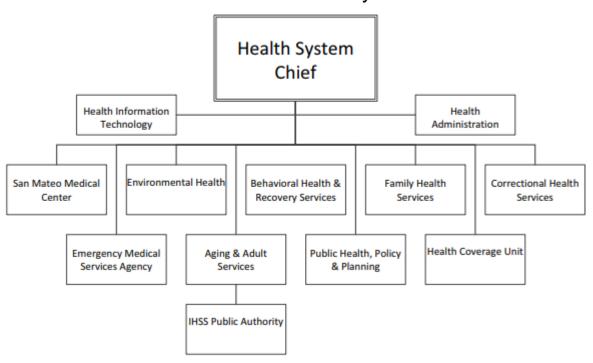


# San Mateo County EMS Agency





## San Mateo Health System



FY 2021-22



## TABLE 3: SYSTEM RESOURCES AND OPERATIONS - Personnel/Training

EMS System: San Mateo County

Reporting Year: 2021

**NOTE:** Table 3 is to be reported by agency.

	EMT - Is	EMT - IIs	EMT - Ps	MICN
Total Certified	400	N/A		N/A
Number newly certified this year	108	N/A		N/A
Number recertified this year	292	N/A		N/A
Total number of accredited personnel on July 1 of the reporting year			429	N/A
Number of certification reviews resulting in:				
a) formal investigations	9	N/A		N/A
b) probation	2	N/A	N/A	N/A
c) suspensions	0	N/A	N/A	N/A
d) revocations	1	N/A		N/A
e) denials	0	N/A		N/A
f) denials of renewal	0	N/A		N/A
g) surrenders	0	N/A	N/A	N/A
h) no action taken	7	N/A	N/A	N/A

1.	Number of EMS dispatch agencies utilizing EMD Guidelines:	<u>1</u>
2.	Early defibrillation: a) Number of EMT=I (defib) certified	N/A
	b) Number of public safety (defib) certified (non-EMT-I)	N/A
3.	Do you have a first responder training program	□ yes ⊠ no



## **TABLE 4: COMMUNICATIONS**

**Note:** Table 4 is to be answered for each county.

Count	y:	San Mateo		
Repor	ting Year:	2021		
1.	Number of p	orimary Public Servi	ce Answering Points (PSAP)	14
2.	Number of s	secondary PSAPs		1
3.	Number of dispatch centers directly dispatching ambulances			1
4.	Number of E	EMS dispatch agend	cies utilizing EMD guidelines	1
5.	Number of o	designated dispatch	centers for EMS Aircraft	1
6.	Who is your primary dispatch agency for day-to-day emergencies?  San Mateo County Public Safety Communications			
7.	Who is your primary dispatch agency for a disaster?  San Mateo County Public Safety Communications			
8.	8. Do you have an operational area disaster communication system?			
	a. Radio pr	imary frequency	700MHz trunked	
	b. Other me	ethods	Microwave (21.8 – 22.4 GHz; 23.0 – 23.6 GHz); Fire VHF radio channels	
	c. Can all medical response units communicate on the same disaster communications system?			
	d. Do you p (OASIS)	•	erational Area Satellite Information System	⊠ Yes □ No
	•	nave a plan to utilize ) as a back-up comr	the Radio Amateur Civil Emergency Services munication system?	⊠ Yes □ No
	1) Within the operational area?		⊠ Yes □ No	
	2) Betwe	en operation area a	nd the region and/or state?	⊠ Yes □ No



## **TABLE 5: RESPONSE/TRANSPORTATION**

Reporting Year: 2021

**Note:** Table 5 is to be reported by agency.

## **Early Defibrillation Providers**

1. Number of EMT-Defibrillation providers  $\underline{0}$ 

## SYSTEM STANDARD RESPONSE TIMES (90<sup>TH</sup> PERCENTILE)

Enter the response times in the appropriate boxes:

	METRO/URBAN	SUBURBAN/ RURAL	WILDERNESS	SYSTEMWIDE
BLS and CPR capable first responder	n/a	n/a	n/a	n/a
Early defibrillation responder	6:59 minutes	11:59 minutes	21:59 minutes	6:59 – 21:59 minutes
Advanced life support responder	6:59 minutes	11:59 minutes	21:59 minutes	6:59 – 21:59 minutes
Transport Ambulance	12:59 minutes	19:59 minutes	39:59 minutes	12:59 – 39:59 minutes



## **TABLE 6: FACILITIES/CRITICAL CARE**

Reporting Year: CY 2021

**NOTE**: Table 6 is to be reported by agency.

### **Trauma**

Trauma patients:	
Number of patients meeting trauma triage criteria	

2. Number of major trauma victims transported directly to a trauma center by ambulance

3. Number of major trauma patients transferred to a trauma center

4. Number of patients meeting triage criteria who weren't treated at a trauma center

<u>1,670</u>

33

<u>1,670</u>

N/A – Non-trauma centers do not submit data to

LEMSA

## **Emergency Departments**

Total number of emergency departments  1. Number of referral emergency services	12 (include 6 out of county) 0
2. Number of standby emergency services	<u>1</u>
3. Number of basic emergency services	12 (includes 6 out of county)
4. Number of comprehensive emergency services	<u>0</u>

## **Receiving Hospitals**

Number of receiving hospitals with written agreements	<u>9</u>
2. Number of base hospitals with written agreements	<u>1</u>



## **TABLE 7: DISASTER MEDICAL**

Reporting	Year:	2021

County: San Mateo

**NOTE:** Table 7 is to be answered for each county.

## **SYSTEM RESOURCES**

1.	Casualty Collections Points (CCP)	
	a. Where are your CCPs located? <u>CCPs are located adjacent to each hos</u>	oital. Alternate sites
	designated as needed.	
	b. How are they staffed? Staffed by hospital and volunteer healthcare per	sonnel.
	c. Do you have a supply system for supporting them for 72 hours?	☐ Yes ☒ No
2.	CISD	
	Do you have a CISD provider with 24-hour capability?	
3.	Medical Response Team	
	a. Do you have any team medical response capability?	
	b. For each team, are they incorporated into your local response plan?	oxtimes Yes $oxtimes$ No
	c. Are they available for statewide response?	oxtimes Yes $oxtimes$ No
	d. Are they part of a formal out-of-state response system?	
4.	Hazardous Materials	
	a. Do you have any HazMat trained medical response teams?	$oxtimes$ Yes $\Box$ No
	b. At what HazMat level are they trained? <u>First Responder, Technician,</u> and Specialist depending on the fire agency.	
	c. Do you have the ability to do decontamination in an emergency room?	
	d. Do you have the ability to do decontamination in the field?	$oxtimes$ Yes $\Box$ No
OP	ERATIONS	
1.	Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure?	⊠ Yes □ No
2.	What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster?	20



2	Llove you tooted your MCI Plan this year in a	
3.	Have you tested your MCI Plan this year in a:  a. real event?	⊠ Yes □ No
	b. exercise?	
4.	List all counties with which you have a written medical mutual aid agreement	· ·
	All counties that have entered into the California Mutual Aid Region II and / c	or Statewide-
	Cooperative Agreement for Emergency Medical and Health Disaster Assistan	nce agreement(s)
5.	Do you have formal agreements with hospitals in your operational area	
	to participate in disaster planning and response?	⊠ Yes □ No
6.	Do you have a formal agreement(s) with community clinics in your	
	operational areas to participate in disaster planning and response?	oxtimes Yes $oxtimes$ No
7	And were and of a provide account. EMC avertage for discrete process 2	N Vaa II Na
7.	Are you part of a multi-county EMS system for disaster response?	⊠ Yes □ No
8.	Are you a separate department or agency?	□ Yes ⊠ No
0.	, no you a coparate department of agoiney.	
9.	If not, to whom do you report? County Health System Deputy Chief	
8.	If your agency is not in the Health Department, do you have a plan to	
٥.	coordinate public health and environmental health issues with the Health	
	Department?	N/A



**Table 8: Resource Directory** 

Reporting Year: 2021

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San	Mateo	Provider: American Medical Re	Response	All except City of South San Francisco
Address: 1510 Rollins Road  Burlingame, California 94041		Number of Ambulance	e Vehicles in Fleet:	27
Phone Number: (650) 235-1333		Average Number of A At 12:00 p.m. (noon) o		18
Written Cont	act: Medical Director:	System Available 24 Hours:	Lev	el of Service:
⊠ Yes □	lo ⊠ Yes □ No	⊠ Yes □ No	☐ Non-Transport ▷	☐ ALS
<u>Ownershi</u>	o: If Public:	<u>If Public</u> :	<u>lf Air:</u>	Air Classification:
□ Public ⊠ Private	☐ Fire☐ Law☐ OtherExplain:	☐ City ☐ County ☐ State ☐ District ☐ Federal	☐ Rotary ☐ Fixed Wing	<ul><li>☐ Auxiliary Rescue</li><li>☐ Air Ambulance</li><li>☐ ALS Rescue</li><li>☐ BLS Rescue</li></ul>
37,504 Num	number of responses per of emergency responses per of non-emergency responses	<u>Transporting Agencies</u> 33,912 2,570 31,342	_ Total number of transport _ Number of emergency tra _ Number of non-emergenc	nsports
0 Num	number of responses per of emergency responses per of non-emergency responses	Air Ambulance Services  0 0 0 0	_ Total number of transport _ Number of emergency tra _ Number of non-emergenc	nsports



**Table 8: Resource Directory** 

Re	porting	Year:	2021

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Mateo			Provider:	South San Franc Department	isco	Fire Re	spons	e Zone:	City o		h San
Address:	-	Canal Street Francisco, California 94080	Number of Ambulance Vehicles in Fleet:						;	5	
Phone Number: (650) 829-3950						nbulances on Duty n Any Given Day:			,	3	
Written	Contract:	Medical Director:	System /	Available 24 Hour	' <u>S:</u>		Lev	el of Ser	Service:		
□ Yes	s ⊠ No	⊠ Yes □ No	⊠ Yes	□ No		⊠ Transport □ Non-Transpo	ort 🗵	ALS BLS LALS		'-Digit CCT	<ul><li>☑ Ground</li><li>☐ Air</li><li>☐ Water</li></ul>
0		If Doubling	16	D. L.C.		If A:			A ! O !-		
$\boxtimes$	nership: Public Private	If Public:  ☐ Fire ☐ Law ☐ Other Explain:	□ City □ State □ Federa	Public:  County District		<u>If Air:</u> □ Rotary □ Fixed Wii	ng		Air A		escue ince ue
5,195 3,776 1,419	Number of er	r of responses mergency responses on-emergency responses	Trar	13,99 328 3,67	8	Total number of tra Number of emerge Number of non-em	ncy tra	nsports	orts		
0 0	Number of er	r of responses mergency responses on-emergency responses	<u>Air A</u>	Ambulance Service 0 0 0 0	es	Total number of tra Number of emerge Number of non-em	ncy tra	nsports y transpo	orts		



**Table 8: Resource Directory** 

Reporting	Year:	2021
1 CPOI tillig	ı caı.	2021

## Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

		742.0 742.0 0 75 15 25		n cach provider by coal	,				
County:	San Mateo		Provider:	San Mateo County Pro Emergency Medical S (Fire JPA)				All of county except of South San Fran	
Address:	Idress: 1510 Rollins Road Burlingame, California 94041			Number of Ambulance Vehicles in Fleet: n/a					
Phone Number: (650) 235-1255			Average Number of Ambulances on Duty  At 12:00 p.m. (noon) on Any Given Day: n/a						
Written	Written Contract: Medical Director:			Available 24 Hours:		Leve	l of Serv	rice:	
⊠ Yes	s 🗆 No	⊠ Yes □ No	⊠ Yes	□ No	□ Transport ⊠ Non-Tran	sport 🗆	ALS BLS LALS	<ul><li>⋈ 9-1-1</li><li>⋈ G</li><li>□ 7-Digit</li><li>□ CCT</li><li>□ Wa</li><li>□ IFT</li></ul>	
Ownership: If Public:		<u>If</u>	Public:	If Air:			Air Classification:		
	Public Private	<ul><li>☑ Fire</li><li>☐ Law</li><li>☐ Other</li><li>Explain:</li></ul>	<ul><li>⊠ City</li><li>□ State</li><li>□ Federa</li></ul>	<ul><li>☑ County</li><li>☑ District</li></ul>	☐ Rotary ☐ Fixed			Auxiliary Rescue Air Ambulance ALS Rescue BLS Rescue	
<ul> <li>44,300 Total number of responses</li> <li>33,239 Number of emergency responses</li> <li>11,061 Number of non-emergency responses</li> </ul>			Transporting Agencies  O Total number of transports O Number of emergency transports Number of non-emergency transports						
0 0 0	Number of er	of responses mergency responses on-emergency responses	<u>Air A</u>	Ambulance Services  0 0 0 0	0 Total number of transports				



V/FORW	ILDIGAL SLAV	IULS					
TABLE 9:	FACILITIES						
County: S		n for each	facility by county. Make	copies	s as needed.		
Facility: Seton Hospital Address: 1900 Sullivan Avenue Daly City, California 94015					Telephone Number: <u>(650)                                    </u>	992-4000	
Written Contract: Ser			rvice	<u>:</u>	Base Hospital:	Burn Center:	
			Referral Emergency Basic Emergency			□ Yes ⊠ No	□ Yes ⊠ No
D. P. dele	0-1111-0	0 1 1			Tanana Cantan	K T O	and at level
Pediatric Critical Care Center <sup>1</sup> EDAP <sup>2</sup> PICU <sup>3</sup>		□ Yes ⊠ No ⊠ Yes □ No □ Yes ⊠ No		Trauma Center:  ☐ Yes ☒ No	If Trauma Cent  ☐ Level I ☐ Level III	<u>er what level:</u> ☐ Level II ☐ Level IV	
STEMI Center: Stroke Center:							

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WEI ME	MEDICAL SERVICES									
TABLE 9: F	ACILITIES									
County: Sar		n for each	facility by county. Make o	onies	s as needed					
Note: Complete information for each facility by county. Make of Facility:  Kaiser Permanente Medical Center - South San Francisco  Address: 1200 El Camino Real South San Francisco, California 94080				-		)) 742-2200				
		Ser eferral Emergency	rvice:		Base Hospital:  ☐ Yes ☒ No	Burn Center:  ☐ Yes ☒ No				
		⊠ B	asic Emergency		Comprehensive Emergency	У				
Pediatric Ci	ritical Care	Center <sup>1</sup>	□ Yes ⊠ No ⊠ Yes □ No	Trauma Center:		If Trauma Cent	er what level:			
PICU <sup>3</sup>			☐ Yes ⊠ No		□ Yes ⊠ No	□ Level III	☐ Level II ☐ Level IV			
STE	EMI Center:		Stroke Center:							
☐ Yes ⋈ No			⊠ Yes □ No							

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WIEDICA	WEDICAL SERVICES								
TABLE 9: FACILI	TIES								
County: San Mate	90								
Note: Complete info	ormation for each	h facility by county. Make c	opies	as needed.					
Facility: Mills-P	eninsula Medic	cal Center	Т	elephone Number: (650)	695-5400				
Address: 1501 T	rousdale Drive	,	_						
Burling	ame, California	a 94010	= =						
Written Contra	<u>ct:</u>	<u>Ser</u>	vice:		Base Hospital:	Burn Center:			
	,   <sub> </sub>	Referral Emergency		Standby Emergency	☐ Yes ⊠ No	☐ Yes ☒ No			
		Basic Emergency	☐ Comprehensive Em						
		,							
<b>Pediatric Critical</b>	Care Center <sup>1</sup>	□ Yes ⋈ No		Trauma Center:	If Trauma Cente	er what level:			
EDAP <sup>2</sup>									
PICU <sup>3</sup>		☐ Yes ⋈ No		☐ Yes ☒ No	□ Level I	□ Level II			
					☐ Level III	☐ Level IV			
				_					
STEMI Center: Stroke Center:									

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES		

TABLE 9: FACILITIES										
County: San Mateo	ounty: San Mateo									
Note: Complete information	ote: Complete information for each facility by county. Make copies as needed.									
Facility: San Mateo Medical Center Address: 222 West 39 <sup>th</sup> Street San Mateo, California 94403				Telephone Number: <u>(650) </u>	573-2222					
Written Contract: Ser			vice	<u> </u>	Base Hospital:	Burn Center:				
<ul><li>☑ Yes ☐ No</li><li>☐ Referral Emergency</li><li>☑ Basic Emergency</li></ul>			Standby Emergency ☐ Yes ☒ No ☐ Yes Comprehensive Emergency		☐ Yes ☒ No					
	•					ı				
Pediatric Critical Care EDAP <sup>2</sup>	Center <sup>1</sup>	☐ Yes ☒ No		Trauma Center:	If Trauma Cente	er what level:				
PICU <sup>3</sup>		⊠ Yes □ No □ Yes ⊠ No		□ Yes ⊠ No	□ Level III	☐ Level II ☐ Level IV				
STEMI Center:		Stroke Center:								
□ Yes ⊠ No		☐ Yes ☒ No								

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



**Written Contract:** 

TABLE 9:	TABLE 9: FACILITIES									
County: San Mateo										
Note: Complete information for each facility by county. Make copies as needed.										
•	Sequoia Hospital 170 Alameda de las Pulgas Redwood City, California 94062	Telephone Number:	(650) 367-5561							

Service:

⊠ Yes □ No		eferral Emergency asic Emergency	Standby Emergency Comprehensive Emergency	□ Y	′es ⊠ No	□ Yes ⊠ No
Pediatric Critical Care	· Center¹	□ Yes ⊠ No	Trauma Center:	<u>lf</u> ·	Frauma Cente	er what level:
EDAP <sup>2</sup> PICU <sup>3</sup>		⊠ Yes □ No □ Yes ⊠ No	□ Yes ⊠ No		Level I Level III	□ Level II □ Level IV

<b>STEMI Center:</b>	Stroke Center:
⊠ Yes □ No	⊠ Yes □ No

**Burn Center:** 

**Base Hospital:** 

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



CALIFORNIA	MEDICAL SERVICES									
TABLE 9:	FACILITIES									
County: S	San Mateo									
Note: Com	plete informatio	n for each	facility by county. Make o	copies	s as needed.					
Facility: Kaiser Permanente Medical Center - Redwood City			Telephone Number: (650) 742-2200							
Address:				<del>-</del>						
South San Francisco, California 94080										
						1		<u> </u>		
<u>Written</u>	Contract:		Se	ervice:			Base Hospital:	Burn Center:		
		eferral Emergency asic Emergency	<ul><li>☐ Standby Emergency</li><li>☐ Comprehensive Emergency</li></ul>		ency	□ Yes ⊠ No	□ Yes ⊠ No			
Pediatric EDAP <sup>2</sup>	Critical Care	Center <sup>1</sup>	□ Yes ⊠ No ⊠ Yes □ No		Trauma Center:		If Trauma Cente	er what level:		
PICU <sup>3</sup>			☐ Yes ⊠ No		☐ Yes ☒ No		☐ Level I	☐ Level II		
							☐ Level III	☐ Level IV		
		T				•				
<u>S</u>	TEMI Center:		Stroke Center:							
⊠ Yes □ No										

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WIEDICAL SERVICES										
TABLE 9: FACILITIES										
County: San Mateo										
Note: Complete information	on for each facility by county. Make copies	s as needed.								
Facility: Stanford Hos	spital*	Telephone Number: (650)	723-4000							
Address: 300 Pasteur	Drive									
Stanford, Ca		*Santa Clara County hospital facility, Base Hospital, pediatr center (designated by San Ma	ic Base Hospital, PCCC							
Written Contract:	Service	<u>:</u>	Base Hospital:	Burn Center:						
⊠ Yes □ No	<ul><li>□ Referral Emergency</li><li>□ Basic Emergency</li><li>□</li></ul>	Standby Emergency Comprehensive Emergency	⊠ Yes □ No	☐ Yes ⊠ No						
Pediatric Critical Care Center¹		<u>Trauma Center:</u>	If Trauma Cent	er what level:						
PICU <sup>3</sup>	⊠ Yes □ No	⊠ Yes □ No	□ Level III	☐ Level II ☐ Level IV						

**STEMI Center: Stroke Center:**  $\boxtimes$  Yes  $\square$  No  $\boxtimes$  Yes  $\square$  No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES	

TABLE 9: FACILITIES						
County: San Mateo						
Note: Complete information	n for each	n facility by county. Make cop	ies	as needed.		
Facility: Seton - Coastside  Address: 600 Marine Boulevard  Moss Beach, California 94038				Telephone Number: <u>(650) 7</u>	23-3921	
Written Contract: Ser			ervice:		Base Hospital:	Burn Center:
⊠ Yes □ No	<ul><li>□ Referral Emergency</li><li>□ Basic Emergency</li></ul>		$\boxtimes$	Standby Emergency Comprehensive Emergency	☐ Yes ⊠ No	□ Yes ⊠ No
				,		
Pediatric Critical Care EDAP <sup>2</sup>	Center <sup>1</sup>	□ Yes ⋈ No□ Yes ⋈ No		Trauma Center:	If Trauma Cente	er what level:
PICU <sup>3</sup>		□ Yes ⊠ No		☐ Yes ☒ No	□ Level III	☐ Level II ☐ Level IV
STEMI Center:		Stroke Center:				
☐ Yes ⊠ No		☐ Yes ⊠ No				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



I FOR						
TABLE 9: FACILITIES						
County: San Mateo						
Note: Complete informatio	n for each fa	acility by county. Make	copies	as needed.		
Facility: Palo Alto VA Address: 3801 Mirand	a Avenue		- 	Telephone Number: (650) 4	93-5000	
Palo Alto, Ca	alitornia 943	304		*Santa Clara County facility tha receiving hospital	at serves San Mateo C	County as a
Written Contract:		Se	ervice	<u> </u>	Base Hospital:	Burn Center:
□ Yes ⊠ No	☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency			Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No
						1
Pediatric Critical Care Center <sup>1</sup> EDAP <sup>2</sup>		□ Yes ⊠ No □ Yes ⊠ No		Trauma Center:	<u>If Trauma Cent</u>	er what level:
PICU <sup>3</sup>		☐ Yes ⊠ No		□ Yes ⊠ No	□ Level I □ Level III	□ Level II □ Level IV
STEMI Center:		Stroke Center:	<u>.</u>			
☐ Yes ☒ No		□ Yes ⊠ No				

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



ALIFORNI	MEDICAL SE	INVIOL						
TABLE 9:	FACILITIES							
County: S		n for each	facility by county. Make	copies a	as needed.			
Facility: Address:	Dominican H 1555 Soquel Santa Cruz, 0	Drive	95065	- - - *(	elephone Number: Santa Cruz County fa eceiving hospital	(831) 40	62-7700 serves San Mateo Co	ounty as a
					cerving nospital			T
<u>Written</u>	Contract:		<u>Se</u>	rvice:			Base Hospital:	Burn Center:
☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency			Standby Emergency Comprehensive Eme	rgency	□ Yes ⊠ No	□ Yes ⊠ No		
	1					,		
Pediatric Critical Care Center <sup>1</sup> EDAP <sup>2</sup> PICU <sup>3</sup>		☐ Yes ☒ No ☒ Yes ☐ No ☐ Yes ☒ No		Trauma Center  ☐ Yes ☒ No	<u>r:</u>	If Trauma Center  ☐ Level I	er what level:	
			L 163 M 140		= :55 = :10		☐ Level III	□ Level IV
<u>s</u>	TEMI Center:		Stroke Center:			·		

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES									
County: San Mateo									
Note: Complete information	on for each fac	cility by county. Make	copies a	as needed.					
Facility: University of Medical Cen		an Francisco	T	elephone Number: _(415)	353-1611				
Address: 1975 4 <sup>th</sup> Stre		a 94158							
	,			San Francisco County facilit esignated PCCC only	y that serves San Mated	County as a			
Written Contract: Ser									
Written Contract:		<u>s</u>	ervice:		Base Hospital:	Burn Center:			
Written Contract:  ☐ Yes ☒ No		erral Emergency		Standby Emergency	Base Hospital:  ☐ Yes ☒ No	Burn Center:  ☐ Yes ☒ No			
		_		Standby Emergency Comprehensive Emergency					
		erral Emergency							
□ Yes ⋈ No  Pediatric Critical Care	⊠ Bas	erral Emergency sic Emergency ⊠ Yes □ No				☐ Yes ⊠ No			
☐ Yes ⊠ No	⊠ Bas	erral Emergency sic Emergency		Comprehensive Emergency	□ Yes ⊠ No	☐ Yes ⊠ No			
□ Yes ⋈ No  Pediatric Critical Care EDAP²	⊠ Bas	erral Emergency sic Emergency		Comprehensive Emergency  Trauma Center:	☐ Yes ☒ No	☐ Yes ⊠ No			
□ Yes ⋈ No  Pediatric Critical Care EDAP²	⊠ Bas	erral Emergency sic Emergency		Comprehensive Emergency  Trauma Center:	☐ Yes ☒ No  If Trauma Cente	□ Yes ⋈ No er what level: □ Level II			

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



TABLE 9: FACILITIES							
County: San Mateo							
Note: Complete information	on for each	facility by county. Make	copies	as needed.			
Facility: California Pacific Medical Center – Davies Telephone Number: Campus* (415) 600-6464							
Address: Castro and I			_				
San Francis	co, Califo	nia 94114		San Francisco County facility designated PCCC only	v that serves San Mated	o County as a	
Written Contract:		Se	rvice:		Base Hospital:	Burn Center:	
□ Yes ⊠ No	☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency			Standby Emergency Comprehensive Emergency	□ Yes ⊠ No	□ Yes ⊠ No	
	1						
		⊠ Yes □ No ⊠ Yes □ No		<u>Trauma Center:</u>	If Trauma Cent	er what level:	
PICU <sup>3</sup>				☐ Yes ⊠ No	☐ Level III	☐ Level II ☐ Level IV	
STEMI Center:	1	Stroke Center:					

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



WILFORN WILDICAL SERVICES										
TABLE 9: FACILITIES										
County: San Mateo										
Note: Complete information	n for each	n facility by county. Make co	opies	as needed.						
Address: 1001 Portrer	o Avenue		Т	elephone Number: (628)	206-8000					
San Franciso	co, Califo	rnia 94110		San Francisco County facilit rauma center designated by		County as a				
Written Contract:		Ser	vice:		Base Hospital:	Burn Center:				
⊠ Yes □ No	<ul><li>□ Referral Emergency</li><li>⋈ Basic Emergency</li></ul>			Standby Emergency Comprehensive Emergency	⊠ Yes □ No	□ Yes ⊠ No				
				T						
Pediatric Critical Care Center <sup>1</sup> ☐ Yes ☒ No EDAP <sup>2</sup> ☐ Yes ☒ No		□ Yes ⊠ No □ Yes ⊠ No		<u>Trauma Center:</u>	If Trauma Cente	er what level:				
PICU <sup>3</sup>		□ Yes ⊠ No		⊠ Yes □ No	□ Level III	<ul><li>□ Level II</li><li>□ Level IV</li></ul>				
STEMI Center:		Stroke Center:								

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



LIFORM								
TABLE 9:	FACILITIES							
County: S		n for each	facility by county. Make o	copies	s as needed.			
Facility: Address:	St. Francis H 900 Hyde Str San Francisc	eet	rnia 94109	<del>-</del> -	Telephone Number: _(4 *San Francisco County faburn center only	(415) 35 facility th		o County as a
Written	Contract:		Se	rvice	<u>:</u>		Base Hospital:	Burn Center:
☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency			Standby Emergency Comprehensive Emerge	ency	□ Yes ⊠ No	⊠ Yes □ No		
	1							1
Pediatric Critical Care Center <sup>1</sup> EDAP <sup>2</sup>		☐ Yes ☒ No ☐ Yes ☒ No		Trauma Center:  ☐ Yes ☒ No		If Trauma Center  ☐ Level I	er what level:	
PICU <sup>3</sup>			□ Yes ⊠ No		_ 103 \( \text{NO} \)		☐ Level III	☐ Level IV
<u>s</u>	TEMI Center:		Stroke Center:					

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



LIFORN					
TABLE 9: FACILITIES					
County: San Mateo					
Note: Complete information	on for each facility by county. Make	copies	as needed.		
	Valley Medical Center*	T	elephone Number:	(408) 885-3228	
	ascom Avenue alifornia 95128	_			
			Santa Clara County fac enter only	cility that serves San Mateo C	ounty as a burn
Written Contract:	<u>S</u>	ervice:		Base Hospital:	Burn Center:
☐ Yes ☒ No ☐ Referral Emergency ☒ Basic Emergency			Standby Emergency Comprehensive Emerg	□ Yes ⊠ No gency	⊠ Yes □ No
			ı		
Pediatric Critical Care EDAP <sup>2</sup>	Center¹ ☐ Yes ☒ No ☐ Yes ☒ No		Trauma Center:	If Trauma Cente	er what level:
PICU <sup>3</sup>	☐ Yes ☒ No		□ Yes ⊠ No	☐ Level II	☐ Level II ☐ Level IV
STEMI Center:	Stroke Center:	<u> </u>	]		

☐ Yes ⊠ No

Meets EMSA Pediatric Critical Care Center (PCCC) Standards
 Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards
 Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards



## **TABLE 10: APPROVED TRAINING PROGRAMS**

County: San Mateo Reporting Year: 2021

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: Address:	1700 Wes	of San Mate est Hillsdale eo, Californi	Telephone Number: (650) 574-6347			
Student Open to expublic public	В	Cost of Progra	sm: \$977 \$154	**Program Level EMT-I  Number of students completing training per year Initial training  Refresher: Continuing Education: Expiration Date: Number of courses: Initial training: Refresher: Continuing Education:	7: 31 0 n/a 6/30/2023 2 1 n/a	

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



Student Eligibility*: Open to general public    Basic:   \$625   Number of students completing training per year:	Training Institution: Address:	3300 (	e College College Drive runo, Califorr		6	Telephone Number:	(650) 738-4284
		general	Basic:	\$625	Number of students completing training per year Initial training  Refresher: Continuing Education: Expiration Date: Number of courses: Initial training: Refresher:	36 4 0 9/30/2025	- - - -

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.



Training Institution: Address:		480 N	San Francis orth Canal S San Francis	treet		Telephone Number:	(650) 877-8664	
Student Eligibility*:	Open to go	eneral	Cost of Program:		**Program Level	EMT-I		
0 ,		Basic	Basic:	\$1,650	Number of students Initial training	completing training per year:		
			Refresher:	\$500	3		0	
	Refresher:				0			
					Continuing Education: Expiration Date:		Not reported	
							6/30/2023	
		Number of courses:				:		
					Initial training:		_1-2 year	
					Refresher:		10 per year	
					Continuing Ed	ucation:	_Varies	
**	1 12		1					

<sup>\*</sup>Open to general public or restricted to certain personnel only.

\*\* Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each level.

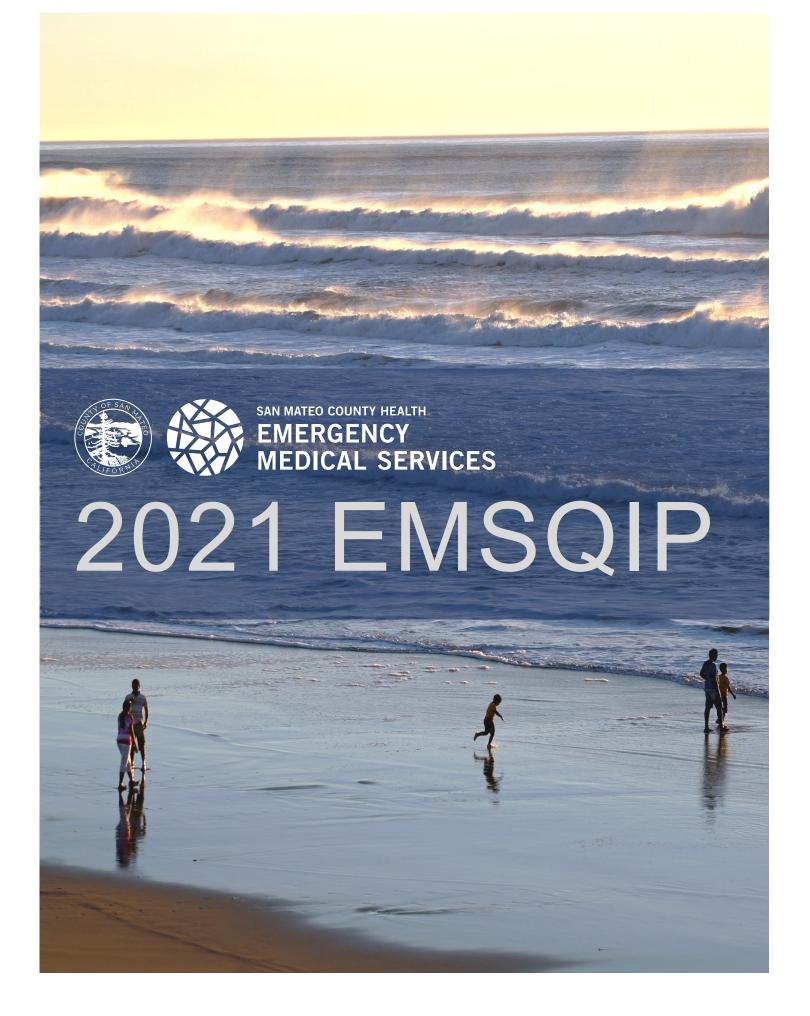


## **TABLE 11: DISPATCH AGENCY**

County: San Mateo Reporting Year: 2021

**NOTE:** Make copies to add pages as needed. Complete information for each provider by county.

Name:	San Mateo Cou	San Mateo County Public Safety Communications				Primary Contact:		Elise Moeck, EMS Dispatch Manager		
Address:	501 Winslow Str	501 Winslow Street Redwood City, California 94063					· ·			
	Redwood City, 0									
Telephone Number:	(650) 363-4900									
Written Contract:	Medical Director:	□ Day-to-Day	Number of Personnel Providing Services:							
⊠ Yes □ No		□ Disaster	<u>30</u> 0	EMD BLS	Training	<u>0</u> 0	EMT-D LALS	<u>0</u> n/a	ALS Other	
Ownership:		If Public:				_				
□ Private		<ul><li>☑ Fire</li><li>☑ Law</li><li>☐ Other</li><li>Explain:</li></ul>	If Public	: 🗆 (	City ⊠ Co	ounty $\square$	] State □ F	ire Distric	t □ Federal	



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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 based on research, scientific examination, and focused process improvement
- Promotion of candor, integrity, and mutual respect
- Multidisciplinary partnerships with our system stakeholders to 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 statutes and regulations, as well as exert Medical Control over the EMS system
- 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 EMS communication systems
- Collaborate with all divisions of County Health in developing local medical and health disaster plans for local and regional mutual aid and mutual assistance.
- Lead County Emergency Operations Center (EOC) Medical Health Branch activities via the Medical Health Operational Area Coordination (MHOAC) 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)
- Provide 24/7 EMS system level coordination and oversight including field response capability via County EMS / MHOAC Duty Officer

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 searching for opportunities to improve, educate, and resolve problems prospectively
- Striving for effective communication with our stakeholders
- Educating 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, identifying root causes of problems, intervening to reduce or eliminate these causes, and implementing steps towards corrective action. Additionally, our method includes 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 at 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 ten-year contract (2019-2029) with the County to provide ALS ambulance services for the EOA, comprised of an initial five-year term and subsequent five-year earned extension period. AMR was awarded this contract through a competitive RFP process. The second exclusive operational area (EOA) is the City of South San Francisco, which is grandfathered. 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 County 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 EHR (MEDS) to document patient care. Aside from frequency indicators such as the number of transports and the number of AED activations, the EMS Agency is involved in the following:

- Development of policies, procedures, and treatment protocols
- Submission of the Core Measures to EMSA
- Compliance review and oversight
- Initial and ongoing skill competency evaluations
- Contract compliance

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

- Clinical and Operational Performance including but not limited to patient care, outcome, inventories (medication, procedure, skills maintenance), documentation, response, 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
- Emergency Medical Dispatch

# LEMSA Personnel and Their Roles in EMSQIP

Travis Kusman, MPH, Paramedic, EMS Agency Director Gregory H. Gilbert, MD, FAAEMS, EMS Medical Director Linda Allington RN, MPH, MPA, FACHE, EMS Clinical Services Manager Kelly McGinty, MSN, RN, EMS Clinical Nurse Chad Henry, MBA, Paramedic, EMS Operations Manager Garrett Fahey, MBA, EMS Management Analyst

# SMC Emergency Medical Services Quality Improvement Program (EMSQIP)

The goal of San Mateo County's Emergency Medical Services 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 of all key system stakeholders.

The EMS Agency staff in collaboration with our system stakeholders leads most internal quality improvement efforts and activities. All EMS Agency staff participate in quality improvement activities pertinent to their respective assigned areas of responsibility. EMS Agency staff routinely audit records pertaining to and physically inspect 911 system medical response apparatus, including on-board supply and equipment inventories to assure compliance with medical control requirements.

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 twice each year. Membership is through appointment by the Board of Supervisors and includes representation from the following groups and organizations:

- Fire first responder
- 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
- San Mateo County field care paramedic or paramedic supervisor of the county-wide emergency ambulance contractor
- Emergency nurse from a San Mateo County receiving hospital
- Emergency physician from a San Mateo County receiving hospital

Additionally, there are categorical members of the EMCC:

- County Health Officer
- County Director of Public Safety Communications
- County Area Coordinator of the Department of Emergency Services
- Executive leader of San Mateo County receiving hospitals
- Executive leader of the county-wide exclusive emergency ambulance contractor

## **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 Agency and its EMS Medical Director on medical policies, procedures and protocols and provides a forum for communication between prehospital 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.\

The committee meets quarterly, 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), as well as 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 and resolve 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 is voting membership includes the EMS Medical Director and EMS staff, JPA EMS Supervisors, Advanced Life Support (ALS) ambulance transport provider agency clinical leadership, and County Public Safety Communications.

Recent discussions have included the Airtraq video laryngoscopy implementation, the Spear ™ decompression needle rollout, and the updated trauma triage protocol. Guest speakers have included representative from Adult Protective Services and a representative from Mills-Peninsula Medical Center discussing its ECMO program.

## 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 and subsequently monitoring EMSA regulations, the committee reviews cases and provides advice regarding policy and best practices, as well as recommendations related to 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). A pilot study with the Mobile Stroke Unit or (MSU) was undertaken including rendezvous sites to facilitate rapid assessment, treatment, and transport, and is now fully integrated into our system response.

Get with The Guidelines (GWTG) ® has been fully implemented enabling the EMS Agency to evaluate 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 redesignation 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.

Consistent with prevailing regulations and best practices, the committee reviews cases, assesses 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 trial of extracorporeal membrane oxygenation (ECMO) was piloted 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.

# Triple P (Policies, Procedures, and Protocols)

Comprised of a cross section of clinical system stakeholders, the Triple P committee provides initial feedback related to policies, procedures, and protocols in development or review and makes recommendations for change, which are then sent to the entire system for clinical review. Through this committee, a point in time comprehensive review and updating of all patient care protocols, policies and procedures has been recently completed. Scheduled annual and ad-hoc review and modifications of policies, procedures and protocols are ongoing.

The Triple P committee recently reviewed and updated the trauma triage protocol, as well as the pediatric cardiac arrest protocol and needle decompression procedure. The trauma triage protocol was updated based on the 2021 American College of Surgeons (ACS) guidelines. The committee recommends updates to protocols based on clinical research and best practices.

#### 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 the countywide EHR platform, MEDS has been modified accordingly.

#### **SYSTEM ENHANCEMENTS**

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

## Response Volume and Speed

#### REQUIRED 911 EMERGENCY RESPONSE TIMES

Urban/Suburban – Response to 90 percent of calls each month shall be compliant				
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		
Rural – Response to	90 percent of calls each month	shall be compliant		
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		
Remote – Response	to 90 percent of calls each mon	th shall be compliant		
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 providers. The Online Compliance Utility (OCU) is directly linked to the County's computer aided dispatch (CAD) system. The OCU provides a real-time and retrospective web enabled tool to monitor system status and response time compliance, 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.

San Mateo County actively monitors 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 surveying Emergency Department (ED), medical examiner and multiple other data sources. This data is shared amongst our system stakeholders to assess, monitor, and develop solutions to this public health crisis in our community.

The EMS Agency has supported law enforcement agencies countywide in the development and implementation of Naloxone training and administration programs. The EMS Agency is in the early stages of development of a program for medication-assisted treatment initiation by paramedics using Buprenorphine.

## Specialty Care – Cardiac Patients

San Mateo County participates in the Cardiac Arrest Registry to Enhance Survival or CARES program and data for 2021 is displayed below.

#### **CARDIAC ARREST- CARES**

2021 CARDIAC ARREST FACTS
340 CASES
66% MALE
34% FEMALE
MEAN AGE OF 64.8
Utstein Survival N=46 or 28.3% (witnessed by a bystander & found in a shockable rhythm).
Utstein Bystander Survival N=21 or 47.6% (witnessed by a bystander, found in a shockable rhythm, and received some bystander intervention-CPR and/or AED

## Specialty Care – Stroke CY 2021

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. Paramedics have the ability to identify patients as having a stroke and alert the hospital of their impending arrival via a "stroke alert." Six hospitals serve San Mateo County stroke patients. Three are primary stroke centers (PSC), one is a thrombectomy capable stroke center (TSC), and two are comprehensive centers (CSC). The tiered system allows patients to receive assessment and treatment at either a primary, thrombectomy capable, 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 San Mateo County EMS Agency personnel, physicians, stroke coordinator nurses, and American Heart Association (AHA) staff, all of whom participate in the stroke system and work 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 Stroke Plan for additional details.

## Specialty Care – Trauma CY 2021

The San Mateo Emergency Medical Services Agency ("EMS Agency") is the local EMS agency (LEMSA) responsible for planning, implementing, evaluating, and regulating the County's comprehensive emergency medical system. The EMS Agency appreciates that the delivery of definitive, high quality trauma care requires a highly collaborative and integrated system which is focused on patient needs and corresponding optimal processes to attain desired outcomes.

While none of the receiving hospitals physically located within San Mateo County are designated trauma centers at any level, the LEMSA supports and ensures that all responders have the ability to quickly identify, re-triage, and transport patients to designated receiving trauma centers when indicated.

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 of QI issues/efforts are reported back to our committees.

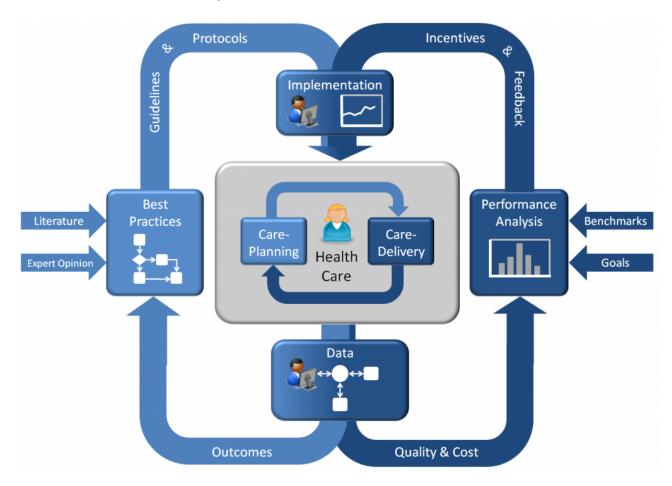
Stanford and Zuckerberg San Francisco General Hospital are the designated receiving trauma centers for the San Mateo County EMS system. EMS Agency staff participate in the American College of Surgeons (ACS) trauma designation surveys for both of these hospitals.

the EMS Agency continues to monitor the scene time for trauma patients with a goal of getting off scene rapidly with transport to the trauma center as quickly as possible.

Please see the Trauma Plan 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 (EMSAAC). 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 County's contracts with AMR and the Fire EMS First Responder 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. 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
- Virtual labs
- Scheduled clinical experience
- Receiving hospitals
- Specialty care centers

Recent opportunities for education included a Pediatric Advanced Workshop with Simulation in collaboration with Lucille Packard Hospital and a Cardiac Symposium coordinated by AMR in 2022.

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, the AMR Clinical Manager and AMR/JPA Training Coordinators 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 Agency 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 and is found on our website.





## 2021 STEMI Critical Care System Plan

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### Introduction

San Mateo County has a well-developed STEMI Critical Care System that focuses on providing quality clinical care that is evidence-based, striving to achieve the best outcomes for our patients.

To attain this, many stakeholders come together in a collaborative system. These parties include the San Mateo County EMS Agency (EMS Agency), Emergency Medical Dispatch (EMD) services performed by our County Public Safety Communications (PSC) center, our fire first responders, our 911 emergency ambulance services transport providers American Medical response (AMR) and South San Francisco Fire Department, as well as our STEMI Receiving Centers (SRC) and STEMI Referral Hospitals (SRH).

The purpose of the San Mateo County Emergency Medical Services STEMI Critical Care System Plan is to ensure excellent cardiac services for both 911 and walkin patients.

## LEMSA Personnel and Their Roles in the STEMI Critical Care System

- Travis Kusman, MPH, Paramedic, EMS Director
- Gregory H. Gilbert, MD, FAAEMS, EMS Medical Director
- Linda Allington RN, MPH, MPA, FACHE, EMS Clinical Services Manager
- Kelly McGinty, RN, MSN, EMS Clinical Nurse
- Chad Henry, MBA, Paramedic, EMS Operations Manager
- Garrett Fahey, MBA, EMS Management Analyst



## STEMI QI Committee – Organizational Description, Structure and Members

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.

The committee mission, purpose, and goals follow on the next page. The committee is advisory to the EMS Agency.

The San Mateo County EMS Agency STEMI Continuous Quality Improvement Committee (SMC STEMI CQI) meets quarterly.

The SMC STEMI CQI committee has the following values:

- Patient & community-oriented system
- Provide a caring environment to inspire and produce teamwork
- Clinical care based on research, scientific examination, and focused process improvement
- Promotion of candor, integrity, and mutual respect
- Multidisciplinary partnerships with our STEMI community, which help us produce excellence

Our STEMI CQI 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 implementing 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 this work.

Incorporating the EMSA regulations into practice, the committee reviews cases, and evaluates data for walk- in, ambulance transport, and patients transferred from a STEMI Referral Hospital (of which we have two in our County) to a STEMI Receiving Center (SRC). Hospital-based extracorporeal membrane oxygenation (ECMO) was trialed for out of hospital refractory ventricular tachycardia/fibrillation patients with certain inclusion criteria in a specific catchment area. These patients were transported to a specific cardiac receiving center. While the ECMO program remains in effect, it is in the process of being modified slightly due to changes in operations at the designated receiving hospital.

SMC STEMI CQI meetings are closed and confidential. Each SRC and SRH identifies who will represent their facility - most commonly the representatives for each facility are the STEMI medical director and the STEMI program manager. Select Emergency Medicine (EM) physicians and the American Heart Association also participate in these meetings.

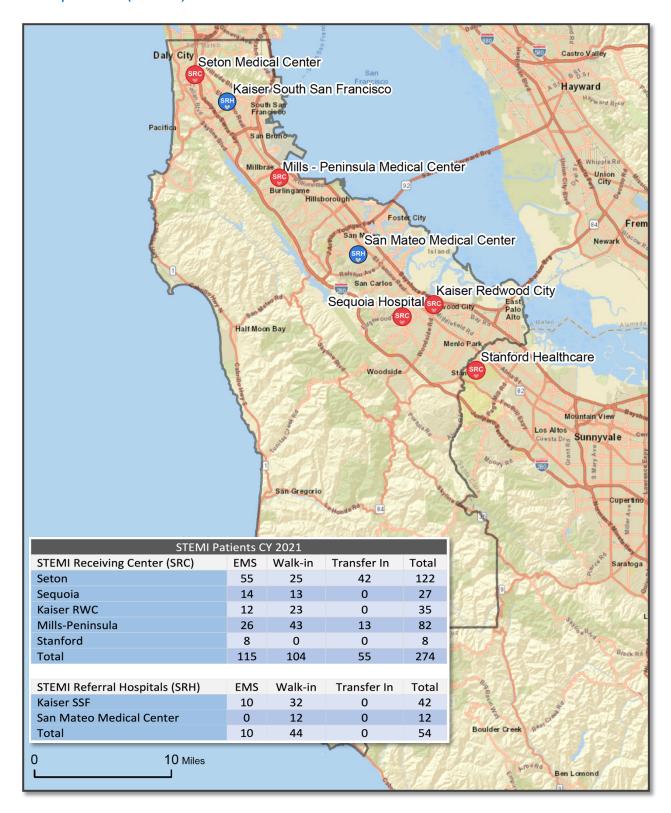
### STEMI QI Committee – Mission, Purpose, and Goals

**Mission**: Improve STEMI outcomes in the SMC STEMI system through data review, quality improvement, education, and innovation.

**Purpose**: Serve as an advisory committee to the EMS agency regarding the STEMI system.

Goals	Objectives	Responsible Party(ies)	Target Date	Evaluation/ Outcome
Improve the quality and service delivered to STEMI patients.	Identify best practices through evidence-based data that can be implemented as needed.      Evaluate and reduce time from symptom onset to definitive care for the STEMI patient.	Designated STEMI Centers STEMI Referral Hospitals EMS Provider Agencies EMS Agency	Ongoing	Committee recommendation on Dual Anti- platelet Therapy (DAPT) Ongoing
Use data     collection to     identify clinical     excellence and     identify     opportunities for     improvement.	Collect and analyze data regularly on STEMI patients from the EMS system and hospitals to evaluate the continuum of care.      Recognize excellence in the provision of care.	STEMI QI Committee	Annually or as noted	Reviewed quarterly all SRCs now on AHA Get with the Guidelines
	Identify and communicate excellence, areas of concern, or opportunities for improvement to the STEMI stakeholders.			STEMI site visits completed in 2022
3. Provide education to identify clinical excellence.	Deliver up-to-date and relevant education to health care professionals.      Raise public awareness	Designated STEMI Centers	Quarterly	Ongoing throughout the year
	regarding the signs and symptoms of heart attack, the importance of activation of the 911 system, and provide education to identified targetgroups.	Referral Hospitals EMS Provider Agencies EMS Agency		

## STEMI Receiving Centers (SRC) and STEMI Referral Hospitals (SRH)



### SRC Re-designation Visit Evaluation Agenda

- 1. Welcome, review schedule
- 2. Hospital to provide brief overview of program
- 3. Review Self-Assessment Tool and on-site supporting documentation with STEMI team
- 4. Tour of ED, Cath Lab
- 5. EMS Agency Staff meet and confer
- 6. EMS, STEMI Team, and Hospital Administration wrapup/finding/recommendations

## SRC Designation Validation Tool

Standard	Evidence of Standard	Meets Standard	Comments & Recommendations
Hospital Standards-STEMI Receiving Hospitals			
Hospital Services			If anything has changed since initial designation, provide. If no changes, please indicate no change.
Licensed General Acute Care Hospital	Copy of hospital license		As above.
Current license to provide Basic Emergency Care	Copy of license		As above.
Operate a cardiac catheterization lab (CCL) licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions (PCI)	Copy of permit		As above.
PCI capability 24 hrs. per day/7 days /week/365 days a year. Immediate notification to the EMS Duty Officer if the SRC is unable to perform PCI.	<ul><li>On call schedule</li><li>On call policy and procedures document</li></ul>		As above. EMS Duty Officer is found under System Contacts in ReddiNet- ED Charge nurse will be familiar.
Permit for Cardiovascular Surgery or plan for transfer as below:	■ Copy of permit		As above.
<ul> <li>Alternate criteria for cardiovascular surgical capability:</li> <li>Written transfer agreements with one hospital within 20 miles that has cardiovascular capability and transfer plan for rapid transfer of patients needing cardiovascular surgery.</li> <li>An active process to monitor time expectations for transfer of patients needing cardiovascular surgery</li> </ul>	<ul> <li>Policy for emergent transfer of STEMI patient needing surgical intervention</li> <li>Contract with a company providing critical care (CCT) transfers</li> <li>Transfer policies for cardiovascular pt.</li> </ul>		As above.

Standard	Evidence of Standard	Meets Standard	Comments & Recommendations
Intra-aortic Balloon pump capability with staffing available 24/7/365	Staffing policies that demonstrate support of operations		Have there been any changes since the last site visit? If so, please provide an update.
Protocols for triage, diagnosis, and Cardiac Catheterization Laboratory activation  Single activation phone call for alert of the STEMI team initiated from the ED  Criteria for activation of the STEMI team prior to patient's arrival.	Copy of internal policies		As above.
30-minute door-to-patient arrival in the CCL.  *Strive for 20 minutes.  Number of emergent PCI over the past 12 months (July 1, 2021-June 30, 2022) and the number of times the cardiologist or the interventionalist response time to the CCL was > 30 minutes.	<ul> <li>Copy of policy</li> <li>Copy of any existing measurement to audit response time of all team members</li> <li>Copy of last three months of call schedule</li> </ul>		If cardiologist or interventionalist response is >30 minutes, please indicate frequency # over the past year and measures implemented to improve.
Universal acceptance of STEMI patients (no ED or CCL diversion) unless there is a declared internal disaster, equipment failure or scheduled maintenance of essential equipment for interventional cardiac procedures.	<ul><li>Copy of policy</li><li>Record of performance</li></ul>		Provide documentation of any internal disasters, equipment failure, or scheduled maintenance that precluded the SRC from accepting a patient over the past year (July 1, 2021-June 30, 2022). If none, please indicate this.
Ability to receive electronic transmission of the EMS 12- lead EKG to one or more sites	<ul><li>Copy of policy</li><li>Copy of contract with vendor</li></ul>		Please report any problems with receiving prehospital 12-lead transmissions.

Standard	Evidence of Standard	Meets Standard	Comments & Recommendations
Participation in EMS education including providing feedback to the EMS providers.	<ul> <li>Participation at County Level</li> <li>Implementation of a system to provide feedback to EMS providers.</li> </ul>		Please list any EMS educational activities the SRC has completed since the last site visit. Discuss & demonstrate system that will be used or is in use to provide feedback to EMS providers.
Collaborates with San Mateo County STEMI Referral Hospitals (SRH) in receiving acute STEMI patients in transfer	<ul><li>Copies of transfer agreements</li><li>Copy of policies for receiving transfers</li></ul>		Please provide any new information or changes since the last site visit.
Hospital Personnel			
<ul> <li>STEMI Receiving Center Program Medical Director qualifications:</li> <li>Board Certified in Internal Medicine (ABIM)</li> <li>Subspecialty certification in cardiovascular disease with interventional cardiology</li> <li>Credentialed member of medical staff with privileges for Primary PCI.</li> <li>Participates in San Mateo County STEMI QI activities</li> </ul>	<ul> <li>Copy of current board certification in internal medicine (ABIM) with current ABIM subspecialty certification in cardiovascular disease, and Interventional Cardiology</li> <li>Copy of medical staff privileges</li> </ul>		As above.
STEMI Program Manager  Current RN License, or Other qualified experience  STEMI program experience  Participates in SMC STEMI QI Program	<ul> <li>Copy of license and resume or CV</li> <li>Documentation of participation in hospitals QI process for STEMI</li> </ul>		Provide information for any new staff members.
Cardiac Cath Lab Manager  may by same individual as the program manager	Job description		As above.

Standard	Evidence of Standard	Meets Standard	Comments & Recommendations
<ul> <li>Interventional Cardiologists</li> <li>Currently Board Certified in Cardiovascular Disease</li> <li>Currently Board Certified in Interventional         Cardiology.</li> <li>Active credentialed member of medical staff with         privileges for Primary PCI</li> <li>Actively taking call</li> <li>Proficient in radial approach as monitored by the         Program Medical Director</li> </ul>	<ul> <li>Copy of current board certification in internal medicine (ABIM) with current ABIM subspecialty certification in cardiovascular disease, and Interventional Cardiology for each practitioner</li> <li>Copy of medical staff privileges</li> <li>Copy of call schedule for 3 – 6 months</li> </ul>		Provide information for any new cardiologists since designation.  Include a statement regarding SRC Medical Director oversight for each practitioner that is not currently board certified in interventional cardiology.  Reference: 2021 ACC/AHA Executive Summary
<ul> <li>Alternate plan for cardiovascular surgery capability:</li> <li>Policies and agreements in place that will allow for a transfer within 30 minutes</li> <li>Transfer agreements with at least one facility for emergent CV surgery.</li> </ul>	<ul> <li>Copy of transfer agreement with at least one facility for cardiovascular surgery</li> <li>Policy that facilitates rapid transfer of STEMI patients requiring cardiovascular surgery</li> </ul>		Please provide any update since the last site visit. If none, please indicate so.
Clinical Capabilities			
A plan for triage and treatment of simultaneous presentation of STEMI patients without diversion of a STEMI patient to an alternate facility. EMS Duty Officer is notified if unable to accept at STEMI patient.	<ul> <li>Copy of policy</li> <li>Verbalization of how to contact EMS Duty Officer.</li> </ul>		Did this occur over the last year (July 1, 2021-June 30, 2022)? If so, what was the frequency and how was this managed?
STEMI Receiving Center will have at least one available and functional EMS Agency approved mechanical CPR device with radiolucent back plate for use in the CCL.	Machine shown		Device is readily available for immediate use. How many times has this been used in the last year (July 1, 2021-June 30, 2022)?

Standard	Evidence of Standard	Meets Standard	Comments & Recommendations
The STEMI Receiving Center shall participate in the approved data collection tool, Get with the Guidelines (GWTG CAD).	Provide data to SMC for evaluation of the STEMI System		Please provide any feedback on the data collection tool.
A program shall be in place to track and improve treatment (acutely and at discharge) with ACC/AHA guideline-based Class 1 therapies	Documentation of compliance with ACC/AHA guidelines		Is there any data that is not being collected that the SRC would like to see?
Policy with identifying criteria used for patients to receive emergent angiography.	Copy of Policy or criteria		Have there been any changes?
Process Improvement			
Policy for internal and system process improvement	Copy of policy or QI plan		Please provide a copy of the policy & QIP with any updates.
Program review including:  Deaths Complications Sentinel events System issues Organization issues Post D/C results	Copy of reports Minutes of meetings		Provide an example of one complex case and how it was reviewed from a quality improvement plan.  Describe any institutional or practice changes that were or are currently being implemented as a quality improvement system enhancement.
SMC EMS QI program participation	Written agreement with SMC EMS Agency		New agreements in October 2022.
Proportion of eligible patients receiving reperfusion therapy	Provides Data to SMC EMS Agency		Provide the actual number over the past 12 months (July 1, 2021-June 30, 2022).
Number of patients who either underwent CABG within 24 hours of hospital arrival or were transferred for CABG within 24 hours of hospital arrival for failed PCI (urgent/emergent)	Provides Data to SMC EMS Agency		Provide the actual number over the past 12 months (July 1, 2021-June 30, 2022).

## San Mateo County Sample STEMI Feedback Form (EMS Field Providers and SRCs)

Case Summary:	
*Include pt. demographics, and any relevant case in	ıfo in summary*
Measure	Time
EMS dispatch	
EMS at scene	
EMS w patient	
EMS 12-lead EKG	
EMS departs scene	
Code STEMI alert activated PTA	
ED arrival	
ED EKG	
ISTAT Troponin I	
Stick time	
Revascularization	
D2B	
E2B	

#### Quality Improvement Activities

San Mateo County participates in the Cardiac Arrest Registry to Enhance Survival or CARES program and data is displayed below for CY 2021.

Extracorporeal membrane oxygenation as a pilot study for out of hospital refractory ventricular fibrillation was studied in partnership with one of our high-volume STEMI receiving facilities. LEAN/LEAP for real-time problem solving has been used to decrease the time metric from EMS at Patient Side to acquisition of the 12-lead EKG in patients with suspected ischemic chest pain. We continue to monitor this metric.

SAN MATEO COUNTY CARDIAC ARREST - CARES DATA CY 2021

**66% Male** 

34% Female

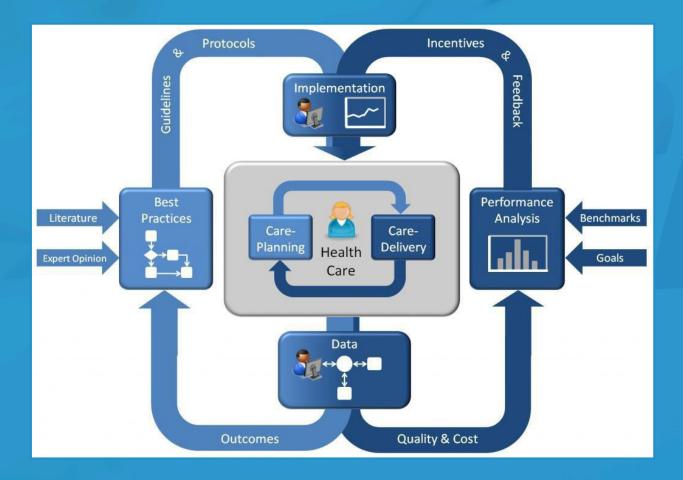
Mean age of 64.8

**Utstein Survival % N=46 or 28.3** (witnessed by a bystander & found in a shockable rhythm)

**Utstein Bystander Survival N=21 or 47.6%** (witnessed by a bystander, found in a shockable rhythm, and received some bystander intervention-CPR and/or AED).

### Action to Improve

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



Striving to create best practices, the STEMI committee focuses on clinical research, recommendations by the American College of Cardiology (ACC) and the AHA. Quarterly case reviews are presented and discussed with committee members.

The EMS Agency has led performance improvement projects focusing on decreasing the time at patient side to acquisition of the 12-lead ECG in patients with chest pain of suspected cardiac origin to < 10 min. This is also the standard expected in the hospitals > 90% of the time.

The EMS Agency, in collaboration with the SRC medical directors, put together a guiding document for adding ECMO to their service lines starting from the prehospital population.

### ECMO Alert Hospital Designation Validation Tool

This Tool serves as a guiding document for those SRCs wishing to add ECMO from the prehospital population.

Standard	Evidence of Standard	Meets Standard	Comments & Recommendations
Hospital Standards-ECMO Alert Hospitals			
Hospital Services			
Licensed tertiary care center with Adult Intensive Care Unit	Copy of hospital license		
Current license to provide Basic Emergency Care	Copy of license		
Operate a cardiac catheterization lab (CCL) licensed by the Department of Health Services and approved for emergency percutaneous coronary interventions (PCI)	Copy of permit		
ECMO cannulation capability and perfusionist staffing 24 hrs. per day/7 days per week/365 days a year	<ul> <li>On call schedule</li> <li>On call policy and procedures document</li> </ul>		
Cardiovascular operating room facilities with cardiopulmonary bypass capabilities available 24 hours per day	Copy of OR availability		
Trained in-hospital transport team 24 hours per day	Copy of shift schedule		

Protocols for triage, diagnosis and ECMO team activation  Single activation phone call for alert of the ECMO team initiated from the ED  Criteria for activation of the ECMO team prior to patient's arrival.	Copy of internal policies
15-minute ECMO Alert activation to ECMO cannulation. *Strive for ECMO flow within one hour of arrest.	<ul> <li>Copy of policy</li> <li>Copy of any existing measurement to audit response time of all team members</li> <li>Copy of last three months of call schedule</li> </ul>
Universal acceptance of cardiac arrest patients (no ED diversion) unless there is a declared internal disaster, equipment failure or scheduled maintenance of essential equipment for procedures.	<ul><li>Copy of policy</li><li>Record of performance</li></ul>
Participation in EMS education	Participation at County Level
Hospital Personnel	
<ul> <li>Physician ECMO Program Director:</li> <li>Board certified critical-care specialist, cardiovascular, vascular, or general surgeon with specific training and experience in ECMO support</li> <li>Assures appropriate specialist training and performance</li> <li>Directs quality improvement meetings and projects</li> <li>Assures proper and valid data submission to ELSO</li> <li>Is responsible for the credentialing of other physicians who care for ECMO patients or who manage the ECMO circuit</li> <li>Participates in San Mateo County ECPR QI activities</li> </ul>	<ul> <li>Copy of current board certification</li> <li>Copy of medical staff privileges</li> <li>Documentation of participation in hospitals QI process for ECMO</li> <li>Proof of staff training and credentials</li> </ul>

<ul> <li>ECMO coordinator</li> <li>An experienced Adult Intensive Care RN or registered respiratory therapist, or other qualified individual with a strong ICU background (at least one year of ICU experience), or a certified clinical perfusionist with ECMO experience</li> <li>Responsible for the supervision and training of the technical staff, maintenance of equipment, and collection of patientdata</li> <li>Participates in SMC ECPR QI Program</li> </ul>	<ul> <li>Copy of license and resume or CV</li> <li>Documentation of participation in hospitals QI process for ECMO</li> </ul>
Provide job descriptions and organizational structure clarifying the relationship between the ECMO Program Director, the ECMO coordinator, and the ECMO team.	Job descriptions and organizational chart
<ul> <li>ECMO physician staff</li> <li>Current Board Certified</li> <li>Active credentialed member of medical staff with training for ECMO cannulation</li> <li>Actively taking call</li> </ul>	<ul> <li>Copy of current board certification in general surgery, vascular surgery, cardiovascular surgery, or critical care</li> <li>Copy of completion of specific ECMO training</li> <li>Copy of medical staff privileges</li> <li>Documentation of number of ECMO procedures during the last 12 months</li> <li>Documentation of the number of ECPR ECMO patients in the last 12 months</li> <li>Copy of call schedule for 3 – 6 months</li> </ul>

<ul> <li>ECMO clinical specialist</li> <li>Strong intensive care background (at least one-year of MICU, CCU, CVICU, or other critical care experience)</li> <li>Board certified nurse; Registered Respiratory Therapist (certified by National Board of Respiratory Care); perfusionist (certified by American Board of Cardiovascular Perfusion); or physician trained in ECMO who has completed the institutional training requirements for clinical specialists</li> </ul>	Copy of CV, board certification, and ECMO training completion
Clinical Capabilities	
<ul> <li>The following should be readily available on a 24-hour basis</li> <li>Backup components of the ECMO system and supplies for all circuit components</li> <li>Adequate lighting to support surgical interventions</li> <li>Surgical instrument set for revision of cannula or exploration for bleeding complications</li> <li>A blood gas laboratory and laboratory for blood chemistry and hematologic testing</li> <li>Blood bank</li> <li>Radiographic support including CT scan</li> <li>A device for monitoring the level of anticoagulation at the bedside</li> </ul>	List of availability of these components
Volume total ECMO procedures (divided in categories below) per year the hospital as a whole and for each provider  Out of hospital cardiac arrest placed on ECMO upon arrival In hospital cardiac arrest placed on ECMO Non-arrest patients placed on ECMO	Provide data requested

ECMO Alert Hospital should be in area that can support a minimum of 6 ECMO patients per center per year	Documentation of current hospital volume for ECMO			
Policy with identifying criteria used for patients to be placed on ECMO	Copy of Policy or criteria			
Process Improvement				
Policy for internal and system process improvement	Copy of policy or QI plan			
Program review including:  Deaths Complications Sentinel events System issues Organization issues Post D/C results	Copy of reports Minutes of meetings			
SMC EMS QI program participation	Written agreement with SMC EMS Agency			
First medical contact to ECMO flow in <1h	Provides Data to SMC EMS Agency			
Proportion of eligible patients to be placed on ECMO	Provides Data to SMC EMS Agency			
System Provider Follow up	Follow up is given to first responder agency			

#### **STEMI Center Agreements**

The EMS Agency recently completed site visits at all SRCs. A STEMI Designation agreement ending June 30, 2026, was subsequently implemented with each SRC by the EMS Agency. The first year of each agreement is prorated to allow for standardized fiscal year-based contracting moving forward.

Stanford Health Care which is geographically located in Santa Clara County is designated by the EMS Agency to receive STEMI patients originating within our County. Stanford has been seamlessly integrated as a SRC in our system for many years and is also accredited by the Joint Commission (TJC) and the AHA as a Comprehensive Cardiac Care Center.

Agreement No.			

#### AGREEMENT BETWEEN THE COUNTY OF SAN MATEO AND <HOSPITAL>

This Agreement is entered this first day of November 1, 2022, by and between the County of San Mateo, a political subdivision of the state of California, hereinafter called "COUNTY," and Sta<HOSPITAL> hereinafter called "HOSPITAL."

\* \* \*

Whereas, pursuant to Section 31000 of the California Government Code, COUNTY may contract with independent HOSPITALs for the furnishing of such services to or for COUNTY or any Department thereof; and

Whereas, COUNTY has implemented a ST Segment Elevation Myocardial Infarction ("STEMI") Care System of care for patients with STEMI; and

Whereas, COUNTY wishes to assure the highest quality of care by directing STEMI patients, as defined below, to facilities committed to meeting STEMI Receiving Center ("SRC") standards; and

Whereas, COUNTY has found the HOSPITAL meets COUNTY SRC standards; and

Whereas, HOSPITAL is willing to accept designation as a SRC; and

Whereas HOSPITAL by virtue of the parties' execution of this Agreement, will be designated by as a SRC under the terms of the Agreement; and

Whereas the San Mateo County EMS Agency ("EMS AGENCY") shall represent the COUNTY in all matters pertaining to this Agreement and shall serve as the Agreement Administrator on behalf of the COUNTY;

Now, therefore, in consideration of the recitals and the mutual obligations of the parties expressed herein, both COUNTY and HOSPITAL do hereby expressly agree as follows:

#### 1. Exhibits and Attachments

The following exhibits and attachments to this Agreement are incorporated into this Agreement by this reference:

Exhibit A — Services
Exhibit B — Payments
Attachment I — § 504 Compliance

#### 2. Services to be performed by HOSPITAL

Hospital shall perform services as a STEMI Receiving Center for COUNTY in accordance with the terms, conditions, and specifications set forth herein.

#### 3. Payments

HOSPITAL shall pay COUNTY an annual service charge for STEMI Receiving Center Designation. The service charge shall be used to pay COUNTY costs of administering and evaluating the STEMI Care System, updating and enhancing the data collection system, and providing public information/outreach education. The fee shall be paid annually in full within thirty (30) calendar days following receipt by HOSPITAL of the invoice issued by the COUNTY.

#### 4. Term

Subject to compliance with all terms and conditions, the term of this Agreement shall be from November 1, 2022, through June 30, 2026.

#### 5. <u>Termination</u>

This Agreement may be terminated by HOSPITAL or by the COUNTY at any time without a requirement of good cause upon ninety (90) days' advance written notice to the other party.

COUNTY may terminate this Agreement for cause. To terminate for cause, COUNTY must first give HOSPITAL written notice of the alleged breach, upon the occurrence of any one or more of the following events, and is subject to HOSPITAL's opportunity to correct the underlying breach issues as set forth in item 6 below:

- a. Any material breach of this Agreement by HOSPITAL;
- b. Any violation by HOSPITAL of any applicable laws, regulations, or local ordinances;
- Any failure to provide timely surgical and non-surgical physician coverage for STEMI patients, causing unnecessary risk of mortality and/or morbidity for STEMI patients;
- d. Submission by HOSPITAL to COUNTY of reports or information that HOSPITAL knows or should know are incorrect in any material respect;
- e. Any failure by HOSPITAL to comply with STEMI Receiving Center Standards;
- f. Loss or suspension of licensure as an acute care hospital or loss or suspension of any existing or future special permits (Cardiac Catheterization Lab, Cardiovascular Surgery Service) issued by state or federal agencies necessary for the provision of the services provided by HOSPITAL under the terms of this Agreement.
- g. Any failure to comply with a plan of correction related to a breach of any term of this Agreement imposed by COUNTY;
- Any failure to remedy HOSPITAL's diversion of ambulances transporting STEMI patients intended for HOSPITAL;
- Any failure by HOSPITAL to assume patient care from prehospital personnel consistent with Ambulance Patient Offload Time standards established by COUNTY; and
- Repeated failure to submit specified reports, STEMI System data, or other information required under this Agreement.

#### 6. Opportunity to Cure

Prior to the exercise of COUNTY right to terminate for cause, COUNTY shall give HOSPITAL at least thirty (30) days written notice (hereinafter "Correction Period") specifying in reasonable detail the grounds for termination and all deficiencies requiring correction. COUNTY may shorten the Correction Period to immediate termination if COUNTY determines that HOSPITAL's action or inaction has seriously threatened,

or will seriously threaten, public health and safety. If HOSPITAL has not remedied each deficiency prior to the end of the Correction Period to the satisfaction of COUNTY, or COUNTY has not approved a plan of correction within the Correction Period, COUNTY may terminate this Agreement upon written notice to HOSPITAL, specifying the effective date of termination. No opportunity to cure is required prior to COUNTY termination of this Agreement for failure by HOSPITAL to complete any plan of correction imposed by COUNTY.

#### 7. Relationship of Parties

HOSPITAL agrees and understands that the work/services performed under this Agreement are performed as an independent HOSPITAL and not as an employee of COUNTY and that neither HOSPITAL nor its employees acquire any of the rights, privileges, powers, or advantages of COUNTY employees.

#### 8. Hold Harmless

#### A. General Hold Harmless

HOSPITAL shall indemnify and save harmless COUNTY and its officers, agents, employees, and servants from all claims, suits, or actions of every name, kind, and description resulting from this Agreement, the performance of any work or services required of HOSPITAL under this Agreement, or payments made pursuant to this Agreement brought for, or on account of, any of the following:

- (A) injuries to or death of any person, including HOSPITAL or its employees/officers/agents;
- (B) damage to any property of any kind whatsoever and to whomsoever belonging;
- (C) any sanctions, penalties, or claims of damages resulting from HOSPITAL's failure to comply, if applicable, with the requirements set forth in the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and all Federal regulations promulgated thereunder, as amended; or
- (D) any other loss or cost, including but not limited to that caused by the concurrent active or passive negligence of COUNTY and/or its officers, agents, employees, or servants. However, HOSPITAL's duty to indemnify and save harmless under this Section shall not apply to injuries or damage for which COUNTY has been found in a court of competent jurisdiction to be solely liable by reason of its own negligence or willful misconduct.

The duty of HOSPITAL to indemnify and save harmless as set forth by this Section shall include the duty to defend as set forth in Section 2778 of the California Civil Code.

#### 9. Assignability and Subcontracting

HOSPITAL shall not assign this Agreement or any portion of it to a third party or subcontract with a third party to provide services required by HOSPITAL under this Agreement without the prior written consent of COUNTY. Any such assignment or subcontract without COUNTY's prior written consent shall give COUNTY the right to automatically and immediately terminate this Agreement without penalty or advance notice. Documentation of written agreements to provide cardiac surgery and transportation to facilities for cardiac surgery for hospitals that do not have this service on site will be demonstrated during the STEMI Receiving Center Standards review.

#### 10. Insurance

#### A. General Requirements

HOSPITAL shall not commence work or be required to commence work under this Agreement unless and until all insurance required under this Section has been obtained and such insurance has been approved by COUNTY's Risk Management, and HOSPITAL shall use diligence to obtain such insurance and to obtain such approval. HOSPITAL shall furnish COUNTY with certificates of insurance evidencing the required coverage, and there shall be a specific contractual liability endorsement extending HOSPITAL's coverage to include the contractual liability assumed by HOSPITAL pursuant to this Agreement. These certificates shall specify or be endorsed to provide that thirty (30) days' notice must be given, in writing, to COUNTY of any pending change in the limits of liability or of any cancellation or modification of the policy.

#### B. Workers' Compensation and Employer's Liability Insurance

HOSPITAL shall have in effect during the entire term of this Agreement workers' compensation and employer's liability insurance providing full statutory coverage. In signing this Agreement, HOSPITAL certifies, as required by Section 1861 of the California Labor Code, that (a) it is aware of the provisions of Section 3700 of the California Labor Code, which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of the Labor Code, and (b) it will comply with such provisions before commencing the performance of work under this Agreement.

#### C. Liability Insurance

HOSPITAL shall take out and maintain during the term of this Agreement such bodily injury liability and property damage liability insurance as shall protect HOSPITAL and all of its employees/officers/agents while performing work covered by this Agreement from any and all claims for damages for bodily injury, including accidental death, as well as any and all claims for property damage which may arise from HOSPITAL's operations under this Agreement, whether such operations be by HOSPITAL, any HOSPITAL, anyone directly or indirectly employed by either of them, or an agent of either of them. Such insurance shall be combined single limit bodily injury and property damage for each occurrence and shall not be less than the amounts specified below:

(a) Comprehensive General Liability... \$1,000,000

(b) Motor Vehicle Liability Insurance... \$1,000,000

(c) Professional Liability...... \$1,000,000

COUNTY and its officers, agents, employees, and servants shall be named as additional insured on any such policies of insurance, which shall also contain a provision that (a) the insurance afforded thereby to COUNTY and its officers, agents, employees, and servants shall be primary insurance to the full limits of liability of the policy and (b) if the COUNTY or its officers, agents, employees, and servants have other insurance against the loss covered by such a policy, such other insurance shall be excess insurance only.

In the event of the breach of any provision of this Section, or in the event any notice is received which indicates any required insurance coverage will be diminished or canceled, COUNTY, at its option, may, notwithstanding any other provision of this Agreement to the contrary, immediately declare a material breach of this Agreement and suspend all further work and payment pursuant to this Agreement.

#### 11. Compliance with Laws

All services to be performed by HOSPITAL pursuant to this Agreement shall be performed in accordance with all applicable Federal, State, County, and municipal laws, ordinances, and regulations, including but not limited to the Health Insurance Portability and Accountability Act of 1996 (HIPAA) and the Federal Regulations

promulgated thereunder, as amended (if applicable), the Business Associate requirements set forth in Attachment H (if attached), the Americans with Disabilities Act of 1990, as amended, and Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of disability in programs and activities receiving any Federal or County financial assistance. Such services shall also be performed in accordance with all applicable ordinances and regulations, including but not limited to appropriate licensure, certification regulations, provisions pertaining to confidentiality of records, and applicable quality assurance regulations. In the event of a conflict between the terms of this Agreement and any applicable State, Federal, County, or municipal law or regulation, the requirements of the applicable law or regulation will take precedence over the requirements set forth in this Agreement.

HOSPITAL will timely and accurately complete, sign, and submit all necessary documentation of compliance.

#### 12. Non-Discrimination and Other Requirements

#### A. General Non-discrimination

No person shall be denied any services provided pursuant to this Agreement (except as limited by the scope of services) on the grounds of race, color, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy), medical condition (cancer-related), military service, or genetic information.

#### B. Equal Employment Opportunity

HOSPITAL shall ensure equal employment opportunity based on objective standards of recruitment, classification, selection, promotion, compensation, performance evaluation, and management relations for all employees under this Agreement. HOSPITAL's equal employment policies shall be made available to COUNTY upon request.

#### C. Section 504 of the Rehabilitation Act of 1973

HOSPITAL shall comply with Section 504 of the Rehabilitation Act of 1973, as amended, which provides that no otherwise qualified individual with a disability shall, solely by reason of a disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in the performance of any services this Agreement. This Section applies only to HOSPITALs who are providing services to members of the public under this Agreement.

#### D. Compliance with County's Equal Benefits Ordinance

HOSPITAL shall comply with all laws relating to the provision of benefits to its employees and their spouses or domestic partners, including, but not limited to, such laws prohibiting discrimination in the provision of such benefits on the basis that the spouse or domestic partner of the HOSPITAL's employee is of the same or opposite sex as the employee.

#### E. Discrimination Against Individuals with Disabilities

The nondiscrimination requirements of 41 C.F.R. 60-741.5(a) are incorporated into this Agreement as if fully set forth here, and HOSPITAL and any subHOSPITAL shall abide by the requirements of 41 C.F.R. 60-741.5(a). This regulation prohibits discrimination against qualified individuals on the basis of disability and requires affirmative action by covered prime HOSPITALs and subHOSPITALs to employ and advance in employment qualified individuals with disabilities.

#### F. <u>History of Discrimination</u>

HOSPITAL certifies that no finding of discrimination has been issued in the past 365 days against HOSPITAL by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other investigative entity. If any finding(s) of discrimination have been issued against HOSPITAL within the past 365 days by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or other investigative entity, HOSPITAL shall provide COUNTY with a written explanation of the outcome(s) or remedy for the discrimination prior to execution of this Agreement. Failure to comply with this Section shall constitute a material breach of this Agreement and subjects the Agreement to immediate termination at the sole option of the COUNTY.

#### G. Reporting; Violation of Non-discrimination Provisions

HOSPITAL shall report to the County Manager the filing in any court or with any administrative agency of any complaint or allegation of discrimination on any of the bases prohibited by this Section of the Agreement or the Section titled "Compliance with Laws." Such duty shall include reporting of the filing of any and all charges with the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other entity charged with the investigation or adjudication of allegations covered by this subsection within 30 days of such filing, provided that within such 30 days such entity has not notified HOSPITAL that such charges are dismissed or otherwise unfounded. Such notification shall include a general description of the circumstances involved and a general description of the kind of discrimination alleged (for example, gender-, sexual orientation-, religion-, or race-based discrimination).

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the HOSPITAL to penalties, to be determined by the County Manager, including but not limited to the following:

- termination of this Agreement;
- ii. disqualification of the HOSPITAL from being considered for or being awarded a COUNTY contract for a period of up to 3 years;
- iii. liquidated damages of \$2,500 per violation; and/or
- iv. imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Manager.

To effectuate the provisions of this Section, the County Manager shall have the authority to offset all or any portion of the amount described in this Section against amounts due to HOSPITAL under this Agreement or any other agreement between HOSPITAL and COUNTY.

#### 13. Compliance with County Employee Jury Service Ordinance

HOSPITAL shall comply with Chapter 2.85 of the COUNTY's Ordinance Code, which states that HOSPITAL shall have and adhere to a written policy providing that its employees, to the extent they are full-time employees and live in San Mateo County, shall receive from the HOSPITAL, on an annual basis, no fewer than five days of regular pay for jury service in San Mateo County, with jury pay being provided only for each day of actual jury service. The policy may provide that such employees deposit any fees received for such jury service with HOSPITAL or that the HOSPITAL may deduct from an employee's regular pay the fees received for jury service in San Mateo County. By signing this Agreement, HOSPITAL certifies that it has and adheres to a policy consistent with Chapter 2.85. For purposes of this Section, if HOSPITAL has no employees in San Mateo County, it is sufficient for HOSPITAL to provide the following written statement to COUNTY: "For purposes of San Mateo County's jury service ordinance, HOSPITAL certifies that it has no full-time employees who live in San Mateo County. To the extent that it hires any such employees during the

term of its Agreement with San Mateo County, HOSPITAL shall adopt a policy that complies with Chapter 2.85 of the COUNTY's Ordinance Code." The requirements of Chapter 2.85 do not apply if this Agreement's total value listed in the Section titled "Payments", is less than one-hundred thousand dollars (\$100,000), but HOSPITAL acknowledges that Chapter 2.85's requirements will apply if this Agreement is amended such that its total value meets or exceeds that threshold amount.

#### 14. Retention of Records; Right to Monitor and Audit

HOSPITAL shall maintain patient care, revenue, and expenditure data during the term of this Agreement and for a period of seven (7) years from the termination of this Agreement and for a period of seven (7) years from the termination of this Agreement or until all claims, if any, have been resolved, whichever period is longer, or longer is otherwise required by law for the provisions of this Agreement. Such records shall be maintained in such a fashion as to be able to separately identify STEMI patients from all other patients.

COUNTY and its authorized representatives shall be entitled to monitor, assess, and evaluate HOSPITAL's performance pursuant to this Agreement. To the extent permitted by law, such monitoring, assessments, or evaluations shall include, but not limited to, audits, inspection of premises, review of reports, review of patient records, and interviews of HOSPITAL's staff and STEMI program participants, so long as such activities do not interfere with the provision of patient care and hospital operations; and, any on-site activities are scheduled at least one (1) week in advance and at a time that is mutually convenient for both parties. At a mutually convenient time to which the parties agree in advance, during normal business hours, as often as COUNTY may deem necessary, and to the extent permitted by law, HOSPITAL shall make available to COUNTY, upon COUNTY request, all of HOSPITAL's records with respect to HOSPITAL's performance under this Agreement.

HOSPITAL may, at its discretion, as may be reasonably requested by COUNTY, participate in evaluations and/or research designed to show the effectiveness of the STEMI response and shall submit reports and materials on its STEMI services as reasonably requested by COUNTY. These reports, evaluations and studies shall be used by COUNTY to analyze and generate aggregate statistical reports on the Comprehensive Cardiac Care System for STEMI.

HOSPITAL agrees to participate and enter data in COUNTY specified data system for each STEMI patient received to help in the assessment of the overall STEMI system of care. COUNTY represents and warrants that the data system complies with all California and Federal laws related to security of patient medical records and to patient privacy.

#### 15. Merger Clause; Amendments

This Agreement, including the Exhibits and Attachments attached to this Agreement and incorporated by reference, constitutes the sole Agreement of the parties to this Agreement and correctly states the rights, duties, and obligations of each party as of this document's date. In the event that any term, condition, provision, requirement, or specification set forth in the body of this Agreement conflicts with or is inconsistent with any term, condition, provision, requirement, or specification in any Exhibit and/or Attachment to this Agreement, the provisions of the body of the Agreement shall prevail. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications or amendments shall be in writing and signed by the parties.

#### 16. Controlling Law; Venue

The validity of this Agreement and of its terms, the rights and duties of the parties under this Agreement, the interpretation of this Agreement, the performance of this Agreement, and any other dispute of any nature arising out of this Agreement shall be governed by the laws of the State of California without regard to its choice of law or conflict of law rules. Any dispute arising out of this Agreement shall be venued either in the San Mateo County Superior Court or in the United States District Court for the Northern District of California.

#### 17. Notices

Any notice, request, demand, or other communication required or permitted under this Agreement shall be deemed to be properly given when both: (1) transmitted via facsimile to the telephone number listed below or transmitted via email to the email address listed below; and (2) sent to the physical address listed below by either being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of COUNTY, to:

Name/Title: Travis Kusman, MPH, Paramedic / EMS Director

Address: San Mateo County EMS Agency

801 Gateway, Boulevard, Second Floor South San Francisco, California 94080

Telephone: 650-573-2564

Email: <u>tkusman@smcgov.org</u>

In the case of HOSPITAL, to:

Name/Title: Address: Telephone: Email:

#### 18. Electronic Signature

Both COUNTY and HOSPITAL wish to permit this Agreement and future documents relating to this Agreement to be digitally signed in accordance with California law and COUNTY's Electronic Signature Administrative Memo. Any party to this Agreement may revoke such agreement to permit electronic signatures at any time in relation to all future documents by providing notice pursuant to this Agreement.

#### 19. Payment of Permits/Licenses

HOSPITAL bears responsibility to obtain any license, permit, or approval required from any agency for work/services to be performed under this Agreement at HOSPITAL's own expense prior to commencement of said work/services. Failure to do so will result in forfeit of any right to compensation under this Agreement.

\* \* \*

THIS CONTRACT IS NOT VALID UNTIL SIGNED BY ALL PARTIES. NO WORK WILL COMMENCE UNTIL THIS DOCUMENT HAS BEEN SIGNED BY THE COUNTY PURCHASING AGENT OR AUTHORIZED DESIGNEE. **For HOSPITAL:** HOSPITAL Signature HOSPITAL Name (please print) Date **For COUNTY:** Purchasing Agent Signature Date Purchasing Agent Name (please print) (Department Head or (Department Head or **Authorized** Designee) Authorized Designee) County of San Mateo County of San Mateo Purchasing Agent or <u>Authorized</u> Designee Job Title (please print) County of San Mateo

#### **Exhibit A**

#### I. DEFINITIONS FOR THE PURPOSES OF THIS AGREEMENT

<u>Cardiac Catheterization Laboratory ("Cath lab")</u>: The setting within the hospital where diagnosticand therapeutic procedures are performed on patients with cardiovascular disease.

**CARES**: Cardiac Arrest Registry to Enhance Survival.

<u>Emergency Medical Services Agency ("LEMSA") [or "Agency"]</u>: The San Mateo County EMS Agency is designated as the Local Emergency Medical Services Agency ("LEMSA") and is statutorily charged with primary responsibility for administration and medical control of emergency medical services in San Mateo County.

<u>MEDS Viewer</u>: A proprietary product furnished at no cost by American Medical Response which allows the receiving hospital to view and obtain a copy of the prehospital patient care record for the STEMI patient.

<u>Percutaneous Coronary Intervention ("PCI")</u>: A procedure used to open or widen a narrowed or blocked coronary artery to restore blood flow supplying the heart, usually done on an emergencybasis for a STEMI patient.

<u>Quality Improvement ("QI")</u>: Methods of evaluation that are composed of structure, process, and outcome evaluations that focus on improvement efforts to identify root causes of problems, intervene to reduce, or eliminate these causes, and take steps to correct the process, and recognize excellence in performance and delivery of care.

<u>ST Segment Elevation Myocardial Infarction ("STEMI")</u>: A clinical syndrome defined by symptoms of myocardial infarction in association with ST-segment elevation on Electrocardiogram ("ECG").

<u>STEMI Critical Care System [or "STEMI Care System"]</u>: An integrated prehospital and hospital program that is intended to direct patients with field or Referral Hospital identified STEMI directly to hospitals with specialized capabilities to promptly treat these patients.

STEMI Care: Emergency cardiac care for a STEMI Patient.

<u>STEMI Information System</u>: The computer information system maintained by each SRC which captures the presentation, diagnostic, treatment, and outcome data sets required by the EMS Agency and the SRC Standards.

<u>STEMI Medical Director</u>: A qualified physician board-certified by the American Board of Medical Specialties ("ABMS") or as defined by the EMS Agency, designated by the hospital as responsible for the STEMI program, performance improvement, and patient safety programs related to a STEMI critical care system.

<u>STEMI Patient</u>: A patient with symptoms of myocardial infarction in association with ST-SegmentElevation in an ECG.

<u>STEMI Program</u>: An organizational component of the hospital specializing in the care of STEMI patients.

<u>STEMI Program Manager</u>: A registered nurse or qualified individual as defined by the EMS Agency, designated by the hospital as responsible for monitoring, coordinating, and evaluating the STEMI program.

STEMI Quality Improvement Committee: The confidential multi-disciplinary peer-review committee, comprised of representatives from the STEMI Receiving Centers ("SRC"), STEMI Referral Hospitals ("SRH") and other professionals designated by the EMS Agency, which audits the STEMI Critical Care

System, makes recommendations for system improvements, and functions in an advisory capacity to the EMS Agency on other STEMI and cardiac care system issues. Committee members designated by the EMS Agency may include, but are not limited to, SRC medical directors and program managers, representatives from SRH, interventional and non-interventional cardiologists, emergency medicine subspecialists, and representatives from ground and air emergency medical services providers.

<u>STEMI Receiving Center ("SRC")</u>: A licensed general acute care facility that enters into a written agreement with the LEMSA, meets the minimumhospital STEMI care requirements pursuant to Section 100270.124 and can perform PCI.

<u>STEMI Receiving Center Services</u>: The customary and appropriate hospital and physician services provided by a SRC to STEMI patients, which, at a minimum, meet SRC Standards.

<u>STEMI Referral Hospital ("SRH")</u>: A licensed general acute care facility that meets the minimum hospital STEMI care requirements pursuant to Cal. Code Regs. Tit. 22, Section 100270.125.

<u>STEMI Team</u>: Clinical personnel, support personnel, and administrative staff that function together as part of the hospital's STEMI program.

#### II. HOSPITAL ("STEMI RECEIVING CENTER") SERVICE REQUIREMENTS

- A. HOSPITAL shall comply with STEMI Critical Care Facility Requirements set forth in Cal. Code Regs. Tit. 22, § 100270.124, or most current version.
- B. HOSPITAL shall provide all services, equipment, and personnel including maintenance of adequate staffing levels, equipment, and facilities according to STEMI Receiving Center designation criteria required by the EMS AGENCY.
- C. HOSPITAL shall accept all San Mateo County EMS patients triaged as having a suspected STEMI transported or who "come" to HOSPITAL's facility and provide appropriate medical management for said patients without regard to race, color, national origin, religious affiliation, age, sex, sexual identity, sexual orientation, or ability to pay. For this Agreement, the phrase "comes to the emergency department" shall have the same meaning as set forth in the Emergency Medical Treatment and Active Labor Act (42 U.S.C. § 1395dd) and the regulations promulgated thereunder ("EMTALA"). Any transfer of a STEMI patient by HOSPITAL must be in accordance with EMTALA.
- D. HOSPITAL acknowledges that EMS AGENCY makes no representation, does not guarantee that STEMI patients will be delivered or diverted to HOSPITAL for care, and cannot assure that a minimum number of STEMI patients will be delivered to HOSPITAL during the term of this Agreement.
- E. HOSPITAL shall comply with EMS Agency STEMI Receiving Center Standards and shall monitor compliance with STEMI Receiving Center Standards on a regular and ongoing basis. Documentation of such efforts shall be made available to the EMS AGENCY upon request.
- F. HOSPITAL shall notify the EMS AGENCY, in writing, within twenty-four (24) hours of any failure to meet STEMI Receiving Center Standards and take corrective action within a reasonable period to correct the failure.
- G. HOSPITAL shall immediately notify the EMS AGENCY of any circumstances that will prevent HOSPITAL from providing STEMI Receiving Center services and immediately update its status in the ReddiNet system if unable to provide STEMI Receiving Center services.

- H. HOSPITAL shall comply with any EMS AGENCY plan of correction regarding any identified failure to meet STEMI Receiving Center Standards, within the timeframe(s) established by the EMS AGENCY.
- HOSPITAL shall maintain a designated telephone number to facilitate rapid access to an on-site physician for consultation with EMS personnel, community physicians, and other providers regarding care and transfer of STEMI patients.
- J. HOSPITAL shall actively and cooperatively participate as a member of the COUNTY's STEMI Continuous Quality Improvement Committee, and such other related committees that may, from time to time, be named and organized by the EMS AGENCY.
- K. HOSPITAL shall participate in the EMS AGENCY's data collection process in accordance with the local EMS policies and procedures to provide a data-driven, continuous quality improvement process including collection and monitoring of standardized performance measures.
- L. HOSPITAL shall, at a minimum, collect and maintain the data specified by the EMS AGENCY, unless additional data points are adopted by the STEMI Continuous Quality Improvement Committee.
- M. HOSPITAL shall submit all STEMI patient data and CARES data to the EMS AGENCY specified data system(s) no later than the 15<sup>th</sup> calendar day following the close of the previous month until such time as a Bidirectional Healthcare Data Exchange network is established between EMS AGENCY and HOSPITAL enabling the same, for the purposes of continuous quality improvement and training to enhance the level of care. The EMS AGENCY specified data systems at the time this Agreement is executed is *Get with the Guidelines CAD and CARES Registry*.
- N. Hospital shall allow and maintain access to prehospital electronic healthcare records via a secure link to MEDS Viewer provided by American Medical Response, under contract with the COUNTY.
- O. HOSPITAL shall have available and functional at least one (1) EMS AGENCY approved mechanical CPR device with radiolucent back plate for use in the Cardiac Cath Lab at the time of execution of this Agreement.
- P. HOSPITAL shall designate and maintain a medical director for the STEMI program who shall be a physician certified by the American Board of Internal Medicine ("ABIM") with current ABIM subspecialty certification in cardiovascular disease and interventional cardiology who will ensure compliance with STEMI Receiving Center standards and perform ongoing Quality Improvement ("QI") as part of the HOSPITAL QI Program. The STEMI Receiving Center Medical Director must be a credentialed member of the HOSPITAL's medical staff with PCI privileges.
- Q. HOSPITAL shall designate and maintain a program manager for the STEMI program who shall have experience in Emergency Medicine or Cardiovascular Care, who shall assist the STEMI Receiving Center Medical Director to ensure compliance with STEMI Receiving Center standards and the QI program.
- R. HOSPITAL shall designate and maintain a Cardiovascular Lab Coordinator who shall assist the STEMI Receiving Center Medical Director and the Program Manager to ensure compliance with STEMI Receiving Center standards and the QI Program.

- S. HOSPITAL shall maintain a daily roster of on-call Interventional Cardiologists, including physician consultants, with privileges for PCI and credentialed by the hospital in accordance with the American College of Cardiology/ American Heart Association national standards. This requirement may be waived by EMS Agency for physicians with SRC primary privileges if the following are met:
  - 1. Board certified by the ABIM with subspecialty certification in cardiovascular disease;
  - 2. Demonstrated lifetime minimum of 500 PCI procedures and 11 primary or 75 PCI procedures annually;
  - 3. Physicians must respond immediately upon notification and be available within 30 minutes of when a STEMI patient presents to the hospital; and
  - 4. The STEMI Receiving Center submits a list of Cardiologists with active PCI privileges to the Agency annually.
- T. HOSPITAL shall comply with all additional EMS Agency requirements including, but not limited to clinical performance standards, data management, and quality improvement, and evaluation processes.
- U. Data and imaging requests by COUNTY shall be fulfilled within seven (7) calendar days.

#### **III. COUNTY (EMS AGENCY) OBLIGATIONS**

- A. The EMS AGENCY has developed, implemented, and maintains a STEMI critical care system and plan for San Mateo County. The EMS AGENCY's STEMI Critical Care System Plan is updated annually and submitted to the EMS Authority as part of the EMS System Plan.
- B. The EMS AGENCY will consult with HOSPITAL prior to the adoption of any policy or procedure that concerns the administration of the STEMI Care System, STEMI public education efforts, or the triage, transport, and treatment of STEMI patients through the HOSPITAL's participation in the COUNTY's STEMI Continuous Quality Improvement Committee.
- C. The EMS AGENCY will provide or cause to be provided to HOSPITAL and/ or the STEMI Continuous Quality Improvement Committee, prehospital system data related to STEMI care.
- D. The EMS AGENCY will strive to optimize the overall effectiveness of the STEMI Care System and its individual components through the development of performance measures for each component and for the system to function (both process and outcomes measures) and by employing continuous quality improvement strategies and collaboration with stakeholders.
- E. The EMS AGENCY will update and maintain the STEMI Information System, that requires minimum data duplication and will engage with HOSPITAL to explore methods to establish bidirectional automated data health information exchange, as well as provide appropriate training and/ or training documents for its operation and use.
- F. The EMS AGENCY will provide opportunity for STEMI Receiving Centers to participate in the STEMI Critical Care System Plan goals and objectives.
- G. The EMS AGENCY establishes EMS System prehospital care protocols related to the early recognition, assessment, treatment, and transport of STEMI patients for prehospital emergency medical care personnel in collaboration with system participants and stakeholders.

- H. The EMS AGENCY establishes a mechanism for prehospital personnel to communicate findings of suspected STEMI patients in advance of the arrival to the STEMI centers via a one-call system.
- I. The EMS AGENCY develops STEMI Data System Standards in collaboration with designated STEMI Receiving Centers and implements a standardized data collection and reporting process for the STEMI critical care system. The prehospital STEMI patient care elements shall be compliant with the most current version of the California EMS Information Systems ("CEMSIS") database and the National EMS Information System ("NEMSIS") database. The hospital STEMI patient care elements shall be consistent with the U.S. Centers for Disease Control and Prevention and American Heart Association STEMI guidelines.
- J. The EMS AGENCY will coordinate a STEMI critical care system quality improvement process that shall include, at a minimum:
  - 1. Evaluation of program structure, process, and outcome;
  - 2. Review of STEMI-related deaths, major complications, and transfers;
  - 3. A multi-disciplinary STEMI Continuous Quality Improvement committee, including both prehospital and hospital members;
  - 4. Ensure participation in the Continuous Quality Improvement process by all designated STEMI Receiving Centers and prehospital providers involved in the STEMI critical care system;
  - 5. Evaluation of regional integration of STEMI movement for best practices;
  - 6. Participation in the STEMI data management system;
  - 7. Compliance with the California Evidence Code, Section 1157.7 to ensure confidentiality, and a disclosure-protected review of selected STEMI cases;
  - 8. Be responsible for ongoing performance evaluations and quality improvement activities of the STEMI critical care system;
  - 9. Provide an opportunity for HOSPITAL to participate in EMS Agency sanctioned studies or research projects;
  - Utilize "The Joint Commission" ("TJC") certification or similar standards as part of the COUNTY verification process for designation as a STEMI Receiving Center;
  - 11. Participate in certification visit(s), including that performed by TJC, to confirm State and Local requirements are being meet for continued designation as a STEMI Receiving Center; and
  - 12. Establish service charges which shall be paid by HOSPITAL to COUNTY for the costs of administering, evaluating, updating, and enhancing data collection system, and public information/ outreach education the STEMI Care System, based on actual cost to the County.

#### **Exhibit B**

In consideration of the services provided by COUNTY described in Exhibit A, and subject to the terms of the Agreement, HOSPITAL shall pay COUNTY based on the following service charge schedule and terms:

HOSPITAL shall pay COUNTY an annual service charge of for the STEMI Receiving Center Designation. The service charge shall be used to pay COUNTY costs of administering and evaluating the STEMI Care System, updating and enhancing the data collection system, and providing public information/outreach education.

#### **Service Charge**

Description	Amount
Base STEMI Receiving Center Designation Service Charge - Twelve-month Period	\$27,495.70

**CPI Adjustment**. COUNTY may increase the annual service charge by a percentage up the percentage change in the Consumer Price Index All Urban Consumers San Francisco-Oakland-San Jose ("Bay Area CPI") published by the United States Bureau of Labor, to account for inflation. The change shall be determined by comparison of the Bay Area CPI from the previous February 1, with that of February 1 of the current calendar year.

Example: If the Bay Area CPI inflation rate 12-month change for February 1, 2023 (year one of the current agreement) is 2%, the year two CPI inflation rate adjusted service charge shall be \$28,045.62.

The proposed adjustment shall be presented to the HOSPITAL by COUNTY ninety (90) days prior to the effective date of the next contract year (term: November through October).

Term	Start	End	Service Charge
Year 1	11/1/22	6/30/23	\$16,039.16 <sup>1</sup>
Year 2	7/1/23	6/30/24	TBD <sup>2</sup>
Year 3	7/1/24	6/30/25	TBD <sup>3</sup>
Year 4	7/1/25	6/30/26	TBD <sup>4</sup>

<sup>&</sup>lt;sup>1</sup> Pro-rated for seven months based on the total service charge for the twelve-month period.

The fee shall be paid annually in full within thirty (30) calendar days following receipt by HOSPITAL of the invoice issued by the COUNTY.

<sup>&</sup>lt;sup>2</sup> Base 12-month service charge + February 2023 year-over-year CPI adjustment.

<sup>&</sup>lt;sup>3</sup> Year 2 service charge + February 2024 year-over-year CPI adjustment.

<sup>&</sup>lt;sup>4</sup> Year 3 service charge + February 2025 year-over-year CPI adjustment.

#### ATTACHMENT I

#### Assurance of Compliance with Section 504 of the Rehabilitation Act of 1973, as Amended

The undersigned (hereinafter called "Contractor(s)") hereby agrees that it will comply with Section 504 of the Rehabilitation Act of 1973, as amended, all requirements imposed by the applicable DHHS regulation, and all guidelines and interpretations issued pursuant thereto.

The Contractor(s) gives/give this assurance in consideration of for the purpose of obtaining contracts after the date of this assurance. The Contractor(s) recognizes/recognize and agrees/agree that contracts will be extended in reliance on the representations and agreements made in this assurance. This assurance is binding on the Contractor(s), its successors, transferees, and assignees, and the person or persons whose signatures appear below are authorized to sign this assurance on behalf of the Contractor(s).

The Contractor(s): (Check a or b)  ☐ a. Employs fewer than 15 persons.	
	d, pursuant to section 84.7 (a) of the regulation (45 C.F.R. lowing person(s) to coordinate its efforts to comply with the DHHS
Name of 504 Person:	
Name of Contractor(s):	
Street Address or P.O. Box:	
City, State, Zip Code:	
I certify that the above information	is complete and correct to the best of my knowledge
Signature:	
Title of Authorized Official:	
Date:	

\*Exception: DHHS regulations state that: "If a recipient with fewer than 15 employees finds that, after consultation with a disabled person seeking its services, there is no method of complying with (the facility accessibility regulations) other than making a significant alteration in its existing facilities, the recipient may, as an alternative, refer the handicapped person to other providers of those services that are accessible."

### Training and Education

Our quarterly SMC STEMI CQI meetings all feature case studies and literature review of cardiac topics. At each meeting, a relevant journal article is reviewed, including discussion of how it relates to our system. Content has included best practices for dual anti-platelet agents, termination of resuscitation, and staging versus culprit lesion percutaneous coronary intervention (PCI) as examples.

#### Public Education & Health Promotion

Public education to promote cardiac health has been conducted since the last submission. Some examples include cardiopulmonary resuscitation (CPR) classes for the public, outreach events including virtual education platforms addressing atrial fibrillation, and diet for a healthy heart. Youth and young adult heart screening was conducted utilizing the Via Heart Project which screens for undiagnosed heart defects which can lead to sudden cardiac arrest and death.

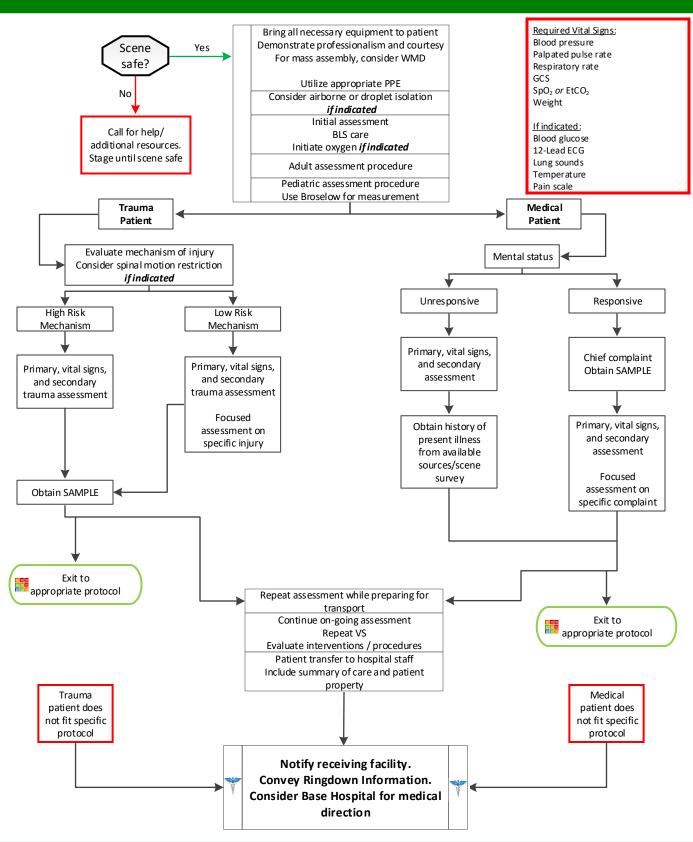
## Clinical Protocols and Policies

Our clinical protocols outline the care for the STEMI patient. G01, Routine Medical Care, describes the clinical care and notification or ringdown to the receiving hospital for the STEMI patient. Clinical protocol A06 is the treatment protocol for the STEMI patient.

Relevant clinical policies included are Facilities EMS 605, the policy for STEMI Receiving Center Standards and Designation, EMS 603, the policy for hospital emergent interfacility transfers, and Reference 902 which is the STEMI Data Dictionary. EMS 603 facilitates emergent transfer from a non-STEMI Receiving Center to a SRC for emergent treatment. Our data dictionary defines the data elements, definitions, and variables used by SRCs in San Mateo County.

# EMS Treatment PG01 – Routine Medical Care and STEMI Ringdown Notification

## Routine Medical Care



## Routine Medical Care

Scene Safety Evaluation: Identify potential hazards to prehospital providers, patient, and public. Identify the number of patients and utilize triage protocol if indicated. Observe patient position and surroundings.

General: All patient care must be appropriate to the provider level of training and documented in the ePCR. The ePCR narrative should be considered a story of the circumstances, events, and care of the patient and should allow the reader to understand the complaint, assessment, treatment, why procedures were performed, and why indicated procedures were not performed as well as ongoing assessments and response to treatment and interventions.

Adult Patient: An adult should be suspected of being acutely hypotensive when systolic blood pressure is less than 90mmHg. Diabetic patients and women may have atypical presentations of cardiac-related problems such as MI. General weakness can be the symptom of a very serious underlying process. Beta blockers and other cardiac drugs may prevent a reflexive tachycardia in shock with low to normal pulse rates.

Geriatric Patient: Falls, car collisions, hip fractures, and dislocations have high mortality rates. Altered mental status is not always dementia. Always check BGL and assess for signs for stroke, trauma, etc. with any alteration in a patient's baseline mental status. Minor or moderate injury in the typical adult may be very serious in the elderly.

Pediatric Patient: A pediatric <u>medical</u> patient is defined as any patient who can be measured on a Broselow Tape. A pediatric trauma patient is defined as any patient < 15 years of age. Special needs children may require continued use of Pediatric based protocols regardless of age and weight. Initial assessment should utilize the Pediatric Assessment Triangle which encompasses appearance, work of breathing and circulation to skin. The order of assessment may require alteration dependent on the developmental state of the pediatric patient. Generally the child or infant should not be separated from the caregiver unless absolutely necessary during assessment and

Special note on oxygen administration and utilization: Oxygen in prehospital patient care is probably over utilized. Oxygen is a pharmaceutical drug with indications, contraindications as well as untoward side effects. Utilize oxygen when indicated, not because it is available. A reasonable target oxygen saturation for most patients is 92% regardless of delivery device.

#### **Pearls**

- Utilize body substance isolation for all patients.
  - All-hazards precautions include standard PPE plus airborne and contact precautions. This level of precaution is utilized during the initial phases of an outbreak when the etiology of the infection is unknown or when the causative agent is found to be highly contagious (e.g., Ebola, MERS, SARS).
  - Airborne precautions include standard PPE plus a N95 or P100 mask. This level of precaution is utilized for very small germs like tuberculosis, measles, and chicken pox.
  - Droplet precautions include standard PPE plus a standard surgical mask for providers who accompany patients in the back of the ambulance and a surgical mask or NRB O<sub>2</sub> mask for the patient. This level of precaution should be utilized when influenza, meningitis, mumps, streptococcal pharyngitis and other illnesses spread via large particle droplets are suspected. A patient with a potentially infectious rash should be treated with droplet precautions.
  - Contact precautions include standard PPE plus utilization of a gown, change of gloves after every patient contact and strict hand washing precautions. This level of precaution is utilized when multi-drug resistant organisms (e.g., MRSA and VRE), scabies, herpes zoster (shingles), or other illnesses spread by contact are suspected.
- Timing of transport should be based on the patient's condition and the destination policy.
- Never hesitate to contact the Base Hospital as a high risk refusal resource for any patient who refuses transport.
- SAMPLE: Signs/Symptoms; Allergies; Medications; PMH; Last oral intake; Events leading to injury/illness.
- For patients on whom a cardiac monitor has been placed, the standard of care and expectation is that they remain on the cardiac monitor until such time that transfer of care has occurred at the hospital.



# **General Treatment Protocols**

## Routine Medical Care

#### **Trauma Ringdowns**

- Unit ID (i.e. M107 or San Mateo Medic 42)
- Code 2 or Code 3 with trauma activation
- Age
- Gender
- Mechanism of Injury: Blunt vs. penetrating

#### Δ//Ν

- Restrained vs. unrestrained
- Location inside car
- Speed
- Type of MVA (e.g., head-on/rear-ended/ t-bone/rollover
- Damage
- Airbag deployment

#### **FALL**

- Height
- Surface
- Taking blood thinners?

#### **ASSAULT**

- Punched, kicked, struck by an object GSW
- Wound location(s)
- Type of weapon (e.g., handgun/shotgun/ rifle)

#### **STABBING**

- Wound location(s)
- Size of blade
- Type of blade (e.g., serrated or smooth)
- Chief complaint
- Mental status and GCS
- Physical findings
- Vital signs (BP/HR/RR/O<sub>2</sub> sat/BGL)
- Treatment
- ETA
- How do you copy?

#### Stroke/ALOC Ringdowns

- Unit ID (i.e. M107 or San Mateo Medic 42)
- Code 2 or Code 3 with stroke alert
- Age
- Gender
- Time last known well
- Mental status and GCS
- Chief Complaint
- Physical findings
- Vital signs (BP/HR/RR/O<sub>2</sub> sat/BGL/Temp)
- Treatment
- Patient is positive/negative for blood thinners
- MR# or patient name and DOB
- ET/
- How do you copy?

#### STEMI/Medical Ringdowns

- Unit ID (i.e. M107 or San Mateo Medic 42)
- Code 2 or Code 3 with STEMI alert
- Age
- Gender
- Chief Complaint
- Physical findings
- Vital signs (BP/HR/RR/O<sub>2</sub> sat/BGL/Temp)
- Treatment
- 12-Lead ECG has been transmitted to your facility
- MR# or patient name and DOB
- FTA
- How do you copy?

Best family contact and phone number must be gathered on all patients and relayed to receiving hospital staff during transfer of care

## EMS Treatment Protocol A06 – Treatment Protocol for the STEMI Patient

## Chest Pain: STEMI

For any suspected STEML with or without chest pair

#### History

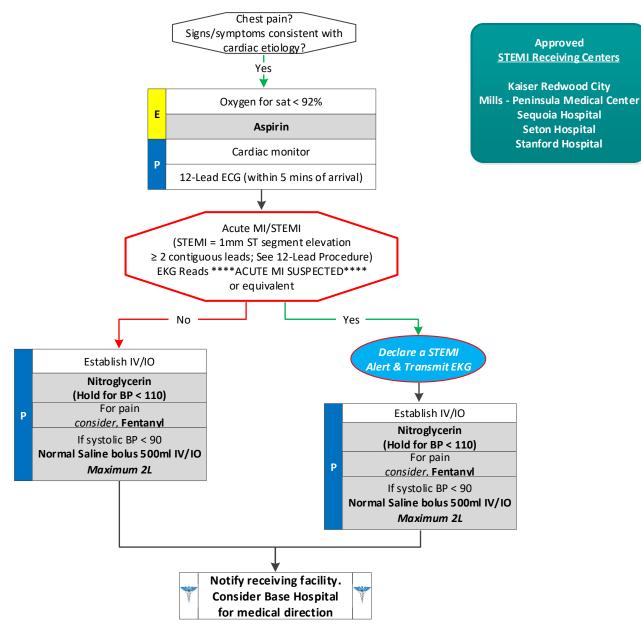
- Age
- Medications (Erectile dysfunction medications)
- Past medical history (e.g., MI, angina, diabetes, or post menopausal)
- Allergies
- · Recent physical exertion
- Onset
- Provocation
- Quality (e.g., pressure, constant, sharp, dull, etc.)
- Region/Radiation/Referred
- **S**everity (0 10 scale)
- Time (onset/duration/repetition)

#### Signs and Symptoms

- Heart rate < 60 with associated hypotension, acute altered mental status, chest pain, acute CHF, seizures, syncope, or shock secondary to bradycardia
- Chest pain
- Respiratory distress
- Hypotension or shock
- · Altered mental status
- Syncope
- Nausea
- Abdominal Pain
- Diaphoresis

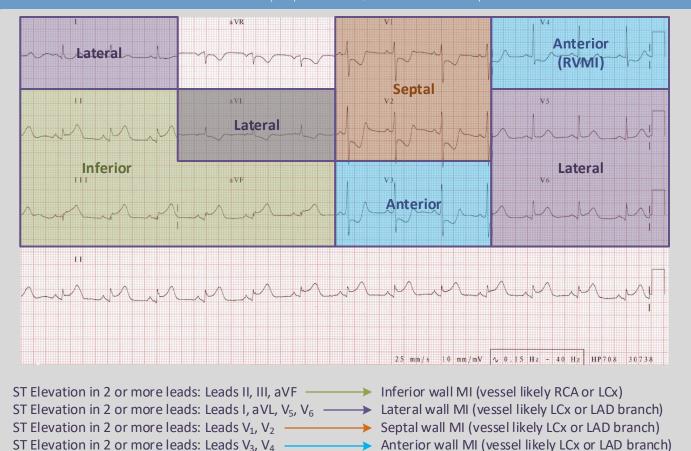
#### **Differential**

- Acute myocardial infarction
- Hypoxia
- Pacemaker failure
- Hypothermia
- · Sinus bradycardia
- Athletes
- Head injury (elevated ICP) or stroke
- Spinal cord lesion
- Sick sinus syndrome
- AV blocks (e.g., 1°, 2°, or 3°)
- Overdose



## hest Pain: STEMI

For any suspected STEMI, with or without chest pain



\*\*Look for ST DEPRESSION in reciprocal leads (opposite wall) to confirm diagnosis.

#### **Pearls**

- If there is question about a 12-Lead ECG, transmit it to the closest STEMI Center for physician interpretation.
- Avoid Nitroglycerin in any patient who has used Viagra (Sildenafil) or Levitra (Vardenafil) in the past 24 hours or Cialis (Tadalafil) in the past 36 hours due to the potential of severe hypotension.
- Avoid Nitroglycerin in patients who are having an inferior STEMI
- Many STEMIs evolve during prehospital care and may not be noted on the initial 12-Lead ECG.
- An ECG should be obtained prior to treatment for bradycardia if patient condition permits.
- If a patient has taken their own Nitroglycerin without relief, consider potency of medication. Provider maximum doses do not include patient administered doses.
- Monitor for hypotension after administration of nitroglycerin and opioids.
- Diabetics, geriatric, and female patients often have atypical pain, or only generalized complaints. Suspect cardiac etiology in these patients, and perform a 12-Lead ECG.



<sup>\*\*</sup>Isolated ST elevation in aVR with ST depression in all other leads should raise suspicion for a proximal LAD Artery injury or Left Main Coronary Artery abnormality. This is not STEMI criteria, but the 12-Lead ECG should be transmitted to the ED for consultation. Consider transport to a STEMI receiving center.

# EMS Policy 605 – STEMI Receiving Center Designation and Standards



EMS POLICY	605
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

#### STEMI RECEIVING CENTER STANDARDS AND DESIGNATION

#### I. PURPOSE

This policy defines the criteria for designation as a STEMI Receiving Center in San Mateo County.

#### II. AUTHORITY

Health and Safety Code, Division 2.5, Sections 1791.102, 1797.100, 1797.102, 1797.103, 1797.104, 1797.107, 1797.114, 1797.174, 1797.176, 1797.200, 1797.202, 1797.204, 1797.206, 1797.214, 1797.220, 1797.222, 1797.250, 1797.254, 1797.540, 1798.150, 1798.167, 1798.170, 1798.172, and 1798.175.; and California Code of Regulations, Title 22, Division 9, Chapter 7.1.

#### III. DEFINITIONS

<u>Cardiac Catheterization Laboratory ("Cath lab")</u>: The setting within the hospital where diagnostic and therapeutic procedures are performed on patients with cardiovascular disease.

<u>Cardiac Catheterization Team</u>: The specially trained health care professionals that perform percutaneous coronary intervention. The Team may include, but is not limited to, an interventional cardiologist, mid-level practitioners, registered nurses, technicians, and other health care professionals.

**CARES**: Cardiac Arrest Registry to Enhance Survival.

Emergency Medical Services Agency ("LEMSA") [or "Agency"]: The San Mateo County EMS Agency is designated as the Local Emergency Medical Services Agency ("LEMSA") and is statutorily charged with primary responsibility for administration and medical control of emergency medical services in San Mateo County.

<u>Immediately Available</u>: Unencumbered by conflicting duties or responsibilities, responding without delay upon receiving notification, or being physically available to the specified area of the hospital when the patient is delivered in accordance with EMS Agency policies and procedures.



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<u>Interfacility Transfer</u>: The transfer of a patient from one acute general care facility to another acute general care facility.

<u>MEDS Viewer</u>: A proprietary product furnished at no cost by American Medical Response which allows the receiving hospital to view and obtain a copy of the prehospital patient care record forthe STEMI patient.

<u>Percutaneous Coronary Intervention ("PCI")</u>: A procedure used to open or widen a narrowed or blocked coronary artery to restore blood flow supplying the heart, usually done on an emergencybasis for a STEMI patient.

<u>Quality Improvement ("QI")</u>: Methods of evaluation that are composed of structure, process, and outcome evaluations that focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate these causes, and take steps to correct the process, and recognize excellence in performance and delivery of care.

<u>ST Segment Elevation Myocardial Infarction ("STEMI")</u>: A clinical syndrome defined by symptoms of myocardial infarction in association with ST-segment elevation on Electrocardiogram ("ECG").

<u>STEMI Critical Care System [or "STEMI Care System"]</u>: An integrated prehospital and hospital program that is intended to direct patients with field or Referral Hospital identified STEMI directlyto hospitals with specialized capabilities to promptly treat these patients.

STEMI Care: Emergency cardiac care for a STEMI Patient.

<u>STEMI Information System</u>: The computer information system maintained by each SRC which captures the presentation, diagnostic, treatment and outcome data sets required by the EMS Agency and the SRC Standards.

<u>STEMI Medical Director</u>: A qualified physician board-certified by the American Board of MedicalSpecialties ("ABMS") as defined by the EMS Agency and designated by the hospital that is responsible for the STEMI program, performance improvement, and patient safety programs related to a STEMI critical care system.

<u>STEMI Patient</u>: A patient with symptoms of myocardial infarction in association with ST-SegmentElevation in an ECG.

STEMI Program: An organizational component of the hospital specializing in the care of



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#### STEMIpatients.

<u>STEMI Program Manager</u>: A registered nurse or qualified individual as defined by the EMS Agency, and designated by the hospital responsible for monitoring, coordinating and evaluating the STEMI program.

STEMI Quality Improvement Committee: The confidential multi-disciplinary peer-review committee, comprised of representatives from the STEMI Receiving Centers ("SRC"), STEMI Referral Hospitals ("SRH") and other professionals designated by the EMS Agency, which auditsthe STEMI Critical Care System, makes recommendations for system improvements, and functions in an advisory capacity to the EMS Agency on other STEMI and cardiac care system issues. Committee members designated by the EMS Agency may include, but are not limited to, SRC medical directors and program managers, representatives from SRH, interventional andnon-interventional cardiologists, emergency medicine sub-specialists, and representatives fromground and air emergency medical services providers.

<u>STEMI Receiving Center ("SRC")</u>: A licensed general acute care facility that enters into a written agreement with the LEMSA, meets the minimumhospital STEMI care requirements pursuant to Section 100270.124 and can perform PCI.

<u>STEMI Receiving Center Services</u>: The customary and appropriate hospital and physician services provided by a SRC to STEMI patients, which, at a minimum, meet SRC Standards.

<u>STEMI Referral Hospital ("SRH")</u>: A licensed general acute care facility that meets the minimumhospital STEMI care requirements pursuant to Section 100270.125.

<u>STEMI Team</u>: Clinical personnel, support personnel, and administrative staff that function together as part of the hospital's STEMI program.

#### IV. POLICY

- A. A STEMI Receiving Center ("SRC"), approved and designated by the Agency, shallmeet the following requirements:
  - 1. Enter into a written agreement with the Agency;
  - 2. The hospital shall have established protocols for triage, diagnosis, and Cath Lab activation following field notification;
  - 3. The hospital shall have a single call activation system to activate the cardiac



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catheterization team directly;

- 4. Written protocols shall be in place for the identification of STEMI patients;
- 5. At a minimum, these written protocols shall be applicable in the Intensive Care Unit/Coronary Care Unit, Cath Lab, and the Emergency Department;
- 6. The hospital shall be available for treatment of STEMI patients twenty-four (24) hours perday, seven (7) days per week, three hundred and sixty-five (365) days per year;
- 7. The hospital shall have a process in place for the treatment and triage of simultaneously arriving STEMI patients;
- 8. The hospital shall maintain STEMI Team and Cardiac Catheterization Team call rosters;
- 9. The Cardiac Catheterization Team, including appropriate staff determined by the Agency, shall be immediately available;
- 10. The hospital shall agree to accept all STEMI patients according to the local policy;
- 11.STEMI receiving centers shall comply with the requirement for a minimum volume of procedures for designation required by the Agency;
- 12. The hospital shall have a STEMI program manager and a STEMI medical director;
- 13. The hospital shall have job descriptions and organizational structure clarifying the relationship between the STEMI medical director, STEMI program manager, and the STEMI team;
- 14. The hospital shall participate in and comply with all aspects of the Agency quality improvement processes related to a STEMI critical care system;
- 15. A SRC without cardiac surgery capability on-site shall have a written transfer plan and agreements for transfer to a facility with cardiovascular surgery capability; and
- 16.A SRC shall have reviews by the Agency or other designated agency conducted at least every three years.
- B. STEMI Referring Hospital ("SRH") Requirements:
  - 1. The hospital shall be committed to supporting the STEMI Program;
  - 2. The hospital shall be available to provide care for STEMI patients twenty-four (24)



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hoursper day, seven (7) days per week, three hundred and sixty-five (365) days per year;

- 3. Written protocols shall be in place to identify STEMI patients and provide an optimal reperfusion strategy, using fibrinolytic therapy;
- 4. The Emergency Department shall maintain a standardized procedure for the treatment of STEMI patients;
- 5. The SRH shall have a transfer process through interfacility transfer agreements and have pre-arranged agreements with EMS ambulance providers for rapid transport of STEMI patients to a SRC;
- 6. The SRH shall have a program to track and improve treatment of STEMI patients;
- 7. The SRH must have a plan to work with a STEMI receiving center and the EMS Agency on quality improvement processes; and
- 8. A SRH designated by the EMS Agency shall have a review conductedat least every three years.

#### C. Personnel

- SRC Medical Director
  - a. The SRC shall designate a medical director for the STEMI program who shall be a physician certified by the American Board of Internal Medicine (ABIM) with current ABIM sub-specialty certification in cardiovascular disease and interventional cardiology who will ensure compliance with these SRC standards and performongoing Quality Improvement ("QI") as part of the hospital QI Program.
  - b. The SRC Medical Director must be a credentialed member of the medical staff with PCI privileges.

#### 2. SRC Program Manager

The SRC shall designate a program manager for the STEMI program who shall have experience in Emergency Medicine or Cardiovascular Care, who shall assist the SRC Medical Director to ensure compliance with these SRC standards and theQI program.

3. Cardiovascular Lab Coordinator



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The SRC shall have a Cardiovascular Lab Coordinator who shall assist the SRC Medical Director and the SRC Program Manager to ensure compliance with theseSRC Standards and the QI Program.

#### 4. Physician Consultants

The SRC shall maintain a daily roster of on-call Interventional Cardiologists with privileges for PCI and credentialed by the hospital in accordance with the American College of Cardiology/ American Heart Association national standards. This requirement may be waived by EMS Agency for physicians with SRC primary privileges if the following are met:

- a. Board certified by the ABIM with subspecialty certification in cardiovascular disease;
- b. Demonstrated lifetime minimum of 500 PCI procedures and 11 primary or 75 PCI annually;
- c. These physicians must respond immediately upon notification and be available within 30 minutes of when a STEMI patient presents to the hospital; and
- d. The SRC will submit a list of Cardiologists with active PCI privileges to the Agency annually.

#### D. Clinical Process Performance Standard

- 1. The overall goal of the STEMI Care System in San Mateo County is to minimize the interval between first medical contact to coronary artery reperfusion.
- 2. SRCs will adopt evidence-based strategies to reduce time to reperfusion.
- 3. An on-going internal quality improvement process, including data measurements and feedback from STEMI patients and SRHs.

#### E. Additional Requirements

Internal policies and procedures shall be developed for the following:

- STEMI Alert: Through a "one call" process, the interventional cardiologist and cardiac catheterization lab team will be immediately contacted upon notification by prehospital personnel that they are transporting a patient on whom a 12-Lead ECG that has been interpreted as an "Acute MI Suspected" or "Meets ST Elevation MI Criteria;"
- 2. Interventional cardiologist and cardiac catheterization laboratory staff will be required



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to respond immediately upon notification and have a response time standard of 20-30 minutes;

- 3. Emergency medicine physicians will have the authority to activate the cardiac catheterization laboratory staff;
- 4. Allow the automatic acceptance of any STEMI patient from a San Mateo County hospital upon notification by the transferring physician;
- 5. An interventional cardiologist assumes care of the patient from the time the patient arrives at the SRC;
- Accept all patients meeting STEMI patient triage criteria or upon transfer notification from a SRH, except when on an internal disaster, and provide a planfor triage and treatment of simultaneously presenting STEMI patients, regardless of ICU/ CCU or ED status;
- 7. Criteria for patients to receive emergent angiography or emergent fibrinolysis based on physician decisions for individual patients;
- 8. Data listed in 902 STEMI Data Dictionary shall be collected on an ongoing basis and provided to the Agency;
- 9. Data will be entered into the Agency approved collection system(s) and submitted monthly, by no later than the 15th calendar day of the following month. The Agency specified data system at the present time is *Get with the Guidelines CAD*; and
- 10.In consultation with the STEMI CQI Committee, the Agency will update the data dictionary and/ or identify another process to expedite data submission and reduce duplication.

#### F. Data Management

- 1. In accordance with Title 22, Division 9, Chapter 7.1 ST-Elevation Myocardial Infarction Critical Care System regulations, data listed in this section shall be collected on an ongoing basis and provided to the Agency.
- 2. Data will be submitted and entered in the Agency approved data collection system and submitted monthly, by no later than the 15th calendar day of the following month.



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3. In consultation with the STEMI CQI Committee, the Agency will update the data dictionary and/ or identify another process to expedite data submission and reduce duplication.

#### G. Quality Improvement and Evaluation Process

- 1. The Quality Improvement ("QI") program will include a process to review all cases of STEMI patients taken to the catheterization laboratory at the end of the procedure and provide immediate feedback to the staff in the Emergency Department and the catheterization laboratory prior to the end of that shift. Additionally, formal feedback utilizing the standardized format designated by the Agency will be provided to any prehospital agency or SRH that participated in the care of a "STEMI Activation" patient, within 72 hours. Approved feedback back forms include the Mission: Lifeline Feedback Report in Get with the Guidelines CAD.
- 2. A SRC QI program shall be established, maintained, and conducted to review performance and outcome data for STEMI patients.
- 3. The SRC will actively participate in the Agency STEMI QI Program. This will require regular meeting attendance by the SRC Medical Director or designee, who will be a staff interventional cardiologist, and the SRC Program Manager.
- 4. A quality improvement process shall include, at a minimum:
  - a. Evaluation of program structure, process, and outcome;
  - b. Review of STEMI-related deaths, major complications, and transfers;
  - c. A multidisciplinary STEMI Quality Improvement Committee, including both prehospitaland hospital members;
  - d. Participation in the QI process by all designated STEMI centers and prehospital providers involved in the STEMI critical care system;
  - e. Evaluation of regional integration of STEMI patient movement; and
  - f. Compliance with California Evidence Code, Section 1157.7 to ensure confidentiality and a disclosure-protected review of selected STEMI cases.

#### **VI. PROCEDURE**

A. Designation



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A SRC may be designated following satisfactory review of written documentation and a site survey, when deemed necessary, by the Agency.

- 1. Application: Eligible hospitals shall submit a written letter of intent and request for SRC approval to the Agency, as well as complete a formal application documenting the compliance of the hospital with Agency SRC Standards.
- 2. Approval: SRC approval or denial shall be made in writing by the Agency to the requesting hospital within a reasonable time (30 days) after receipt of the request for approval, application completion and submission of all required documentation.

#### B. Re-designation

- 1. The Agency may suspend or revoke the approval of a SRC at any time for failure to comply with any applicable policies, procedures, or regulations.
- 2. An SRC may be re-designated following a satisfactory Agency review in accordance with current standards and the term of the written agreements.
- 3. SRCs shall receive notification of evaluation from the EMS Agency.
- 4. SRCs shall respond in writing regarding program compliance.
- 5. On-site SRC visits for evaluative purposes may occur.
- 6. SRCs shall notify the Agency by telephone, followed by a letter or email within 48 hours of changes in program compliance or performance.

#### C. Discontinuation

The SRC shall submit a written 90 calendar day notice to Agency prior to the discontinuation of SRC services.

## EMS Policy 603 – Hospital Emergent Interfacility Transfer



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Approval: EMS Medical Director Greg Gilbert, MD	Signed:

#### HOSPITAL EMERGENT INTERFACILITY TRANSFERS

#### I. PURPOSE

This policy provides guidance for hospital emergency or other departments (ICU) for ground ambulance transport of emergency patients that require interfacility transfer at the Basic (EMT), Advanced Life Support (Paramedic), or Critical Care Transport (CCT) levels.

#### **II. AUTHORITY**

California Code of Regulations, Title 22, Division 9, §100128 and §100170

#### **III. DEFINITIONS**

Advanced Life Support ("ALS"): Special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of a local EMS system at the scene of an emergency, during transport to an acute care hospital and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital.

<u>Air ambulance</u>: Any aircraft specifically constructed, modified, or equipped and staffed for the primary purpose of responding to emergency medical calls and transporting critically ill or injured patients. Air ambulance aircraft shall be ALS capable.

<u>Basic Life Support ("BLS")</u>: Emergency first aid and cardiopulmonary resuscitation procedures which, as a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life without invasive techniques until the victim may be transported or until advanced life support is available.

<u>Critical Care Transport</u>: Special services designed to provide definitive critical care such that the failure to assess/ recognize resuscitation needs and urgently initiate and maintain acute medical diagnostics and/ or interventions, pharmacological interventions, or technologies would likely result in sudden, clinically significant, or life-threatening deterioration in the patient's condition. These capabilities exceed those of an Advanced Life Support EMS unit.



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<u>Emergency Medical Services Agency ("LEMSA") [or "Agency"]</u>: The San Mateo County EMS Agency is designated as the Local Emergency Medical Services Agency (LEMSA) and is statutorily charged with primary responsibility for administration and medical control of emergency medical services in San Mateo County.

#### IV. POLICY

- A. All transfers shall comply with State and Federal laws.
- B. Paramedic/ 9-1-1 system personnel may be used to transport patients ONLY as a last resort when alternative forms of transportation are unavailable, or when the delay in obtaining alterative transport would pose an imminent threat to the patient's health. Hospital personnel accessing the EMS system for transfers shall note that by accessing the EMS system, they may deplete the EMS resources of their local community.
- C. Interfacility transfers utilizing Paramedic/ 9-1-1 system personnel remain under San Mateo County LEMSA medical direction and control.
- D. Paramedic/ 9-1-1 system units are staffed with two personnel: Typically, one paramedic, and one EMT.
- E. Unstable patients shall be transferred only when the reason for the transfer is to medically facilitate the patient's care. The transport of the patient must have the concurrence of both the transferring and receiving physicians that the transfer is appropriate.
- F. The sending physician is responsible for determining the appropriate level of transport required.
- G. The sending physician is responsible for making arrangements for the receipt of the patient by another physician at the receiving facility.
- H. The sending physician or designee shall contact the appropriate dispatch center to arrange for transport.
- I. The sending physician or designee shall provide a verbal report and transfer documents to the arriving ambulance crew. Transfer documents must include the names of the sending and receiving physician.
- J. For patients requiring emergency transfer, specifically those needing immediate care or intervention at a higher level of care receiving hospital (e.g., critical trauma, STEMI, or stroke):



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- 1. Ensure the indication for use is appropriate. Emergency ambulance transport utilizes 9-1-1 resources and is reserved for truly emergent cases;
- 2. Activate 9-1-1 to request Interfacility Emergency Response;
- 3. Arrange transfer of the patient with the receiving physician;
- 4. Assess patient needs prior to the transport to determine if the patient needs exceed the paramedic scope of practice. If the care required during transport is beyond the paramedic scope of practice, hospital staff and/or equipment shall be provided by the transferring hospital and accompany the patient (e.g., if IV pump needed, blood transfusion in progress, management of paralytic agents for intubated patient);
- 5. Prepare transfer records for the arriving ambulance crew. The ambulance will generally arrive within thirteen (13) minutes of request and patient, paperwork, staff and equipment should be ready for transport by the time the ambulance arrives. Records which are not time sensitive or critical to immediate ongoing treatment of the patient may be faxed, emailed, or alternatively delivered to the receiving facility. If the transfer is delayed once the ambulance arrives on scene, the 9-1-1 ambulance may be reassigned to other emergency needs.
- 6. The 9-1-1 ambulance crew will arrive at the Emergency Department (ED). If the patient is being transferred from a location other than the ED, a hospital representative shall meet the responding ambulance crew immediately upon arrival, escort prehospital personnel to the patient's location, remain with the crew, and escort the crew back to the ED.



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#### V. LEVELS OF CARE FOR AMBULANCE TRANSPORT

Type of Transport	Patient Needs	Scope of Practice	Contact
9-1-1 Advanced Life Support (Paramedic) Interfacility Emergency Transfer	Emergency intervention or evaluation not available at the sending hospital (e.g., critical trauma, STEMI, stroke, obstetric care for active labor where birth is not imminent). May include neuro and vascular patients transported directly to an OR/intervention lab.	Advanced airway (ETT and King); Administer and adjust IV fluids including: Glucose, isotonic saline, lactated ringers, and those containing potassium; ECG monitoring; Defibrillation and synchronized cardioversion; Monitoring of watersealed chest tube; Administration of ACLS medications	9-1-1

Type of Transport	Patient Needs	Scope of Practice	Contact
Critical Care Transport with RN	Advanced care for patients with complex medical care needs as determined by the transferring physician and the ambulance agency. May include pediatric and obstetric patients.	Critical Care RN	Contact ambulance service directly
Air Ambulance	RN/Paramedic level of care for patients with complex medical care needs when the receiving hospital is distant and time is a critical factor. May include pediatric and obstetric patients.	Critical Care RN/Paramedic	Contact air ambulance service directly
Non-emergency Basic Life Support (EMT)	Scheduled transport of patients who require a basic level of care.	EMT	Contact ambulance service directly



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Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

#### VI. TRAUMA TRANSFER PROCEDURE

	TRAUMA TRANSFER PROCEDURE			
	Determine appropriate level of transfer using chart below. Contact receiving Trauma Center and confirm acceptance of patient.			
STEP 1	Stanford Trauma Center	Zuckerberg S.F. General Trauma Center		
SILFI	(650) 724-2243 (EMERGENCY)	(628) 206-8111 - request to speak with		
	(650) 723-4696 (Urgent adults)	Attending in Charge ("AIC") about trauma re-		
	(650) 723-7342 (Urgent pediatrics)	triage patient		
STEP 2	As soon as need for transfer is recognized, request CODE 3 TRAUMA TRANSFER using ED to Public Safety Communications microwave direct line #344.			
STEP 3	Prepare patient and paperwork for immediate transport before ambulance arrives.			
STEP 4	For trauma consults for patients not meeting red or blue box criteria, contact the Trauma Center and request to speak to the Trauma AIC about trauma re-triage patient.			

#### RED BOX EMERGENCY TRANSFER PROCEDURE

Call Trauma Center PRIOR to transfer and state "RED BOX TRAUMA TRANSFER."

ED physician determines patient requires immediate evaluation/resuscitation by a trauma center.

- Some indicators:
  - Blood pressure < 90 or decrease in blood pressure by 30 mmHg following 2L IV crystalloid
  - Head injury with blown pupil
  - Penetrating thoracic or abdominal trauma

#### **BLUE BOX URGENT TRANSFER PROCEDURE**

Call Trauma Center PRIOR to transfer.

ED physician determines patient requires urgent evaluation by a trauma center based on the following

indicators:	atient requires digent evaluation by a trauma center based on the following
ANATOMIC AREAS	FINDINGS/ RELATED INJURIES
Central Nervous System	<ul> <li>GCS &lt; 14 with abnormal CT scan</li> <li>Spinal cord or major vertebral injury</li> </ul>
Chest	<ul> <li>Major chest wall injury with &gt; 3 rib fractures and/ or pulmonary contusion</li> <li>Cardiac injury</li> </ul>
Pelvis/ Abdomen	<ul> <li>Pelvic ring disruption</li> <li>Solid organ injury confirmed by CT scan or ultrasound demonstrating abdominal fluid</li> </ul>
Major Extremity Injuries	<ul> <li>Fracture/ dislocation with loss of distal pulses and/ or ischemia</li> <li>Open long bone fractures</li> <li>Two or more long bone fractures</li> <li>Amputations that require reimplantation</li> </ul>
Multi-System Injury	<ul> <li>Trauma with associated burns – transfer to closest trauma center</li> <li>Major trauma to more than two body regions</li> <li>Signs of hypoperfusion – Lactate &gt; 4 or Base Deficit &gt; 4</li> </ul>
Co-morbid Factors	<ul> <li>Adults &gt; 65 years of age</li> <li>Pediatric &lt; 6 years of age – transfer to Stanford Pediatric Trauma Center</li> <li>Pregnancy &gt; 22 weeks gestation</li> <li>Insulin dependent diabetes</li> <li>Morbid obesity</li> <li>Cardiac or respiratory disease</li> <li>Immunosuppression</li> <li>Antiplatelet or anticoagulation agents</li> </ul>

# EMS Policy 902 – STEMI Data Dictionary



EMS POLICY	902
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

#### **STEMI DATA DICTIONARY**

#### I. PURPOSE

This policy defines the data elements, definitions, and variables used by STEMI Receiving Centers in San Mateo County.

#### II. AUTHORITY

Health and Safety Code Division 1, Part 1.8, Section 442220 and 1798-443, Division 2.5, Health and Safety Code, Division 2.5, Sections 1791.102, 1797.100, 1797.102, 1797.103, 1797.104, 1797.107, 1797.114, 1797.174, 1797.176, 1797.200, 1797.202, 1797.204, 1797.206, 1797.214, 1797.220, 1797.222, 1797.250, 1797.254, 1797.540, 1798.150, 1798.167, 1798.170, 1798.172, and 1798.175.; and California Code of Regulations, Title 22, Division 9, Chapter 7.1.

#### III. DATA DICTIONARY

Prehospital Data Element	Hospital Data Element	Element Type	Code Text	Variable Name	Code Value or Format
n/a	Patient ID	Alphanumeric text		patientid	9 characters
Sex	Gender	Single Select	Male Female Unknown	gender	1 2 3
DOB	Date of Birth	Date		dob	MM/DD/YYY (no future dates)
n/a	Zip Code	Numeric		zip	5
n/a	Payment Source	Single Select	Medicare Medicaid Private/Other Self-Pay/No Insurance	psource	1 2 3 4
Ethnicity	Race	Multi-select	American Indian or Alaska Native Black or African American White Asian Native Hawaiian or Pacific Islander UTD	1 2 3 4 5 6	
n/a	Asian	Multi-select	Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian	asian	1 2 3 4 5 6 7
n/a	Native Hawaiian or Pacific Islander	Multi-select	Native Hawaiian Guamanian or Chamorro Samoan Other Pacific Islander	hawaiian	1 2 3 4



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n/a	Hispanic Ethnicity	Single Select	Yes No/UTD	hisethni	1 2
n/a	Hispanic Ethnicity Specify	Multi-select	Mexican, Mexican American, Chicano/a Cuban Puerto Rican Another Hispanic, Latino or Spanish Origin	ethnicys	1 2 3 4
n/a	Attending Physician/Provider NPI:	Site List Drop Down		npi	Valid NPI
n/a	Arrival Date/Time	Date		arrdt	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Admission Date	Date		admdt	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Not admitted, transferred out to another acute care facility	Boolean	True False	notadm	1 Blank
n/a	Patient first evaluated	Single select	ED Cath Lab Other	pateval	1 2 3
n/a	Date/Time if ED discharge/transfer out	Date		edtrans	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	ED Physician	Site List Drop Down		ednpi	Valid NPI
n/a	Cardiac Diagnosis	Single Select	Confirmed AMI – STEMI Confirmed AMI – STEMI/non- STEMI unspecified Unstable Angina Confirmed AMI – non-STEMI Coronary Artery Disease Other	Cardiag	1 2 3 4 5 6
n/a	Means of transport to first facility	Single Select	Air Ambulance Walk-in	meanstrans	1 2 3
Unit	EMS Agency name/number	Site List Drop Down		emsnum	Valid AHA EMS ID
Case #	Run/Sequence Number	Alphanumeric text		runnum	25
Primary impression <i>or</i> Secondary impression	Cardiac arrest prior to arrival	Single Select	Yes No	capriorarr	1 2
Narrative	Was bystander CPR performed	Single Select	Yes No	bystndcpr	1 2
n/a	Was therapeutic hypothermia initiated during this episode of care	Single Select	Yes No	Hypothermia	1 2
At pt side time	EMS First Medical Contact	Date		emsfirst	MM/DD/YYYY HH:MM MM/DD/YYYY



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n/a	Non-EMS First Medical Contact	Date		nonemsfirst	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	EMS Non-System Reason for Delay	Boolean	True False	emssystdel	1 Blank
Dispatched time	EMS Dispatch	Date		emsdisp	MM/DD/YYYY HH:MM MM/DD/YYYY
At scene time	EMS arrive on scene	Date		emsarr	MM/DD/YYYY HH:MM MM/DD/YYYY
Transport time	EMS depart scene	Date		emsdepart	MM/DD/YYYY HH:MM MM/DD/YYYY
Facility activation	Destination pre- arrival alert or notification	Date		destinpre	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Method of 1st notification	Single Select	ECG transmission Phone call Radio ND	methodnot	1 2 3 4
n/a	Transferred from other facility	Single Select	Yes No	transed	1 2
n/a	Transferring facility	Site List Drop Down		transfac	Valid AHA ID
n/a	Arrival at first hospital	Date		outhosp	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Transport requested	Date		transreq	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Transport arrived Date/Time	Date		transarr	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Transfer out	Date		transout	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Facility the patient was transferred to	Site List Drop Down		faciltrans2	Valid AHA ID
n/a	Mode of transport from outside facility	Single Select	Air Ambulance	modetrans	1 2
n/a	Interfacility transport EMS agency name/number	Site List Drop Down		intertrans	Valid AHA EMS ID
EKG/ECG: 12-Lead	1 <sup>st</sup> ECG Date/Time	Date		firstecgdt	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	1st ECG obtained	Single Select	Prior to hospital arrival After first hospital arrival	firstecgobt	1 2
n/a	1st ECG non- system reason for delay	Boolean	True False	firstecgsystdel	1 Blank
n/a	STEMI or STEMI equivalent	Single Select	Yes No	stemi	1 2



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n/a	If no, other ECG findings	Single select	New or presumed new ST depression Transient ST elevation <20	othecgfind	1 2
			minutes		
n/a	If yes, STEMI or STEMI equivalent first noted	Single select	First ECG Subsequent ECG	stemifirst	1 2
n/a	If subsequent ECG, date/time of positive ECG	Date		posecgdt	MM/DD/YYYY HH:MM MM/DD/YYYY
n/a	Symptom onset date/time	Date		onsetdt	MM/DD/YYYY HH:MM MM/DD/YYYY
Vitals	Heart rate documented on first medical contact	Integer		hrfmc	0-300
n/a	Heart failure documented on first medical contact	Single select	Yes No	hffmc	1 2
n/a	Cardiogenic shock documented on first medical contact	Single select	Yes No	cardshockfmc	1 2
Medications	Patient current medications	Single select	Dabigatran Rivaroxaban Apixaban Warfarin None ND	ptcurmeds	1 2 3 4 5 6
n/a	Initial serum creatinine	Decimal		Initscr	0.1 – 59.9
n/a	Aspirin within 24 hours of arrival?	Single select	Yes No Contraindicated	asp24h	1 2 3
n/a	Positive cardiac biomarkers in the first 24 hours?	Single select	Yes No	posbio24	1 2
n/a	History of smoking?	Single select	Yes No	smokinghist	1 2
n/a	History of peripheral artery disease	Single select	Yes No	hxpad	1 2
n/a	Reperfusion candidate?	Single select	Yes No	repcand	1 2
n/a	Primary reason not reperfusion candidate	Single select	No ST elevation/LBBB Chest pain resolved ST elevation resolved MI diagnosis unclear MI symptoms >12 hours No chest pain Other	noreprsn	1 2 3 4 5 6 7
n/a	Thrombolytics?	Single select	Yes No	thromb	1 2
n/a	If yes, Thrombolytics	Date	-	dosest	MM/DD/YYYY HH:MM MM/DD/YYYY



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	dose start				
n/a	date/time  Documented non- system reason for delay thrombolytics?	Single select	Yes No	nsysreas	1 2
n/a	If yes, reason (check all that apply)	Multi-select	Cardiac arrest Intubation Patient refusal	reasdlay	1 2 3
n/a	Reason for not performing thrombolytic	Single select	Known bleeding diathesis Recent surgery/trauma Severe uncontrolled hypertension Ischemic stroke w/in 3 months except acute ischemic stroke w/in 3 hours Significant closed head or facial trauma w/in previous 3 months DNR at time of treatment decision Recent bleeding w/in 4 weeks Active peptic ulcer Traumatic CPR that precludes thrombolytics Any prior intracranial hemorrhage Pregnancy Expected DTB <90 minutes Suspected aortic dissection Intracranial neoplasm, AV malformation, or aneurysm No reason documented Prior allergic reaction to thrombolytics Other Transferred for PCI	nadmlytc	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18
n/a	PCI?	Single select	Yes No	primarypci	1 2
n/a	Physician Interventionalist NPI	Site list – single select		intervnpi	Valid NPI
n/a	Reasons for not performing PCI	Single select	Non-compressible vascular puncture(s) Spontaneous reperfusion (documented by cath only) Other Active bleeding on arrival or w/in 24 hours Patient/family refusal Not performed Quality of life decision DNR at time of treatment decision No reason documented Anatomy not suitable to primary PCI Prior allergic reaction to IV contrast Thrombolytic administered	nperfpci	1 2 3 4 5 6 7 8 9 10 11



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		1		ı	
-/-	Cath Lab	Data		cathactv	MM/DD/YYYY
n/a	activation	Date			HH:MM MM/DD/YYYY
				ptarvcth	MM/DD/YYYY
n/a	Patient arrival to	Date		piarvein	HH:MM
11/4	Cath Lab	Bato			MM/DD/YYYY
	Attending a guirel			atndarv	MM/DD/YYYY
n/a	Attending arrival to Cath Lab	Date			HH:MM
	to Cath Lab				MM/DD/YYYY
	Team arrival to			teamarrv	MM/DD/YYYY
n/a	Cath Lab	Date			HH:MM
				fata a:	MM/DD/YYYY
n/a	First PCI date/time	Date		fstpci	MM/DD/YYYY HH:MM
II/a	First FCI date/time	Date			MM/DD/YYYY
			Primary PCI for STEMI	pciind	1
			PCI for STEMI (unstable, >12 hr	Politic	2
			from sx onset)		
			PCI for STEMI (stable, > 12 hr		3
		1	from sx onset_		
n/a	PCI indication	Single select	PCI for STEMI (stable after		4
			successful fill-dose lytic) Rescue PCI for STEMI (after		_
			failed full-dose lytic)		5
			PCI for non-STEMI		6
			Other		7
			Difficult vascular access	nsysrsn	1
			Patient delays in providing		2
			consent		3
	Non-system		Other		4
n/a	reason for delay	Single select	Cardiac arrest and/or need for		_
			intubation  Difficulty crossing the culprit		5 6
			lesion		0
			None		
n/a	LVF assessment	Integer		lvfasmt	0 – 99
			This admission	lvfobtain	1
n/a	LVF assessment	Single select	W/in the last year		2
.,,	obtained	Gilligio dolloct	> 1 year ago		3
	CABG during this		Planned after discharge Yes	cabg	1
n/a	admission	Single select	No	caby	2
	LDL cholesterol		110	ldl	0 – 999
n/a	value	Integer			
n/a	LDL ND	Boolean	True	ldlnd	1
11/4	LDLIND	Dooloan	False	<u> </u>	Blank
- 1-	Discharge	D-1-		disdate	MM/DD/YYYY
n/a	date/time	Date			HH:MM
		1	Home	dschstat	MM/DD/YYYY
			Hospice – home	usurisiai	2
			Hospice – healthcare facility		3
			Acute care facility		4
n/a	Discharge status	Single select	Other healthcare facility		5
			Expired		6
			Left against medical advice/AMA		7
			Not documented or unable to		8
		L	determine (UTD)		



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	Comfort measures only	Single select	Yes No	cmo	1 2
n/a	Patient referred to cardiac rehab?	Single select	Yes No referral documented No – medical reason No – patient reason/preference No – healthcare system reason	refehab	1 2 3 4 5
n/a	Smoking cessation counseling	Single select	Yes No	smkcncl	1 2
n/a	ACEI at discharge  – prescribed	Single select	Yes No	presacei	1 2
n/a	ACEI at discharge  – contraindicated	Single select	Yes No	contacei	1 2
n/a	ARB at discharge  – prescribed	Single select	Yes No	presarb	1 2
n/a	ARB at discharge  – contraindicated	Single select	Yes No	contarb	1 2
n/a	ASA at discharge  – prescribed	Single select	Yes No	presasa	1 2
n/a	Done (ASA)	Single select	75 – 100mg > 100 mg Other Unknown	doseasa	1 2 3 4
n/a	Frequency (ASA)	Single select	Every day 2 times a day 3 times a day 4 times a day Other Unknown	freqasa	1 2 3 4 5 6
n/a	ASA at discharge  – contraindicated	Single select	Yes No	contasa	1 2
n/a	Clopidogrel at discharge – prescribed	Single select	Yes No	presclop	1 2
n/a	Dose (Clopidogrel)	Single select	75mg Other Unknown	doseclop	1 2 3
n/a	Frequency (Clopidogrel)	Single select	Every day Other Unknown	freqclop	1 2 3
n/a	Clopidogrel at discharge – contraindicated	Single select	Yes No	contclop	1 2
n/a	Prasugrel at discharge – prescribed	Single select	Yes No	prespras	1 2
n/a	Dose (Prasugrel)	Single select	5mg 10mg Other Unknown	dosepras	1 2 3 4
n/a	Frequency (Prasugrel)	Single select	Every day Other Unknown	freqpras	1 2 3
n/a	Prasugrel at discharge – contraindicated	Single select	Yes No	contpras	1 2



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	Ting analog of		l V		14
-/-	Ticagrelor at	Cin ale selest	Yes	prestica	1
n/a	discharge –	Single select	No		2
	prescribed		00	daastiss	
/	Dana (Tian malan)	Cin ale selest	90mg	dosetica	1
n/a	Dose (Ticagrelor)	Single select	Other		2
			Unknown		3
	Frequency		2 times a day	freqtica	1
n/a	(Ticagrelor)	Single select	Other		2
			Unknown		3
	Ticagrelor at		Yes	conttica	1
n/a	discharge –	Single select	No		2
	contraindicated				
	Ticlopidine at		Yes	presticlo	1
n/a	discharge –	Single select	No		2
	prescribed				
			250mg	doseticlo	1
n/a	Dose (Ticlopidine)	Single select	Other		2
	` ' '		Unknown		3
			2 times a day	freqticlo	1
n/a	Frequency	Single select	Other		2
1174	(Ticlopidine)	Cirigio coloci	Unknown		3
	Ticlopidine at		Yes	contticlo	1
n/a	discharge –	Single select	No	CONTRICIO	2
11/a	contraindicated	Sirigle select	NO		2
	Anticoagulation at		Yes	procentiacea	
/		Cin ale selest		presanticoag	1
n/a	discharge –	Single select	No		2
	prescribed		1		
	Class		Warfarin	classanticoag	1
n/a	(Anticoagulation)	Single select	Direct thrombin inhibitor		2
	(7 ti iliooagalation)		Factor Xa inhibitor		3
			Coumadin (warfarin)	medanticoag	1
			Argatroban		2
			Dabigatran		3
			Desirudin		4
	Medication		Lupirudin		5
n/a		Single select	Other direct thrombin inhibitor		6
	(Anticoagulation)		Apixaban		7
			Edoxaban		8
			Fondaparinox		9
			Rovaroxaban		10
			Other Factor Xa inhibitor		11
			No dosage listed	doseanticoag	1
			2.5mg	acces. Moodg	2
			5mg		3
			7.5mg		4
			10mg		5
n/2	Dose	Single select			6
n/a	(Anticoagulation)	Single select	15mg		
			60mg		7
			75mg		8
			150mg		9
			Other		10
			Unknown	1	11
			No frequency listed	freqanticoag	1
			Every day	i	2
n/a	Frequency	Single select	2 times a day		3
n/a	Frequency (Anticoagulation)	Single select	2 times a day 3 times a day		3 4
n/a		Single select	2 times a day		3



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			Unknown		7
n/a	Anticoagulation at discharge – contraindicated	Single select	Yes No	contanticoag	1 2
n/a	Beta blocker at discharge – prescribed	Single select	Yes No	presbeta	1 2
n/a	Beta blocker at discharge – contraindicated	Single select	Yes No	contbeta	1 2
n/a	Statin at discharge – prescribed	Single select	Yes No	presstat	1 2
n/a	Statin at discharge – contraindicated	Single select	Yes No	contstat	1 2
n/a	Comments	Alphanumeric		comnt	500

### **Annual Update**

The San Mateo County EMS Agency updates the STEMI Critical Care Plan annually and submits it to the California Emergency Medical Services Authority (EMSA). Looking forward to 2022-2023, we continue to provide guidance to SRCs wishing to implement ECMO. Additionally, we have introduced The Joint Commission (TJC) program for certification of hospitals as cardiac receiving centers to our system. We are evaluating how this program of TJC will be incorporated into our current standards and designation process and continue to engage in collaborative system improvement in conjunction with stakeholders.







# 2021 STROKE Critical Care System Plan

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## Introduction

San Mateo County has a well-developed stroke specialty care program. As one of the first counties in California to establish a tiered destination policy based on last known well time (LWKT), San Mateo County has been a leader in stroke care. We continue to evolve and pursue potential new therapies. All stroke centers have now switched from using tissue plasminogen activator (tPA) to Tenecteplase (TNK) medication for the treatment of acute ischemic strokes. In addition, the mobile stroke unit (MSU) is in the early stages of a clinical trial known as the rFVIIa for Acute Hemorrhagic Stroke Administered at Earliest Time (FASTEST) trial.

San Mateo County's destination policy is designed to quickly deliver patients to the most appropriate hospital for definitive care. Paramedics are trained to identify patients with stroke symptoms and alert hospitals of their arrival via a "stroke alert." Six hospitals serve San Mateo County stroke patients – three as primary stroke centers (PSC), one as a thrombectomy capable stroke center (TSC) and two as comprehensive stroke centers (CSC). This tiered system allows patients to be assessed and treated at either a primary, thrombectomy capable, or comprehensive center, depending on the time of symptom onset and the type of stroke.

San Mateo County's Stroke System Committee is comprised of San Mateo County EMS Agency (EMS Agency) personnel, physicians, stroke coordinator nurses, and American Heart Association (AHA) staff, all of whom participate in the stroke system and work together to improve quality. The committee reviews care and makes recommendations to the EMS Medical Director on best practices for stroke care.

Relatively recent system enhancements include the use of TNK for the treatment of acute ischemic strokes and participation in the FASTEST trial by the MSU. TNK is a fibrinolytic medication that has shown similar outcomes as tPA in the treatment of acute ischemic stroke. However, TNK is given as a single bolus rather than an infusion like tPA. This leads to a decrease in door to needle time and eliminates the need for a pump if an interfacility transfer is required.

The MSU is currently in the early stages of the FASTEST trial. This trial will test recombinant factor VIIa (rFVIIa) as a treatment for acute spontaneous intracerebral hemorrhage. As part of the trial, the MSU team has been engaging in community outreach in San Mateo County to spread awareness of the trial and gather input from county residents.



# Stroke QI Committee – Organizational Description, Structure and Members

The San Mateo County Stroke Continuous Quality Improvement Committee (Stroke CQI Committee) serves in an advisory capacity to the EMS Agency.

The Stroke CQI Committee has the following values:

- Patient & community-oriented system
- Provide a caring environment to inspire and produce teamwork
- Work based on research, scientific examination, and focused process improvement
- Promotion of candor, integrity, and mutual respect
- Multidisciplinary partnerships with our system stakeholders help us produce excellence
- Promotion and provision of community education on stroke prevention and treatment

The Stroke CQI Committee is a confidential committee and 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.

The committee supports implementation of stroke system of care regulations promulgated by the California Emergency Medical Services Authority (EMSA), reviews cases, discusses policy and best practices, and makes recommendations to enhance 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 committee reviewed and supported a "drip and ship" model for hospitals to expedite transfers to a higher level of care. Enhancements to our stroke system over the last few years include the transition to TNK and the ongoing FASTEST trial involving the MSU.

#### Get With the Guidelines (GWTG) for Data Collection

Get With the Guidelines (GWTG) ® has been implemented to support the EMS Agency's evaluation of our system's performance. GWTG enables the LEMSA and the CQI Committee to view our centers' adherence to the latest treatment recommendations for stroke. This data is presented at the quarterly CQI Committee meetings.

#### LEMSA Personnel and Their Roles in the Stroke Critical Care System

Travis Kusman, MPH, Paramedic, EMS Director Gregory H. Gilbert, MD, FAAEMS, EMS Medical Director Linda Allington RN, MPH, MPA, FACHE, EMS Clinical Services Manager Kelly McGinty, MSN, RN, EMS Clinical Nurse Chad Henry, MBA, Paramedic, EMS Operations Manager Garrett Fahey, MBA, EMS Management Analyst

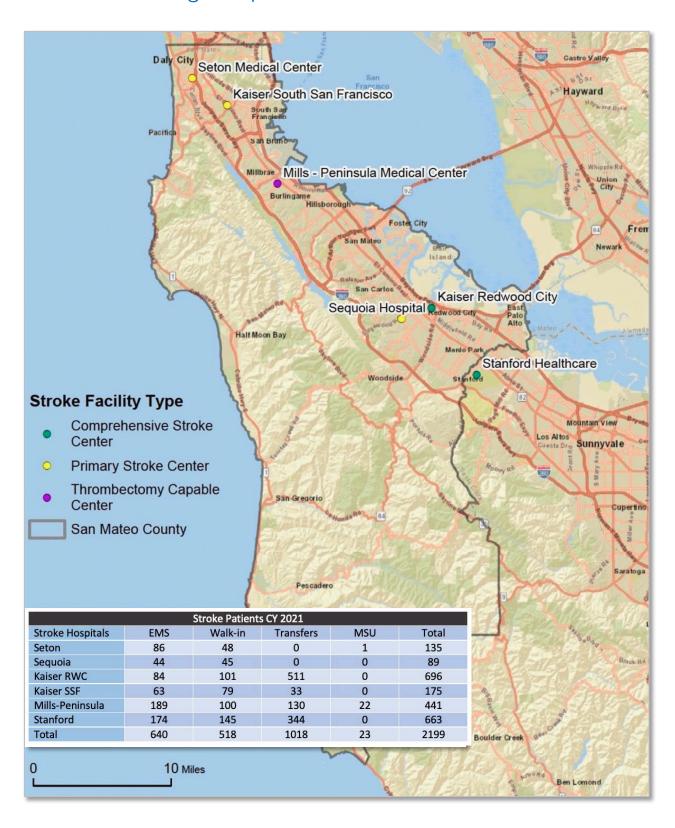
## Stroke QI Committee - Mission, Purpose, and Goals

**Mission**: Improve stroke care outcomes in the San Mateo County Stroke System through data review, quality improvement, education, and innovation.

Purpose: Serve as an advisory committee to the EMS Agency regarding stroke.

Goal	Objectives	Responsible Party(ies)	Target Date	Evaluation/Outcome
Improve the quality and service delivered to stroke patients.	1. Collect and analyze SMC EMS system data over the continuum of care. 2. Identify best practices and implement appropriate actions as needed. 3. Recognize clinical excellence in stroke care. 4. Facilitate inter-facility transfers between hospitals and stroke centers.	San Mateo County Receiving Hospitals  Designated Stroke Centers  EMS Provider Agencies  EMS Agency	Continually	Implemented Get With The Guidelines for data collection.  Structure of meetings to focus on CQI with data.  Stroke regulations are routed for the public comment period. EMS has participated in Joint Commission visits.  Policies 522 and 603 have facilitated Interfacility Transfer (IFT) for stroke.
2. Provide education to professionals and community members and measure the effectiveness of public awareness campaigns.	1. Deliver up-to-date and relevant education to health care professionals. 2. Raise public awareness regarding the signs and symptoms of stroke, the importance of activation of the 911 system, and provide education to identified target groups.	San Mateo County Receiving Hospitals  Designated Stroke Centers  EMS Provider Agencies  EMS Agency  Pacific Stroke Association	Quarterly	AHA Virtual Stroke Conference available on the SMC Health website until January 2024 Community outreach
3. Conduct, evaluate, and research relevant clinical and system factors having an impact on the stroke system.	1. Collect and analyze research data. 2. Participate in research studies to assist in developing and promoting evidence-based standards of excellence and innovation.	QI Committee Stroke stakeholders	Annually	Mobile Stroke Unit (MSU) FASTEST trial ongoing.

## Stroke Receiving Hospitals



#### Stroke Policies and Clinical Protocols

Our stroke destination policy, Policy 522, was developed in collaboration with receiving hospital stroke program medical directors and is based on the patient's last known well time (LKWT). Additionally, the decision was made to transport all stroke patients, even if the symptom onset was > 24 hours to a stroke center. The associated rationale is that wraparound services are be available to the patient and their support system, even if acute therapeutic interventions are no longer indicated.

San Mateo County has an agreement designating Stanford Health Care as a receiving center for patients stroke patients originating within our EMS system. While located in neighboring Santa Clara County, Stanford has been seamlessly integrated as a Comprehensive Stroke Center (CSC) into our system. This integration has been incorporated into Policy 519 (Receiving Hospitals) and Policy 522 (Stroke System Triage and Patient Destination). Stanford has been accredited by the Joint Commission as a CSC.

In accordance with our system's general medical treatment protocol, the transporting ambulance provides the receiving hospital with a pre-notification "Stroke Alert" and corresponding pertinent information via a "ring down".

The following polices and protocols determine stroke patient identification, treatment, transport decision, destination decision, and interfacility transport policies.

- Policy 522—Stroke System Triage and Patient Destination
- Treatment Protocol A34—Stroke/CVA/TIA
- Policy 209—Mobile Stroke Unit Program
- Treatment Protocol A34T—Stroke/CVA/TIA—Mobile Stroke Unit (CT-1)
- Treatment Protocol G01—Routine Medical Care
- Policy 603—Hospital Emergency Interfacility Transfers
- Policy 519—Receiving Hospitals

# EMS Policy 522 – Stroke System Triage and Patient Destination



EMS POLICY	522
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

#### STROKE SYSTEM TRIAGE AND PATIENT DESTINATION

#### I. PURPOSE

This policy describes the San Mateo County stroke system and triage policy and provides an overview of data collection and system quality improvement for the San Mateo County stroke system.

This system is designed to provide timely, appropriate care to patients who have symptoms of acute stroke. Acute stroke patients will be transported to a Primary Stroke Center, Thrombectomy Capable Stroke Center, or a Comprehensive Stroke Center in accordance with LEMSA policy.

#### II. AUTHORITY

Health and Safety Code, Division 2.5, Section 1797.220 and 1798

#### III. DEFINITIONS

<u>Acute stroke patient</u>: A patient who meets assessment criteria for an acute stroke in accordance with LEMSA's patient care protocols and last known well time is within 24 hours.

<u>Comprehensive Stroke Center ("CSC")</u>: A hospital that has successfully completed and maintains Joint Commission accreditation as a CSC and enters into a written agreement with LEMSA to be designated as a stroke receiving center. These centers can treat both ischemic and hemorrhagic strokes.

Emergency Medical Services Agency ("LEMSA") [or "Agency"]: The San Mateo County EMS Agency is designated as the Local Emergency Medical Services Agency (LEMSA) and is statutorily charged with primary responsibility for administration and medical control of emergency medical services in San Mateo County.

Mobile Stroke Unit ("MSU"): An ambulance capable of delivering at minimum Advanced Life Support ("ALS") services that has a Computerized Tomography ("CT") scanner capable of performing head CTs in the community and prior to arriving at a hospital.

<u>Primary Stroke Center ("PSC")</u>: A hospital that has successfully completed and maintains Joint Commission accreditation as a PSC and enters into a written agreement with LEMSA to be



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Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

designated as a PSC. These centers can treat stroke patients throughout the continuum of care.

<u>Thrombectomy Capable Stroke Center ("TSC")</u>: A primary stroke center with the ability to perform mechanical thrombectomy for an ischemic stroke patient and meets the designation requirements by Joint Commission and enters into a written agreement with LEMSA to be designated as a TSC. These centers can treat both ischemic and hemorrhagic strokes throughout the continuum of care.

#### IV. AUTHORIZED STROKE RECEIVING CENTERS

#### Primary Stroke Centers (PSC):

- 1. Kaiser Redwood City
- 2. Kaiser South San Francisco
- 3. Mills-Peninsula Medical Center
- 4. Sequoia Hospital
- 5. Seton Medical Center
- 6. Stanford Hospital

#### Thrombectomy-Capable Stroke Center (TSC):

- 1. Kaiser Redwood City
- 2. Mills-Peninsula Medical Center
- 3. Stanford Hospital

#### Comprehensive Stroke Centers (CSC):

- 1. Kaiser Redwood City
- 2. Stanford Hospital

#### V. PROCEDURE

- A. Notification of the Stroke Center
  - 1. The EMS crew shall notify the Stroke Center as soon as possible during the call.
  - 2. EMS verbal report: As soon as feasible, the crew from the scene will contact the intended stroke center and inform them an acute stroke patient is enroute to that facility. It is recommended that the report be started with the statement "This is a Stroke Alert."
  - 3. The report shall include EMS Stroke/ ALOC ringdowns per Routine Medical Care Protocol.
- B. Diversion by a Stroke Center



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- 1. Stroke Centers shall not close to acute stroke patients except for the following:
  - a. Failure of all CT scanners in the Stroke Center
  - b. Declared internal disaster
- 2. If a Stroke Center must close to stroke patients, the nurse leader or equivalent will call San Mateo County Public Safety Communications at (650) 363-4981 and request a system wide notification.

#### C. Documentation

- 1. A completed electronic health record ("EHR") shall be left at the Stroke Center for all stroke patients before the paramedic leaves the receiving hospital.
- D. Transferring an acute stroke patient to a higher level of care (See also 603 Hospital Emergency Interfacility Transfers)
  - 1. Patients found to have a large vessel occlusion ("LVO") should be expeditiously transferred to a CSC or TSC if the patient meets inclusion criteria for clot retrieval.
  - 2. In the event that an acute stroke patient needs to be transferred to a higher level of stroke care, the emergency department should:
    - a. Provide appropriate assessment and emergency treatment.
    - b. Notify the receiving CSC or TSC of the intent to transfer the patient, using the term "SIR" ("Stroke Interventional Radiology") and provide as complete a report as possible.
    - c. Use the microwave line and request an interfacility transport. If unable to use the microwave line, San Mateo County Public Safety Communications can be contacted at (650) 363-4981. Request a paramedic ambulance to transport the patient to the receiving CSC or TSC. The ambulance will arrive shortly.
  - If initiated patient care exceeds the paramedic scope of practice, qualified medical or nursing staff should accompany the patient in the 9-1-1 ambulance, or a Critical Care Transport unit is required.
    - a. It is recommended that the medical staff or RN perform a neurological exam every 15 minutes enroute and follow their routine hospital procedures for care of the patient.
  - 4. Provide the ambulance crew with as complete a record as possible (verbal essential, written if possible). Do not delay transport of the patient. A complete written patient report can be faxed to the receiving stroke center prior to patient arrival at CSC or TSC.



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5. If a non-stroke center emergency department receives an acute stroke patient by 9-1-1 ambulance, the hospital shall notify LEMSA in accordance with 523 – EMS Event Reporting.

#### E. Stroke System Quality Improvement

Each designated stroke hospital, EMS system participant, and LEMSA will have representatives on the Stroke Quality Improvement Committee.

#### F. Data Collection

- 1. Hospitals shall enter stroke patient and care data into Get With the Guidelines or LEMSA authorized equivalent.
- 2. LEMSA staff will review hospital and EMS data and provide reports to be presented to the Stroke Quality Improvement Committee.

## EMS Treatment Protocol A34 – Stroke/CVA/TIA

# Stroke/CVA/TIA

For suspected stroke or transient is chemic attack (stroke symptoms that resolve rapidly)

#### History

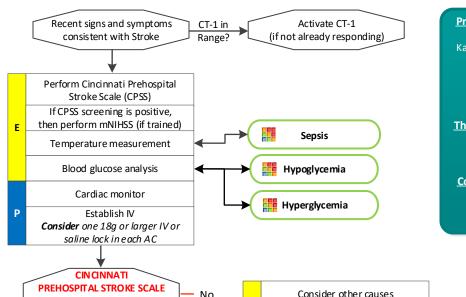
- · Last seen normal
- · A&O Status and GCS
- Family members phone number
- Previous stroke or TIA or brain hemorrhage
- Major surgery within last 2 weeks
- Signs of active bleeding, including Melena
- Associated diseases (DM, HTN, CAD)
- Atrial fibrillation
- Medications (blood thinners)
- History of trauma
- History of brain tumor, aneurysm, or AVM.

#### Signs and Symptoms

- · Altered mental status
- · Weakness or paralysis
- Blindness or other sensory loss
- · Aphasia or dysarthia
- Syncope
- Vertigo or dizziness
- Vomiting
- Headache
- Seizure
- Respiratory pattern change
- Hypertension/hypotension
- Diplopia or double vision

#### **Differential**

- · See Altered Mental Status
- TIA
- Sepsis
- Seizure/Todd's paralysis
- Hypoglycemia
- Stroke
  - Thrombotic or embolic (~85%)
  - Hemorrhagic (~15%)
- Tumor
- Trauma
- · Dialysis or renal failure
- Bell's Palsy



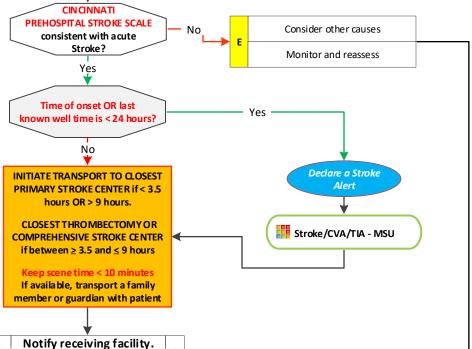
#### **Primary Stroke Centers**

Seton Medical Center Kaiser South San Francisco Sequoia Hospital Mills-Peninsula Kaiser Redwood City Stanford Hospital

Thrombectomy Capable
Stroke Centers
Mills-Peninsula

Comprehensive Stroke
Centers
Kaiser Redwood City

Stanford Hospital



Consider Base Hospital for medical direction

# Stroke/CVA/TIA

For suspected stroke or transient ischemic attack (stroke symptoms that resolve rapidly)

A Stroke Alert is indicated when the Cincinnati Prehospital Stroke Scale findings are abnormal and onset (time last seen normal) is less than 24 hours from time of patient contact. Make hospital contact following the format described in Routine Medical Care G01 for Stroke.

If a family member or guardian is available, assure their availability by either transporting them in the ambulance or obtain their name and phone number to allow the receiving physician to contact them. Encourage a family member to be available to speak with hospital staff.

- If any of portion of the Cincinnati Prehospital Stroke Scale is abnormal and it is a new finding, the stroke screen is positive and may indicate an acute stroke.
- Early hospital notification is necessary for the receiving facility to make rapid treatment and potential transfer decisions.
- Because the patient may need to receive thrombolytic therapy, avoid multiple IV attempts.
- Avoid distal placement of IVs, if possible, as this is a preferred access site by Interventionalists.
- When turning over patient care to hospital staff, make sure to include common anticoagulants taken by the patient. Known use of these medications may affect the course of hospital treatment:
  - Warfarin (Coumadin)
- Enoxaparin (Lovenox)

- Heparin

- Dabigatran (Pradaxa)
- Fondaparinux (Arixtra)
- Rivaroxaban (Xarelto)

- Apixaban (Eliquis)

Cincinnati Prehospital Stroke Scale		
Finding Interpretation		
Facial Droop	Normal: Symmetrical smile or face Abnormal: Asymmetry	
Arm Weakness	Normal: Both arms move symmetrically  Abnormal: Asymmetrical arm movement	
Speech Abnormality	Normal: Correct words; no slurring  Abnormal: Slurred or incorrect words	

Test	ed Item Description	Responses & Scores	
1B	LOC (orientated questions)	0 1 2	Answers both correctly Answers one correctly Answers neither correctly
1C	LOC (response to commands)	0 1 2	Performs both tasks correctly Performs one task correctly Performs neither
2	Gaze	0 1 2	Normal horizontal movements Partial gaze palsy Complete gaze palsy
3	Bidang visual	0 1 2 3	No visual field defect Partial hemianopia Complete hemianopia Bilateral hemianopia
5	Motor function (arm) a. Left b. Right	0 1 2 3 4	No drift Drift before 5 seconds Falls before 10 seconds No effort against gravity No movement
6	Motor function (leg) a. Left b. Right	0 1 2 3 4	No drift Drift before 5 seconds Falls before 5 seconds No effort against gravity No movement
8	Sensory	0	Normal Abnormal
9	Language	0 1 2 3	Normal Mild aphasia Severe aphasia Mute or global aphasia
11	Neglect	0 1 2	Absent Mild (loss 1 sensory modality) Severe (loss 2 modalities)

#### **Pearls**

- CT-1 should be alerted if you arrive on scene and determine a stroke is occurring. Based on ETA, MSU will meet on scene, at rendezvous, or advise not responding and will recommend transport to the closest, most appropriate SRC.
- Last known well time: Critical information that prehospital providers can obtain, on which all treatment decisions are based. Be <u>very precise</u> in gathering data to establish the time of onset and report as an actual time (i.e., "13:45," NOT "about 45 minutes ago"). Without this information, patients may not receive thrombolytics at the hospital. For patients who "woke up and noticed stroke symptoms," time starts when the patient was last awake.
- If there is any question as to status of patient with acute symptoms of stroke, transport to Primary Stroke Center.
- If last know well time is unknown or > 24 hours, transport to closest or requested Primary, Thrombectomy Capable, or Comprehensive Stroke Center.
- The differential listed in A04 Altered Level of Consciousness should also be considered.
- Be alert for airway problems (difficulty swallowing, vomiting and aspiration). PO meds are not appropriate.
- Hypoglycemia or hyperglycemia can present as a LOCALIZED neurologic deficit, especially in the elderly.
- Document the Cincinnati Prehospital Stroke Scale in the EHR.



# EMS Policy 209 – Mobile Stroke Unit Program



EMS POLICY	209
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

#### MOBILE STROKE UNIT PROGRAM

#### I. PURPOSE

This policy establishes requirements for a mobile stroke program.

#### II. AUTHORITY

California Health and Safety Code Division 2.5, §1797.90. 1797.220, 1797.221; California Code of Regulations, Title 22, Division 9, Chapter 7.2

#### III. DEFINITIONS

<u>Emergency Medical Services Agency ("LEMSA") [or "Agency"]</u>: The San Mateo County EMS Agency is designated as the Local Emergency Medical Services Agency (LEMSA) and is statutorily charged with primary responsibility for administration and medical control of emergency medical services in San Mateo County.

Mobile Stroke Unit ("MSU"): An ambulance capable of delivering at minimum Advanced Life Support ("ALS") services that has a Computerized Tomography ("CT") scanner capable of performing head CTs in the community and prior to arriving at a hospital.

Mobile Stroke Unit ("MSU") Program: A predetermined plan that includes a MSU and MSU team who respond in an ambulance and provide high level acute stroke care at the scene of an emergency, during transport to an acute care hospital and while in an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital. The program is approved by the EMS Agency to be deployed in the prehospital setting to provide rapid assessment of suspected acute stroke patients by utilizing a mobile computed tomography ("CT") scanner on-scene and able to transmit images to a remote site and provide a hard copy to receiving hospitals. Further elements of the program can include treatment with intravenous thrombolytic therapy, hemostatic agents, and blood pressure medications and determination of appropriate hospital destination depending on CT scanner findings and consultation with closest receiving facility capable of supporting the suspected or confirmed stroke patient.

<u>Mobile Stroke Unit ("MSU") Team</u>: An organized group of health care providers that specialize in stroke care and may include, but not limited to a radiology technician, registered nurse, paramedic, emergency medical technician, and neurologist.



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Approval: EMS Director  Travis Kusman, MPH	Signed:
Approval: EMS Medical Director  Greg Gilbert, MD	Signed:

#### IV. MOBILE STROKE PROGRAM REQUIREMENTS

- A. A mobile stroke program shall meet the following requirements:
  - 1. Be approved by LEMSA.
  - 2. Possess a physical response unit specially configured and suitable for the delivery of MSU services that has been appropriately authorized as emergency response vehicle by the California Highway Patrol and LEMSA.
  - 3. Designate a program Medical Director who shall be responsible for the functions of the MSU. The MSU Program Medical Director shall be a physician on hospital staff at a San Mateo County hospital, licensed in the State of California, and Board Certified in Neurology, Neurosurgery, or Neuroradiology by the American Board of Medical Specialties.
  - 4. Designate a Program Manager who shall be responsible for ensuring timely and accurate data collection and who works with the MSU Program Medical Director to develop a data collection process and a quality improvement program.
  - 5. MSU shall be staffed with a minimum of one (1) stroke trained nurse, one (1) emergency medical technician or paramedic, and one (1) CT technician. A stroke neurologist may also be included as part of the team. Neurology services may be provided in person or via telemedicine consult.
  - 6. Implement a quality improvement ("QI") program for program monitoring and evaluation. Program results shall be shared with LEMSA and San Mateo County Stroke QI Committee quarterly, or when requested.
  - Transport patients to the closest appropriate stroke facility based on LEMSA protocols, regardless of the results of patient evaluation or treatment rendered by MSU, unless redirected by receiving facility.
  - 8. Provide copies of all staff evaluation, lab results, electronic health records, and imaging to the receiving hospital upon delivery of the patient.
  - 9. MSU Program shall develop activation, dispatch and longitudinal patient-care integration procedures in collaboration with the Authorized San Mateo County EMS Provider in each exclusive operating area in which the MSU delivers service and Public Safety Communications, which are subject to LEMSA approval.



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- 10.A written agreement between MSU Program and each exclusive operating area provider in which MSU will operate shall be executed, which is subject to LEMSA approval. The agreement shall address, at minimum, the following:
  - a. Staffing
  - b. Billing
  - c. Documentation Sharing
  - d. Insurance and Indemnity
- B. MSU Program shall develop policies and procedures that address patient care, include the following and are subject to LEMSA approval:
  - 1. Patient assessment and identification of patients requiring MSU services;
  - 2. indications for CT procedures for transmission and reporting;
  - 3. indications and contraindications for IV thrombolytic therapy (based on current American Heart Association/American Stroke Association guidelines);
  - 4. documentation of all evaluation and treatment (including lab results and copies of imaging); and
  - 5. reporting of adverse events.
- C. MSU Program shall develop policies that address data collection, dispatch, and interaction between staff of MSU and the 9-1-1 jurisdictional ambulance provider and first responders, which are subject to LEMSA approval.

#### V. MOBILE STROKE PROGRAM APPROVAL

- A. MSU Programs shall submit a letter of intent to LEMSA outlining the following:
  - 1. Qualifications of the composition of MSU program;
  - 2. Proposed response area;
  - 3. Deployment and dispatch plan for integration with the 9-1-1 jurisdictional provider; and
  - 4. Data collection and quality improvement process.
- B. Institutional Review Board approvals from all participating hospitals are to be shared with LEMSA.
- C. If MSU will be used to transport stroke patients, submit a copy of the written agreement with the 9-1-1 jurisdictional provider/ EOA provider.



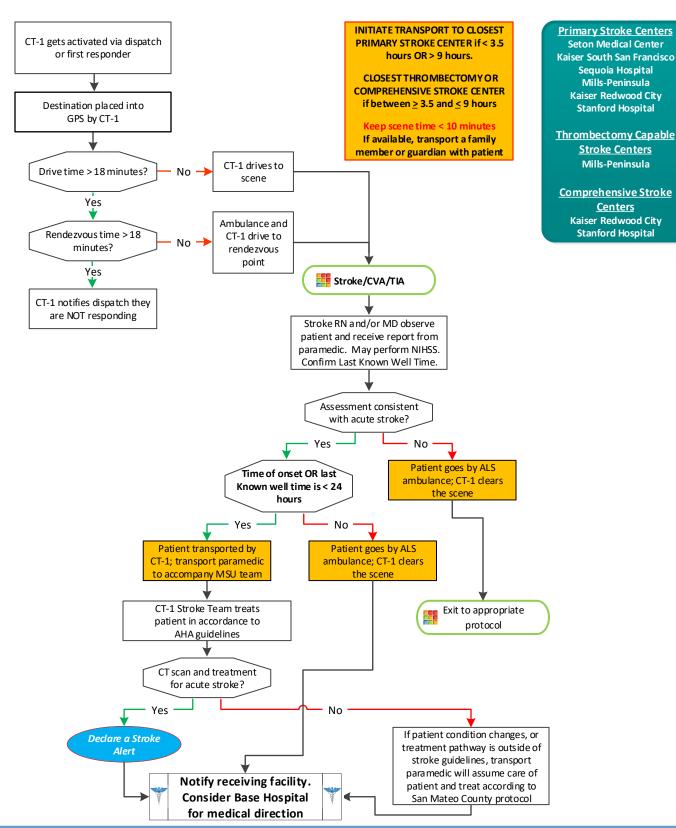
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- D. LEMSA will review and verify the submitted information. LEMSA reserves the sole discretion to approve or reject any MSU proposal as well as suspend, stipulate terms of cure of deficiency / non-compliance, or terminate the service of any MSU program.
- E. After completion of the study program, MSU program will submit a comprehensive report to LEMSA. LEMSA will consider the report in conjunction with the Stroke QI Committee, in determining whether to approve MSU for continued operation in San Mateo County beyond the initial term of the pilot study.

# EMS Treatment Protocol A34T – Mobile Stroke Unit (CT-1)

# Stroke/CVA/TIA - Mobile Stroke Unit (CT-1)

For suspected stroke or transient is chemic attack (stroke symptoms that resolve rapidly)



San Mateo County Emergency Medical Services

# Stroke/CVA/TIA – Mobile Stroke Unit (CT-1)

For suspected stroke or transient is chemic attack (stroke symptoms that resolve rapidly)

#### **Pearls**

- If a patient is transported by CT-1 and a large vessel occlusion is identified, either on non-contrast CT or CT angiogram, the patient shall be transported to a Comprehensive or Thrombectomy Capable Stroke Center, regardless of the last known well time.
- If a patient being transported by CT-1 and a large vessel occlusion is ruled out using CT angiogram, the patient shall be transported to a Primary Stroke Center, regardless of the last known well time.



# Adult Medical Treatment Protocols

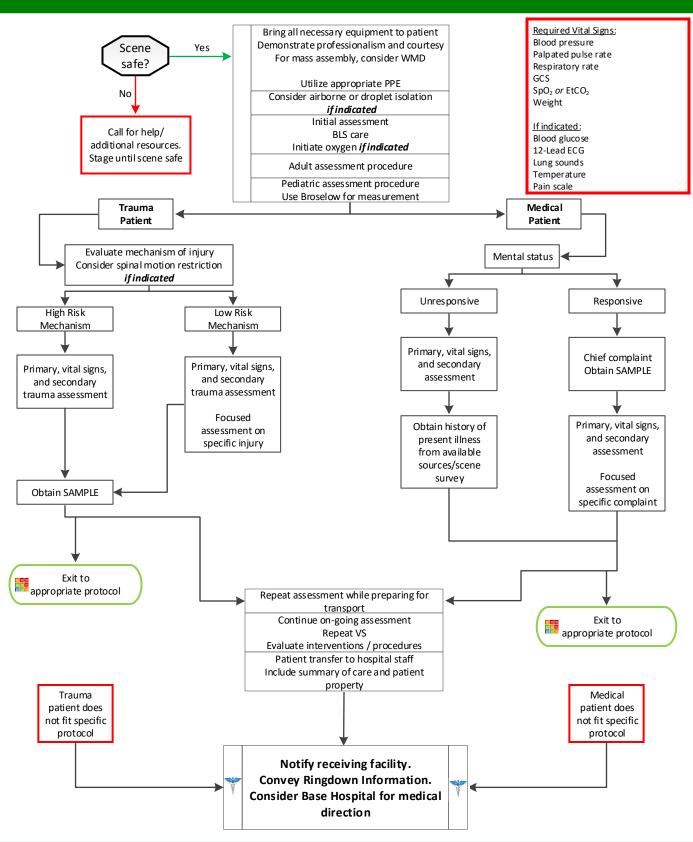
# Stroke/CVA/TIA – Mobile Stroke Unit (CT-1)

For suspected stroke or transient ischemic attack (stroke symptoms that resolve rapidly)

	CT-1 Rendezvous F	Point Locations
Call Location	Rendezvous Point	Alternate Rendezvous Points
Brisbane	Station 81 3445 Bayshore Blvd.	None
Colma	Serramonte Center 3 Serramonte Center (at Cost Plus World Market)	None
Daly City	Serramonte Center 3 Serramonte Center (at Cost Plus World Market)	None
El Granada	Upper Lakes Vista Hwy. 35/Hwy. 92	1. Station 40 – 1191 Main St. 2. Half Moon Bay Airport – 9850 Cabrillo Hwy.
Foster City	San Mateo Fairgrounds 2495 S. Delaware St.	1. Bridgepoint Center – 2205 Bridgepoint Pkwy.
Half Moon Bay	Upper Lakes Vista Hwy. 35/Hwy. 92	1. Station 40 – 1191 Main St.
Miramar	Upper Lakes Vista Hwy. 35/Hwy. 92	1. Station 40 – 1191 Main St. 2. Half Moon Bay Airport – 9850 Cabrillo Hwy.
Montara	Tri-County Bank 1450 Linda Mar Blvd.	1. Station 72 – 1100 Linda Mar Blvd. 2. Lunardi's – 2801 San Bruno Ave.
Moss Beach	Tri-County Bank 1450 Linda Mar Blvd.	1. Tri-County Bank – 1450 Linda Mar Blvd. 2. Station 72 – 1100 Linda Mar Blvd. 3. Half Moon Bay Airport – 9850 Cabrillo Hwy.
Pacifica	Sharp Golf Course 1 Sharp Park Rd.	1. Tri-County Bank – 1450 Linda Mar Blvd. 2. Station 72 – 1100 Linda Mar Blvd. 3. Lunardi's – 2801 San Bruno Ave.
Princeton	Tri-County Bank 1450 Linda Mar Blvd.	1. Tri-County Bank – 1450 Linda Mar 2. Station 72 – 1100 Linda Mar Blvd. 3. Half Moon Bay Airport – 9850 Cabrillo Hwy.
San Bruno	Lunardi's 2801 San Bruno Blvd.	1. Tanforan Mall – 1151 El Camino Real
San Mateo	San Mateo Fairgrounds 2495 S. Delaware St.	1. Bridgepoint Center – 2205 Bridgepoint Pkwy.
South Coast (Pescadero/ San Gregorio/ La Honda)	Station 40 1191 Main St.	Half Moon Bay Airport – 9850 Cabrillo Hwy.     Upper Lakes Vista – Hwy. 35/Hwy. 92
	CT-1 Leveling	Locations
Call Location	Rendezvous Point	Alternate Rendezvous Points
Brisbane	Station 81 3445 Bayshore Blvd.	None
Daly City (Cow Palace Area)	Station 81 3445 Bayshore Blvd.	None
Millbrae	Station 37 511 Magnolia Ave.	None
Burlingame	Inquire with Fire	None
Hillsborough	Hillsborough Police Station 1600 Floribunda Ave.	1. Station 33 – 835 Chateau Dr.

# EMS Treatment Protocol G01 - Routine Medical Care

# Routine Medical Care



# Routine Medical Care

Scene Safety Evaluation: Identify potential hazards to prehospital providers, patient, and public. Identify the number of patients and utilize triage protocol if indicated. Observe patient position and surroundings.

General: All patient care must be appropriate to the provider level of training and documented in the ePCR. The ePCR narrative should be considered a story of the circumstances, events, and care of the patient and should allow the reader to understand the complaint, assessment, treatment, why procedures were performed, and why indicated procedures were not performed as well as ongoing assessments and response to treatment and interventions.

Adult Patient: An adult should be suspected of being acutely hypotensive when systolic blood pressure is less than 90mmHg. Diabetic patients and women may have atypical presentations of cardiac-related problems such as MI. General weakness can be the symptom of a very serious underlying process. Beta blockers and other cardiac drugs may prevent a reflexive tachycardia in shock with low to normal pulse rates.

Geriatric Patient: Falls, car collisions, hip fractures, and dislocations have high mortality rates. Altered mental status is not always dementia. Always check BGL and assess for signs for stroke, trauma, etc. with any alteration in a patient's baseline mental status. Minor or moderate injury in the typical adult may be very serious in the elderly.

Pediatric Patient: A pediatric <u>medical</u> patient is defined as any patient who can be measured on a Broselow Tape. A pediatric trauma patient is defined as any patient < 15 years of age. Special needs children may require continued use of Pediatric based protocols regardless of age and weight. Initial assessment should utilize the Pediatric Assessment Triangle which encompasses appearance, work of breathing and circulation to skin. The order of assessment may require alteration dependent on the developmental state of the pediatric patient. Generally the child or infant should not be separated from the caregiver unless absolutely necessary during assessment and

Special note on oxygen administration and utilization: Oxygen in prehospital patient care is probably over utilized. Oxygen is a pharmaceutical drug with indications, contraindications as well as untoward side effects. Utilize oxygen when indicated, not because it is available. A reasonable target oxygen saturation for most patients is 92% regardless of delivery device.

### **Pearls**

- Utilize body substance isolation for all patients.
  - All-hazards precautions include standard PPE plus airborne and contact precautions. This level of precaution is utilized during the initial phases of an outbreak when the etiology of the infection is unknown or when the causative agent is found to be highly contagious (e.g., Ebola, MERS, SARS).
  - Airborne precautions include standard PPE plus a N95 or P100 mask. This level of precaution is utilized for very small germs like tuberculosis, measles, and chicken pox.
  - Droplet precautions include standard PPE plus a standard surgical mask for providers who accompany patients in the back of the ambulance and a surgical mask or NRB O<sub>2</sub> mask for the patient. This level of precaution should be utilized when influenza, meningitis, mumps, streptococcal pharyngitis and other illnesses spread via large particle droplets are suspected. A patient with a potentially infectious rash should be treated with droplet precautions.
  - Contact precautions include standard PPE plus utilization of a gown, change of gloves after every patient contact and strict hand washing precautions. This level of precaution is utilized when multi-drug resistant organisms (e.g., MRSA and VRE), scabies, herpes zoster (shingles), or other illnesses spread by contact are suspected.
- Timing of transport should be based on the patient's condition and the destination policy.
- Never hesitate to contact the Base Hospital as a high risk refusal resource for any patient who refuses transport.
- SAMPLE: Signs/Symptoms; Allergies; Medications; PMH; Last oral intake; Events leading to injury/illness.
- For patients on whom a cardiac monitor has been placed, the standard of care and expectation is that they remain on the cardiac monitor until such time that transfer of care has occurred at the hospital.



# **General Treatment Protocols**

# Routine Medical Care

# **Trauma Ringdowns**

- Unit ID (i.e. M107 or San Mateo Medic 42)
- Code 2 or Code 3 with trauma activation
- Age
- Gender
- Mechanism of Injury: Blunt vs. penetrating

### Δ//Ν

- Restrained vs. unrestrained
- Location inside car
- Speed
- Type of MVA (e.g., head-on/rear-ended/ t-bone/rollover
- Damage
- Airbag deployment

### **FALL**

- Height
- Surface
- Taking blood thinners?

### **ASSAULT**

- Punched, kicked, struck by an object GSW
- Wound location(s)
- Type of weapon (e.g., handgun/shotgun/ rifle)

### **STABBING**

- Wound location(s)
- Size of blade
- Type of blade (e.g., serrated or smooth)
- Chief complaint
- Mental status and GCS
- Physical findings
- Vital signs (BP/HR/RR/O<sub>2</sub> sat/BGL)
- Treatment
- ETA
- How do you copy?

# Stroke/ALOC Ringdowns

- Unit ID (i.e. M107 or San Mateo Medic 42)
- Code 2 or Code 3 with stroke alert
- Age
- Gender
- Time last known well
- Mental status and GCS
- Chief Complaint
- Physical findings
- Vital signs (BP/HR/RR/O<sub>2</sub> sat/BGL/Temp)
- Treatment
- Patient is positive/negative for blood thinners
- MR# or patient name and DOB
- ET/
- How do you copy?

# STEMI/Medical Ringdowns

- Unit ID (i.e. M107 or San Mateo Medic 42)
- Code 2 or Code 3 with STEMI alert
- Age
- Gender
- Chief Complaint
- Physical findings
- Vital signs (BP/HR/RR/O<sub>2</sub> sat/BGL/Temp)
- Treatment
- 12-Lead ECG has been transmitted to your facility
- MR# or patient name and DOB
- FTA
- How do you copy?

Best family contact and phone number must be gathered on all patients and relayed to receiving hospital staff during transfer of care

# EMS Policy 603 – Hospital Emergent Facility Transfers



EMS POLICY	603
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director Greg Gilbert, MD	Signed:

# HOSPITAL EMERGENT INTERFACILITY TRANSFERS

# I. PURPOSE

This policy provides guidance for hospital emergency or other departments (ICU) for ground ambulance transport of emergency patients that require interfacility transfer at the Basic (EMT), Advanced Life Support (Paramedic), or Critical Care Transport (CCT) levels.

# **II. AUTHORITY**

California Code of Regulations, Title 22, Division 9, §100128 and §100170

# III. DEFINITIONS

Advanced Life Support ("ALS"): Special services designed to provide definitive prehospital emergency medical care, including, but not limited to, cardiopulmonary resuscitation, cardiac monitoring, cardiac defibrillation, advanced airway management, intravenous therapy, administration of specified drugs and other medicinal preparations, and other specified techniques and procedures administered by authorized personnel under the direct supervision of a base hospital as part of a local EMS system at the scene of an emergency, during transport to an acute care hospital and while in the emergency department of an acute care hospital until responsibility is assumed by the emergency or other medical staff of that hospital.

<u>Air ambulance</u>: Any aircraft specifically constructed, modified, or equipped and staffed for the primary purpose of responding to emergency medical calls and transporting critically ill or injured patients. Air ambulance aircraft shall be ALS capable.

<u>Basic Life Support ("BLS")</u>: Emergency first aid and cardiopulmonary resuscitation procedures which, as a minimum, include recognizing respiratory and cardiac arrest and starting the proper application of cardiopulmonary resuscitation to maintain life without invasive techniques until the victim may be transported or until advanced life support is available.

<u>Critical Care Transport</u>: Special services designed to provide definitive critical care such that the failure to assess/ recognize resuscitation needs and urgently initiate and maintain acute medical diagnostics and/ or interventions, pharmacological interventions, or technologies would likely result in sudden, clinically significant, or life-threatening deterioration in the patient's condition. These capabilities exceed those of an Advanced Life Support EMS unit.



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Approval: EMS Medical Director Greg Gilbert, MD	Signed:

<u>Emergency Medical Services Agency ("LEMSA") [or "Agency"]</u>: The San Mateo County EMS Agency is designated as the Local Emergency Medical Services Agency (LEMSA) and is statutorily charged with primary responsibility for administration and medical control of emergency medical services in San Mateo County.

# **IV. POLICY**

- A. All transfers shall comply with State and Federal laws.
- B. Paramedic/ 9-1-1 system personnel may be used to transport patients ONLY as a last resort when alternative forms of transportation are unavailable, or when the delay in obtaining alterative transport would pose an imminent threat to the patient's health. Hospital personnel accessing the EMS system for transfers shall note that by accessing the EMS system, they may deplete the EMS resources of their local community.
- C. Interfacility transfers utilizing Paramedic/ 9-1-1 system personnel remain under San Mateo County LEMSA medical direction and control.
- D. Paramedic/ 9-1-1 system units are staffed with two personnel: Typically, one paramedic, and one EMT.
- E. Unstable patients shall be transferred only when the reason for the transfer is to medically facilitate the patient's care. The transport of the patient must have the concurrence of both the transferring and receiving physicians that the transfer is appropriate.
- F. The sending physician is responsible for determining the appropriate level of transport required.
- G. The sending physician is responsible for making arrangements for the receipt of the patient by another physician at the receiving facility.
- H. The sending physician or designee shall contact the appropriate dispatch center to arrange for transport.
- I. The sending physician or designee shall provide a verbal report and transfer documents to the arriving ambulance crew. Transfer documents must include the names of the sending and receiving physician.
- J. For patients requiring emergency transfer, specifically those needing immediate care or intervention at a higher level of care receiving hospital (e.g., critical trauma, STEMI, or stroke):



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- 1. Ensure the indication for use is appropriate. Emergency ambulance transport utilizes 9-1-1 resources and is reserved for truly emergent cases;
- 2. Activate 9-1-1 to request Interfacility Emergency Response;
- 3. Arrange transfer of the patient with the receiving physician;
- 4. Assess patient needs prior to the transport to determine if the patient needs exceed the paramedic scope of practice. If the care required during transport is beyond the paramedic scope of practice, hospital staff and/or equipment shall be provided by the transferring hospital and accompany the patient (e.g., if IV pump needed, blood transfusion in progress, management of paralytic agents for intubated patient);
- 5. Prepare transfer records for the arriving ambulance crew. The ambulance will generally arrive within thirteen (13) minutes of request and patient, paperwork, staff and equipment should be ready for transport by the time the ambulance arrives. Records which are not time sensitive or critical to immediate ongoing treatment of the patient may be faxed, emailed, or alternatively delivered to the receiving facility. If the transfer is delayed once the ambulance arrives on scene, the 9-1-1 ambulance may be reassigned to other emergency needs.
- 6. The 9-1-1 ambulance crew will arrive at the Emergency Department (ED). If the patient is being transferred from a location other than the ED, a hospital representative shall meet the responding ambulance crew immediately upon arrival, escort prehospital personnel to the patient's location, remain with the crew, and escort the crew back to the ED.



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# V. LEVELS OF CARE FOR AMBULANCE TRANSPORT

Type of Transport	Patient Needs	Scope of Practice	Contact
9-1-1 Advanced Life Support (Paramedic) Interfacility Emergency Transfer	Emergency intervention or evaluation not available at the sending hospital (e.g., critical trauma, STEMI, stroke, obstetric care for active labor where birth is not imminent). May include neuro and vascular patients transported directly to an OR/intervention lab.	Advanced airway (ETT and King); Administer and adjust IV fluids including: Glucose, isotonic saline, lactated ringers, and those containing potassium; ECG monitoring; Defibrillation and synchronized cardioversion; Monitoring of watersealed chest tube; Administration of ACLS medications	9-1-1

Type of Transport	Patient Needs	Scope of Practice	Contact
Critical Care Transport with RN	Advanced care for patients with complex medical care needs as determined by the transferring physician and the ambulance agency. May include pediatric and obstetric patients.	Critical Care RN	Contact ambulance service directly
Air Ambulance	RN/Paramedic level of care for patients with complex medical care needs when the receiving hospital is distant and time is a critical factor. May include pediatric and obstetric patients.	Critical Care RN/Paramedic	Contact air ambulance service directly
Non-emergency Basic Life Support (EMT)	Scheduled transport of patients who require a basic level of care.	EMT	Contact ambulance service directly



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# VI. TRAUMA TRANSFER PROCEDURE

TRAUMA TRANSFER PROCEDURE		
	Determine appropriate level of transfer using chart below. Contact receiving Trauma Center and confirm acceptance of patient.	
STEP 1	Stanford Trauma Center	Zuckerberg S.F. General Trauma Center
SILFI	(650) 724-2243 (EMERGENCY)	(628) 206-8111 - request to speak with
	(650) 723-4696 (Urgent adults)	Attending in Charge ("AIC") about trauma re-
	(650) 723-7342 (Urgent pediatrics)	triage patient
STEP 2	As soon as need for transfer is recognized, request CODE 3 TRAUMA TRANSFER using ED to Public Safety Communications microwave direct line #344.	
STEP 3	Prepare patient and paperwork for immediate transport before ambulance arrives.	
STEP 4	STEP 4 For trauma consults for patients not meeting red or blue box criteria, contact the Trauma Center and request to speak to the Trauma AIC about trauma re-triage patient.	

# **RED BOX EMERGENCY TRANSFER PROCEDURE**

Call Trauma Center PRIOR to transfer and state "RED BOX TRAUMA TRANSFER."

ED physician determines patient requires immediate evaluation/resuscitation by a trauma center.

- Some indicators:
  - Blood pressure < 90 or decrease in blood pressure by 30 mmHg following 2L IV crystalloid
  - Head injury with blown pupil
  - Penetrating thoracic or abdominal trauma

# **BLUE BOX URGENT TRANSFER PROCEDURE**

Call Trauma Center PRIOR to transfer.

ED physician determines patient requires urgent evaluation by a trauma center based on the following

indicators:	atient requires digent evaluation by a trauma center based on the following
ANATOMIC AREAS	FINDINGS/ RELATED INJURIES
Central Nervous System	<ul> <li>GCS &lt; 14 with abnormal CT scan</li> <li>Spinal cord or major vertebral injury</li> </ul>
Chest	<ul> <li>Major chest wall injury with &gt; 3 rib fractures and/ or pulmonary contusion</li> <li>Cardiac injury</li> </ul>
Pelvis/ Abdomen	<ul> <li>Pelvic ring disruption</li> <li>Solid organ injury confirmed by CT scan or ultrasound demonstrating abdominal fluid</li> </ul>
Major Extremity Injuries	<ul> <li>Fracture/ dislocation with loss of distal pulses and/ or ischemia</li> <li>Open long bone fractures</li> <li>Two or more long bone fractures</li> <li>Amputations that require reimplantation</li> </ul>
<ul> <li>Trauma with associated burns – transfer to closest trauma center</li> <li>Major trauma to more than two body regions</li> <li>Signs of hypoperfusion – Lactate &gt; 4 or Base Deficit &gt; 4</li> </ul>	
Co-morbid Factors	<ul> <li>Adults &gt; 65 years of age</li> <li>Pediatric &lt; 6 years of age – transfer to Stanford Pediatric Trauma Center</li> <li>Pregnancy &gt; 22 weeks gestation</li> <li>Insulin dependent diabetes</li> <li>Morbid obesity</li> <li>Cardiac or respiratory disease</li> <li>Immunosuppression</li> <li>Antiplatelet or anticoagulation agents</li> </ul>

# EMS Policy 519 – Receiving Hospitals



EMS POLICY	519
Effective:	April 2022
Approval: EMS Director  Travis Kusman, MPH	Signed:
Approval: EMS Medical Director Greg Gilbert, MD	Signed:

# **RECEIVING HOSPITALS**

# I. PURPOSE

This policy identifies the most frequented receiving hospitals and specialty centers for patients transported by 9-1-1 ground ambulance, air ambulance or interfacility patients who become unstable during transport. This is not an inclusive list of all receiving hospitals.

### II. AUTHORITY

California Code of Regulations, Title 22, Division 9, §100128 and §100170

### III. POLICY

- A. A patient, transported as part of an EMS response, shall be delivered to the most appropriate hospital staffed and equipped to provide care appropriate to the needs of the patient, despite County boundaries.
- B. Field transport personnel should refer to 505 Patient Destination Determination for destination determination.

# IV. RECEIVING CENTERS

San Mateo County Hospitals	Specialty Services	ED Phone
Kaiser Medical Center - Redwood City 1100 Veterans Boulevard Redwood City, CA 94063	OB/ Neonatal STEMI Stroke - Comprehensive	(650) 299-2201
Kaiser Medical Center - South San Francisco 1200 El Camino Real South San Francisco, CA 94080	Stroke - Primary	(650) 742-3111
Mills-Peninsula Medical Center 1501 Trousdale Drive Burlingame, CA 94010	HELIPAD OB/ Neonatal Psychiatric STEMI Stroke - Thrombectomy Capable	(650) 696-5446



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San Mateo County Hospitals	Specialty Services	ED Phone
San Mateo Medical Center 222 West 39th Avenue San Mateo, CA 94403	Psychiatric Sexual Assault Center	(650) 573-2671 Psych ED (650) 573-2662
Sequoia Hospital 170 Alameda de las Pulgas Redwood City, CA 94062	OB/ Neonatal STEMI Stroke - Primary	(650) 367-5542
Seton Coastside 600 Marine Boulevard Moss Beach, CA 94038	Standby Emergency Department	(650) 563-7107
Seton Medical Center 1900 Sullivan Avenue Daly City, CA 94015	STEMI Stroke - Primary	(650) 991-6892
Santa Clara County Hospitals	Specialty Services	ED Phone
El Camino Hospital 2500 Grant Road Mountain View, CA 94040	none	(650) 940-7051
Kaiser Medical Center - Santa Clara 700 Lawrence Expressway Santa Clara, CA 95051	VAD	(408) 851-5310 VAD Coordinator (408) 851-3750
Lucille Packard Children's Hospital at Stanford 725 Welch Road Palo Alto, CA 94394	NO EMERGENCY OB/ GYN VAD	(650) 723-4422 VAD Coordinator (650) 723-6661
Palo Alto Veteran's Hospital 3801 Miranda Avenue Palo Alto, CA 94304	none	(650) 849-0221
Santa Clara Valley Medical Center	HELIPAD	(408) 885-3228



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Santa Clara County Hospitals	Specialty Services	ED Phone
Stanford Hospital (BASE HOSPITAL) 500 Pasteur Drive Stanford, CA 94305	HELIPAD OB/ Neonatal Pediatrics Adult Trauma Pediatric Trauma STEMI Stroke - Comprehensive VAD	Adult Base Physician (650) 497-4802 Peds Base Physician (650) 723-5032 Reports (650) 723-7337 VAD Coordinator (650) 723-6661
San Francisco County Hospitals	Specialty Services	ED Phone
Californa Pacific Medical Center - Van Ness Campus 1260 Franklin Street San Francisco, CA 94109	none	Adult (415) 600-3333 Pediatric (415) 600-4444
Californa Pacific Medical Center - Davies Campus Castro and Duboce Streets San Francisco, CA 94114	VAD (Hand Reimplantation)	(415) 600-0600 VAD Coordinator (415) 600-1051
Californa Pacific Medical Center - Bernal Campus 3555 Cesar Chavez Street San Francisco, CA 94110	none	(415) 461-6625
Chinese Hospital 845 Jackson Street San Francisco, CA 94133	none	(415) 677-2300
Kaiser Medical Center - San Francisco 2425 Geary Boulevard San Francisco, CA 95115	OB/ Neonatal	(415) 883-5628

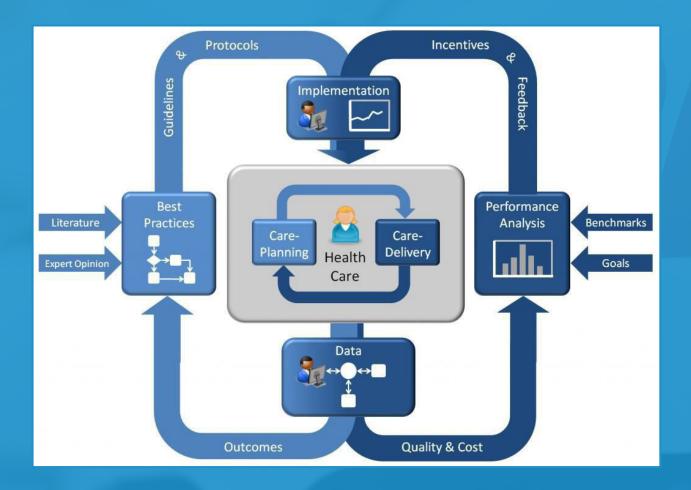


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San Francisco County Hospitals	Specialty Services	ED Phone
St. Francis Memorial Hospital 900 Hyde Street San Francisco, CA 95109	Burn	(415) 353-6255
UCSF Medical Center - Parnassus Heights Campus 505 Parnassus Avenue San Francisco, CA 95143	VAD (Hand Reimplantation)	(415) 353-1037 VAD Coordinator (415) 514-5823
UCSF Medical Center - Mission Bay Campus 1975 Fourth Street San Francisco, CA 95158	OB/ Neonatal	(415) 476-7788
UCSF Benioff Children's Hospital - Mission Bay 1975 Fourth Street San Francisco, CA 95158	none	(415) 353-1818
Zuckerberg San Francisco General Hospital (TRAUMA BASE HOSPITAL) 1001 Potrero Avenue San Francisco, CA 95110	OB/ Neonatal Trauma/ Trauma Base Hospital (Hand Reimplantation)	Base Physician (415) 647-4747 Report/Emergent (628) 206-9600
Other Out-of-County Hospitals	Specialty Services	ED Phone
Eden Medical Center 20103 Lake Chabot Road Castro Valley, CA 94546	HELIPAD Adult Trauma	(510) 727-3015
Dominican Hospital 1555 Soquel Drive Sata Cruz, CA 95065	HELIPAD	(831) 476-2746

# Action to Improve

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



The EMS Agency reviews and incorporates clinical research and recommendations by the International Stroke Committee (ISC) and the American Heart Association (AHA) to attain best practices in our stroke critical care system. Recommendations from the AHA and the ISC are discussed at quarterly meetings.

Data from GWTG is shared at committee meetings to evaluate and derive system best practices.

# Training and Education

The AHA has partnered with the EMS Agency in the provision of training and education, adding valuable resources to the stroke critical care system. The AHA provides continuing education online for EMS providers. Currently, the AHA Virtual Stroke Conference Webinars are available on the San Mateo County Health website and will be available until January 2024.

Conference topics span the spectrum of stroke care, from post-stroke depression to pediatric stroke codes, and reducing atrial fibrillation stroke risk.

In the last two years, EMS provider agencies and hospitals within the County have provided multiple community outreach activities throughout the county. In addition, they have sponsored trainings for providers.

# **Annual Update**

The EMS Agency will continue to plan, implement, and evaluate the performance of the EMS system. The Stroke Critical Care System Plan will be updated and submitted to the California Emergency Medical Services Authority (EMSA) annually.

# Stroke Center Agreements - Designation Type and Terms

Stroke Centers	Туре	Agreement Terms		
Kaiser RWC	CSC	9/1/2019	8/31/2024	
Kaiser SSF	PSC	9/1/2019	8/31/2024	
Sequoia	PSC	9/1/2019	8/31/2024	
Mills-Peninsula	TCS	9/1/2019	8/31/2024	
Seton	PSC	1/1/2020	12/31/2024	
Stanford	CSC	2/14/2020	2/13/2025	



# COUNTY OF SAN MATEO SAN MATEO COUNTY HEALTH EMERGENCY MEDICAL SERVICES



# 2021 Trauma System Status Report

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# Introduction

San Mateo County (SMC) has a very stable trauma system that utilizes American College of Surgeons Committee on Trauma (ACS-COT) verified Level One Centers: Zuckerberg San Francisco General Hospital (ZSFG) for the Northern region of the County and Stanford Health Care (SHC) for the Southern region of San Mateo County for both adults and pediatrics.

# San Mateo County Integration

The San Mateo County Emergency Medical Services Agency ("EMS Agency") is the local EMS agency (LEMSA) responsible for planning, implementing, evaluating, and regulating the County's comprehensive emergency medical services system. The EMS Agency appreciates that the delivery of definitive, high quality trauma care requires a highly collaborative and integrated system which is keenly focused on patient needs and the corresponding optimal processes to attain desired outcomes.

While none of the receiving hospitals physically located within San Mateo County are designated trauma centers at any level, the LEMSA supports and ensures that all have the ability to quickly identify, re-triage, and transport patients to designated receiving trauma centers when indicated. Accordingly, trauma patients originating within the San Mateo County EMS System are seamlessly destined to receiving trauma centers located outside of, yet proximate to, our County's jurisdictional boundaries.

The EMS Agency coordinates trauma prevention activities and has developed and maintains processes, systems and infrastructure that assure that our EMS system's trauma patients receive timely, comprehensive, and high-quality care and supportive services. The EMS Agency appreciates the expertise of the many partners and provider agencies within our system and leverages our continuous quality improvement structure and collaborative relationships with Stanford Health Care (SHC), Zuckerberg San Francisco General (ZSFG), as well as the Santa Clara and San Francisco County LEMSAs as vital components enabling our integrated system of care.

Key personnel and components of the EMS Agency's infrastructure committed to enabling and overseeing the care of trauma patients arising within San Mateo County include:

- EMS Director and EMS Medical Director responsible for strategic leadership and direction
  of the County's trauma system consistent with State statute, regulation, and local
  requirements. The EMS Director serves as the County's Medical Health Operational Area
  Coordinator (MHOAC) and Regional Disaster Medical Health Coordinator (RDMHC) for
  the Coastal Region.
- EMS Clinical Services Manager dedicated as trauma program manager serves as the primary liaison between the two trauma centers and the County, is responsible for coordinating continuous quality improvement activities and is supported by an EMS Clinical Nurse.
- EMS Operations Manager dedicated to overseeing system operations, equipment and readiness, local prehospital provider certification and accreditation, educational programs and coordinating EMS system policies, procedures, and protocols.
- Management Analyst supports procurement, contracting, data analysis and compliance activities.
- EMS Agency maintains 24/7 on-call EMS/MHOAC Duty Officer coverage including field response capability.
- Policy, procedure, and protocol development, implementation, and enforcement to govern
  the delivery of care within the County's trauma system including coordination and
  integration with neighboring jurisdictions and San Mateo County designated trauma
  receiving centers. Both SHC and ZSFG are consulted and provide input in trauma field
  triage, treatment, and destination protocols.
- Continuous trauma system evaluation including review and response to local hospital interest(s) in pursuing a trauma center designation at any level.
- Development, implementation, and oversight of trauma receiving center agreements.
- Active participation on San Francisco County, Santa Clara County, and State trauma committee as well as attendance of corresponding meetings.
- Provision of a countywide radio communications system for Advanced Life Support including capability of direct routine and disaster communication with SHC and ZSFG.
- Establishment, coordination, and oversight of the County's Base Hospital system providing on-line medical control services to prehospital personnel.
- Coordination and oversight of full-spectrum 911 system Emergency Medical Dispatch services including pre-arrival instructions, call prioritization and associated quality assurance activities via San Mateo County Public Safety Communications, an International Academies of Emergency Dispatch Accredited Center of Excellence.
- Maintenance of a Countywide prehospital electronic patient care record (eHR) system, which is interfaced with SHC's electronic medical record system, enabling real time bidirectional information sharing and all functionality specified by the +EMS SAFR standards promulgated by the California Emergency Medical Services Authority.

- Development, implementation, coordination and oversight of mutual aid and assistance agreements with neighboring jurisdictions to facilitate response to and disposition of patients during surge and/or multi-casualty incidents.
- Comprehensive trauma care and system continuous quality improvement activities, including integration of SHC and ZSFG into San Mateo County medical advisory committees.
- Coordination and oversight of care provided to trauma patients by air ambulance providers including 100% review of air ambulance transports.
- Oversight of interfacility "Red Box and Blue Box" trauma re-triage transports including the assurance of availability of 911 system ambulance responses to expedite transfer.
- Liaise with Medical Examiners offices in multiple counties relative to decedents.
- Development and oversight of trauma training requirements for prehospital personnel.
- Administration of Maddy and Richie funds in accordance with State law including policies, procedures, and administrative tool development, implementation and oversight.
- Annual and ad hoc reporting and interface with the California Emergency Medical Services Authority regarding the San Mateo County trauma system.

# Summary of Changes

There have been no major changes to the trauma delivery system since our last submission. Rather, this report provides updates since our last submission. Both the adult and pediatric facilities designated as trauma receiving centers by the EMS Agency have been re-verified as Level One Centers by the American College of Surgeons (ACS). The EMS Agency participates in the ACS site visits and also reviews the reports of the findings.

Effective March 1, 2021, Stanford Health Care has become the County EMS system's sole base station for base hospital consult and medical direction. The exception to this is for trauma patients in the Northern part of the County who are destined for ZSFG, in which case, to retain continuity of care and streamline communications, ZSFG is the base hospital.

ZSFG has a new trauma medical director, Dr. Joseph Cuschieri, who was appointed March 1, 2021. Dr. Cuschieri was previously a Professor of Surgery at the University of Washington and has many research interests, publications, and funded NIH grants.

Our Trauma treatment protocols which were redesigned last year into an algorithmic style for ease of use and congruency with our overall treatment protocol redesign now available through both Android and iOS applications. The ease of accessing these as well as the algorithmic style is appreciated by our system's caregivers and stakeholders.

# Structure & Organizational Description

The EMS Agency Clinical Services Manager serves as the primary liaison with the SMC trauma receiving centers. This role includes attending the Bay Area Regional Trauma Care Committee (RTTC) meetings, trauma center site meetings, following up on CQI issues and relaying information back to key stakeholders. The EMS Agency Medical Director provides overall medical control of the EMS system and works closely with the trauma medical community.

The EMS Agency Director provides administrative oversight and schedule permitting, attends local and regional trauma meetings. The EMS Agency Operations Manager monitors overall system performance, including response time performance and time on scene and facilitates overall data aggregation and analysis as well as treatment protocol, procedure, and policy development. The EMS Agency Clinical Nurse drives continuous quality improvement and education activities and the EMS Agency Management Analyst provides administrative support including coordination of Maddy and Richie fund activities.

# Names and Title of LEMSA agency personnel and Their Role in the Trauma Program

- Travis Kusman, MPH, Paramedic, EMS Director-Administration and Strategic Leadership
- Gregory H. Gilbert, MD, FAAEMS, EMS Medical Director-Medical Control of the local EMS system
- Linda Allington RN, MPH, MPA, FACHE, EMS Clinical Services Manager-Trauma Program Manager, Liaison with the receiving hospitals, Continuous Quality Improvement (CQI)
- Kelly McGinty, RN, MSN, EMS Clinical Nurse, Education and CQI
- Chad Henry, MBA, Paramedic, EMS Operations Manager-Performance management, CQI, Policy, Protocol and Procedure committee coordinator and facilitator.
- Garrett Fahey, MBA, EMS Management Analyst-Administrative coordination, and support

# Designated Trauma Centers for San Mateo County of San Mateo

- Zuckerberg San Francisco General Hospital Level One Adult 1001 Potrero Avenue San Francisco, CA 94110
- Stanford Health Care Level One Adult and Pediatrics 300 Pasteur Drive Stanford, CA 94305

# Trauma Triage and Transport

The SMC trauma treatment protocols were revised and became effective April 1, 2022. The treatment protocols now align with the standards promulgated by the American College of Surgeons as well as the California Emergency Medical Services Authority list of primary impressions and reduces variability. Information that was previously found in policy has been integrated into the treatment protocol, streamlining access to this critical information for Paramedics and EMT's.

# Hospital Emergent Interfacility Transfers - 603

The purpose of Facility 603 policy, Hospital Emergent Interfacility Transfers, is to provide guidance for emergency department initiated interfacility transfer of patients to higher-level care at a trauma center. As Critical Care Transport (CCT) resources have become increasingly limited, Facilities 603 outlines staffing and resource requirements and capabilities for Basic Life Support (BLS) and Advanced Life Support (ALS) ambulances.

The "Red Box/Blue Box" criteria displayed within the policy are provided as a reference to all basic emergency department receiving centers to assist in expeditiously transferring patients in need to a higher-level of care. These criteria were developed in collaboration with the Regional Trauma Care Committee (RTCC) to assist non-trauma hospitals with both recognition of acuity and the need for transfer to a trauma center. The 911 system is utilized to emergently facilitate a trauma transport if time is of the essence due to patient condition. The EMS Agency reviews 911 system facilitated emergent interfacility transports (referred to as "MEDER") on a weekly basis. This report includes both trauma and medical patients and serves as a starting point for further follow up and quality review if indicated. The trauma centers have reported that the "Red Box/Blue Box" has helped non-trauma receiving hospitals in the transfer decision-making process and facilitated the rapid movement of patients when required.



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# **III. DEFINITIONS**

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<u>Air ambulance</u>: Any aircraft specifically constructed, modified, or equipped and staffed for the primary purpose of responding to emergency medical calls and transporting critically ill or injured patients. Air ambulance aircraft shall be ALS capable.

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# IV. POLICY

- A. All transfers shall comply with State and Federal laws.
- B. Paramedic/ 9-1-1 system personnel may be used to transport patients ONLY as a last resort when alternative forms of transportation are unavailable, or when the delay in obtaining alterative transport would pose an imminent threat to the patient's health. Hospital personnel accessing the EMS system for transfers shall note that by accessing the EMS system, they may deplete the EMS resources of their local community.
- C. Interfacility transfers utilizing Paramedic/ 9-1-1 system personnel remain under San Mateo County LEMSA medical direction and control.
- D. Paramedic/ 9-1-1 system units are staffed with two personnel: Typically, one paramedic, and one EMT.
- E. Unstable patients shall be transferred only when the reason for the transfer is to medically facilitate the patient's care. The transport of the patient must have the concurrence of both the transferring and receiving physicians that the transfer is appropriate.
- F. The sending physician is responsible for determining the appropriate level of transport required.
- G. The sending physician is responsible for making arrangements for the receipt of the patient by another physician at the receiving facility.
- H. The sending physician or designee shall contact the appropriate dispatch center to arrange for transport.
- I. The sending physician or designee shall provide a verbal report and transfer documents to the arriving ambulance crew. Transfer documents must include the names of the sending and receiving physician.
- J. For patients requiring emergency transfer, specifically those needing immediate care or intervention at a higher level of care receiving hospital (e.g., critical trauma, STEMI, or stroke):



EMS POLICY	603
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director Greg Gilbert, MD	Signed:

- 1. Ensure the indication for use is appropriate. Emergency ambulance transport utilizes 9-1-1 resources and is reserved for truly emergent cases;
- 2. Activate 9-1-1 to request Interfacility Emergency Response;
- 3. Arrange transfer of the patient with the receiving physician;
- 4. Assess patient needs prior to the transport to determine if the patient needs exceed the paramedic scope of practice. If the care required during transport is beyond the paramedic scope of practice, hospital staff and/or equipment shall be provided by the transferring hospital and accompany the patient (e.g., if IV pump needed, blood transfusion in progress, management of paralytic agents for intubated patient);
- 5. Prepare transfer records for the arriving ambulance crew. The ambulance will generally arrive within thirteen (13) minutes of request and patient, paperwork, staff and equipment should be ready for transport by the time the ambulance arrives. Records which are not time sensitive or critical to immediate ongoing treatment of the patient may be faxed, emailed, or alternatively delivered to the receiving facility. If the transfer is delayed once the ambulance arrives on scene, the 9-1-1 ambulance may be reassigned to other emergency needs.
- 6. The 9-1-1 ambulance crew will arrive at the Emergency Department (ED). If the patient is being transferred from a location other than the ED, a hospital representative shall meet the responding ambulance crew immediately upon arrival, escort prehospital personnel to the patient's location, remain with the crew, and escort the crew back to the ED.



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# V. LEVELS OF CARE FOR AMBULANCE TRANSPORT

Type of Transport	Patient Needs	Scope of Practice	Contact
9-1-1 Advanced Life Support (Paramedic) Interfacility Emergency Transfer	Emergency intervention or evaluation not available at the sending hospital (e.g., critical trauma, STEMI, stroke, obstetric care for active labor where birth is not imminent). May include neuro and vascular patients transported directly to an OR/intervention lab.	Advanced airway (ETT and King); Administer and adjust IV fluids including: Glucose, isotonic saline, lactated ringers, and those containing potassium; ECG monitoring; Defibrillation and synchronized cardioversion; Monitoring of watersealed chest tube; Administration of ACLS medications	9-1-1

Type of Transport	Patient Needs	Scope of Practice	Contact
Critical Care Transport with RN	Advanced care for patients with complex medical care needs as determined by the transferring physician and the ambulance agency. May include pediatric and obstetric patients.	Critical Care RN	Contact ambulance service directly
Air Ambulance	RN/Paramedic level of care for patients with complex medical care needs when the receiving hospital is distant and time is a critical factor. May include pediatric and obstetric patients.	Critical Care RN/Paramedic	Contact air ambulance service directly
Non-emergency Basic Life Support (EMT)	Scheduled transport of patients who require a basic level of care.	EMT	Contact ambulance service directly



EMS POLICY	603
Effective:	April 2022
Approval: EMS Director Travis Kusman, MPH	Signed:
Approval: EMS Medical Director Greg Gilbert, MD	Signed:

# VI. TRAUMA TRANSFER PROCEDURE

TRAUMA TRANSFER PROCEDURE				
	Determine appropriate level of transfer using chart below. Contact receiving Trauma Center and confinacceptance of patient.			
STEP 1	Stanford Trauma Center	Zuckerberg S.F. General Trauma Center		
	(650) 724-2243 (EMERGENCY)	(628) 206-8111 - request to speak with		
	(650) 723-4696 (Urgent adults)	Attending in Charge ("AIC") about trauma re-		
	(650) 723-7342 (Urgent pediatrics)	triage patient		
STEP 2	As soon as need for transfer is recognized, request CODE 3 TRAUMA TRANSFER using ED to Public Safety Communications microwave direct line #344.			
STEP 3	Prepare patient and paperwork for immediate transport before ambulance arrives.			
STEP 4	For trauma consults for patients not meeting red or blue box criteria, contact the Trauma Center and request to speak to the Trauma AIC about trauma re-triage patient.			

# **RED BOX EMERGENCY TRANSFER PROCEDURE**

Call Trauma Center PRIOR to transfer and state "RED BOX TRAUMA TRANSFER."

ED physician determines patient requires immediate evaluation/resuscitation by a trauma center.

Some indicators:

- Blood pressure < 90 or decrease in blood pressure by 30 mmHg following 2L IV crystalloid
- Head injury with blown pupil
- Penetrating thoracic or abdominal trauma

# **BLUE BOX URGENT TRANSFER PROCEDURE**

Call Trauma Center PRIOR to transfer.

ED physician determines patient requires urgent evaluation by a trauma center based on the following

indicators:		
ANATOMIC AREAS	FINDINGS/ RELATED INJURIES	
Central Nervous System	<ul> <li>GCS &lt; 14 with abnormal CT scan</li> <li>Spinal cord or major vertebral injury</li> </ul>	
Chest	<ul> <li>Major chest wall injury with &gt; 3 rib fractures and/ or pulmonary contusion</li> <li>Cardiac injury</li> </ul>	
Pelvis/ Abdomen	<ul> <li>Pelvic ring disruption</li> <li>Solid organ injury confirmed by CT scan or ultrasound demonstrating abdominal fluid</li> </ul>	
Major Extremity Injuries	<ul> <li>Fracture/ dislocation with loss of distal pulses and/ or ischemia</li> <li>Open long bone fractures</li> <li>Two or more long bone fractures</li> <li>Amputations that require reimplantation</li> </ul>	
Multi-System Injury	<ul> <li>Trauma with associated burns – transfer to closest trauma center</li> <li>Major trauma to more than two body regions</li> <li>Signs of hypoperfusion – Lactate &gt; 4 or Base Deficit &gt; 4</li> </ul>	
Co-morbid Factors	Adults > 65 years of age Pediatric < 6 years of age — transfer to Stanford Pediatric Trauma Center Pregnancy > 22 weeks gestation Insulin dependent diabetes Morbid obesity Cardiac or respiratory disease Immunosuppression Antiplatelet or anticoagulation agents	

# Trauma Treatment Protocols

Our Trauma Treatment Protocols are found on the next pages:

- Trauma Triage T01
- Extremity Trauma T02
- Head Trauma T03
- Multi-System Trauma T04
- Traumatic Arrest T05
- Burns T06

# Trauma Triage

Scene time goal is 10 minutes

### **ACTIVATION**





**Traumatic Arrest** 

Transport to closest facility to secure airway

# Measure vital signs and level of consciousness

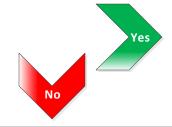


GCS ≤ 13

Systolic blood pressure < 90mmHg ≤ 6 years old SBP < 60 mmHg

Adult respiratory rate < 10 or > 29 <u>or</u> need for ventilatory support

Infant (< I year of age) respiratory rate < 20



Trauma
Center transport
with early
notification

# Assess anatomy of injury



Chest wall instability or deformity (e.g., flail chest)

Two or more proximal long bone fractures

Crushed, degloved, mangled, or pulseless extremity

Amputation above the wrist or ankle

Penetrating injuries to head, neck, torso, groin and extremities proximal to elbow and knee

Pelvic fractures

Open or depressed skull deformity

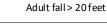
Traumatic paralysis or paresthesia

Combination of trauma with burns



Trauma
Center transport
with early
notification

### Assess mechanism of injury and evidence of high-energy impact



Pediatric fall > 10 feet <u>or</u> 2 times height of child

High risk auto crash:

Death in same vehicle

Ejection (partial or complete)

Extrication > 20 minutes'

Vehicle telemetry data confer high risk

Intrusion on patient side or roof > 12

inches or > 18 inches at any site

Auto-pedestrian/auto-bicycle/motorcycle Separated from, thrown or run over Obvious injury Complaint of pain or injury

Significant blunt trauma to head/torso from large animal (i.e. kick/fall from horse)



Trauma
Center transport
with early
notification



# Adult and Pediatric Trauma Treatment Protocols

# Trauma Triage

Scene time goal is 10 minutes

For other situations not described below, consider Trauma Base Hospital contact if paramedic has concern that a serious injury may exist

### Risk Factor Advisory

Patients who do not meet Box 1-3 criteria may still be prone to seriously injury, specifically if they have one or more of the following risk factors:

- Pregnancy over 20 weeks
- Communication barrier (e.g., age, language, psychiatric, or developmental issues)
- Age 55 or older
- Patient taking anticoagulants or with known bleeding disorder
- Patient with co-morbidity factors
- Central nervous system changes
- Time sensitive injuries



- Estimated impact speed of > 40mph
- Mechanical extrication required by fire department personnel
- Rollover with unrestrained occupant

Person struck by a vehicle at < 20mph

Person ejected/fell from other object (e.g., motorcycle, horse, or ATV)

Blunt assault with weapon (e.g., pipe, bat, or golf club)

Falls > 10 but < 20 feet

This list is not all-inclusive and other high energy mechanisms encountered also merit Trauma Base Hospital contact



Trauma
Center transport
with early
notification



Transport to hospital of patient choice



# Trauma Triage

Scene time goal is 10 minutes

### **Pearls**

- Do <u>not</u> let alcohol confuse the clinical picture. Persons using alcohol may have unrecognized injuries, particularly head bleeds.
- A complete hands on head-to-toe assessment is required for all trauma patients.
- Transport should be initiated within 10 minutes of ambulance arrival unless patient requires extrication.

### Age Categories

Adult Patient – Trauma patients 15 years of age and older.

Pediatric Patients – Trauma patients under the age of 15 years.

# Trauma Receiving Facilities

Adult Trauma Center catchment areas:

- Stanford Hospital Any area south of and including Devil's Slide; City of Millbrae south of Trousdale Drive between I-280 and El Camino Real; and south of Millbrae Avenue between El Camino Real and the San Francisco Bay.
- Zuckerberg San Francisco General Hospital Any area north of Devil's Slide; City of Millbrae north of Trousdale Drive between I-280 and El Camino Real; and north of Millbrae Avenue between El Camino Real and the San Francisco Bay. Includes San Francisco International Airport.
- Eden Medical Center Eastbound on the San Mateo or Dumbarton Bridges.

Pediatric Trauma Center catchment areas:

- Stanford Hospital All patients ≤ 6 years or any area south of and including Devil's Slide; City of Millbrae south of Trousdale Drive between I-280 and El Camino Real; and south of Millbrae Avenue between El Camino Real and the San Francisco Bay.
- Zuckerberg San Francisco General Hospital All patients > 6 years and any area north of Devil's Slide; City of Millbrae north of Trousdale Drive between I-280 and El Camino Real; and north of Millbrae Avenue between El Camino Real and the San Francisco Bay. Includes San Francisco International Airport.

Receiving Facilities – Local hospitals that are not trauma receiving facilities are destinations for patients who are triaged by the Base Hospital at the time of report as not requiring trauma center care. A trauma receiving facility may also serve as the receiving facility when it is the patient's facility of choice.

### Low Energy Mechanism Trauma

Low energy mechanism trauma may not obviously reveal significant trauma. Examples include, but are not limited to ground level or short falls, blunt assault without a weapon (e.g., closed fist), low speed motor vehicle crash, or other blunt trauma (e.g., sports injury). Symptoms or concern may include:

- Symptoms in the presence of head injury such as headache, vomiting, loss of consciousness, repetitive questioning, abnormal, or combative behavior or new onset of confusion
- Pain level greater than 5/10 related to head, neck, or torso injury
- Any concerns due to hypotension, tachycardia, or tachypnea
- Systolic BP < 110mmHg in patients 65 years of age or older</li>
- Torso injury with tenderness of abdomen, chest/ribs or back/flank
- Suspected hip dislocation or pelvis injury

# Other Definitions

Unmanageable Airway – A patient whose airway is unable to be adequately maintained with BLS or ALS maneuvers. All trauma patients are candidates for immediate redirection to the trauma center following airway stabilization at a non-trauma receiving facility.



# **Extremity Trauma**

For any traumatic injury (-ies) to the extremities that does not involve the head

### History

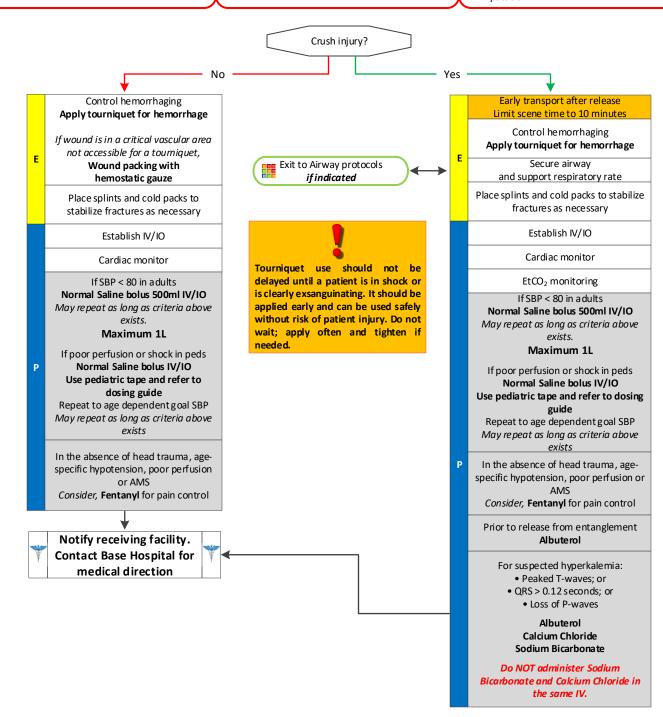
- Type and time of injury
- Mechanism (crush, penetrating, blunt, or amputation)
- Open vs. closed wound/fracture
- · Past medical history
- Medications

### Signs and Symptoms

- Evidence of trauma
- · Pain, swelling, deformity, or bleeding
- · Altered sensation or motor function
- Diminished pulse or capillary refill
- Decreased extremity temperature

### **Differential**

- Abrasion
- ContusionLaceration
- Sprain
- Dislocation
- Fracture
- Amputation



# **Extremity Trauma**

For any traumatic injury (-ies) to the extremities that does not involve the head

### **Pearls**

- For partial amputations, splint affected extremity in anatomic location and elevate extremity.
- For complete amputations, place amputated part in a dry container or bag and place on ice. Seal or tie off bag and place in second container or bag. DO NOT place amputated extremity directly on ice or in water. Elevate extremity and dress with dry gauze.
- Penetrating trauma to an extremity may hide significant vascular injury and hemorrhage. Early application of a tourniquet should be considered.
- Hypotension is age dependent. This is not always reliable and should be interpreted in context with the patient's typical BP, if known. Shock may be present with a seemingly normal blood pressure initially.
  - Neonate: < 60mmHg or weak pulses</li>
  - □ Infant: < 70mmHg or weak pulses
  - 1-10 years: < 70mmHg + (age in years x2)</p>
  - Over 10 years: <90mmHg</p>
  - Over 65 years: <110mmHg</p>
- If vigorous hemorrhage is not controlled with direct pressure and elevation on wound, apply a tourniquet.

  Tourniquets may be used in pediatric patients. Tourniquets may also be appropriate for hemorrhage control in multi-casualty incidents.
- Crush Injury Syndrome is caused by muscle crush injury and cell death. Most patients have an extensive area of involvement such as a large muscle mass in a lower extremity or the pelvis. May develop after one (1) hour in the presence of a severe crush, but usually requires at least four (4) hours of compression. Hypovolemia and hyperkalemia may occur, particularly in extended entrapments.
- An important item to monitor and document is a change in the level of consciousness by repeat examination.
- Do not overlook the possibility of associated domestic violence or abuse.



# Adult and Pediatric Trauma Treatment Protocols

# Head Trauma

For any traumatic injury that involves the head; includes multi-system trauma that involves the head

#### History

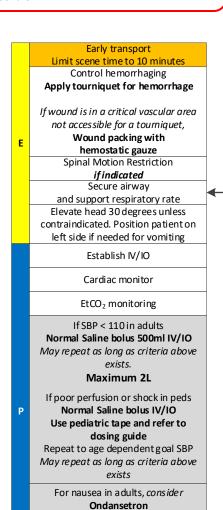
- · Time of injury
- · Mechanism (blunt vs. penetrating)
- · Loss of consciousness
- Bleeding
- · Past medical history
- Medications (anticoagulants)

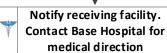
#### Signs and Symptoms

- Evidence of trauma
- · Pain, swelling, or bleeding
- AMS
- Unconscious
- · Respiratory distress or failure
- Vomiting
- Seizure

#### **Differential**

- Skull fracture
- Spinal injury
- Abuse





For peds patients ≥ 4 years, consider

Ondansetron

Use pediatric tape and refer to

dosing guide

!

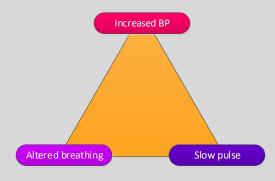
Respiratory Arrest/Failure

Tourniquet use should not be delayed until a patient is in shock or is clearly exsanguinating. It should be applied early and can be used safely without risk of patient injury. Do not wait; apply often and tighten if needed.

# **Head Trauma**

For any traumatic injury that involves the head; includes multi-system trauma that involves the head

#### **Increased Intracranial Pressure**



Headache

**Pupillary changes** 

Vomiting

Changes in vital signs

↑ Blood pressure

**↓** Pulse

Changes in respiratory pattern

#### **Infants**

Bulging fontanels Cranial suture separation ↑ head circumfrance High-pitched cry

#### **Pearls**

- ALS procedures in the field do not significantly improve patient outcome in critical trauma patients.
- Basic airway management is preferred unless unable to effectively manage with BLS maneuvers. Utilize modified jaw thrust technique to open the airway.
- Intubation of head injury patients is best addressed at the hospital.
- Hypotension is age dependent and is not always a reliable sign. It should be interpreted in context with the patient's typical BP, if known. Shock may be present with a seemingly normal blood pressure initially.
  - Neonate: < 60mmHg or weak pulses</p>
  - Infant: < 70mmHg or weak pulses</p>
  - 1-10 years: < 70mmHg + (age in years x2)</li>
  - Over 10 years: <90mmHg</p>
  - Over 65 years: <110mmHg</p>
- Avoid hyperventilation. Maintain an EtCO<sub>2</sub> of 35 or greater, which may be unreliable if the patient was subject to multisystem trauma or poor perfusion.
- In patients with a dilated pupil on one side or posturing, which indicates brainstem herniation, modest hyperventilation is appropriate. Keep EtCO<sub>2</sub> of 30 or greater.
- Scalp hemorrhage can be life threatening. Treat with direct pressure and pressure dressing.
- Increased intracranial pressure may cause hypertension and bradycardia.
- Hypotension usually indicates injury or shock unrelated to the head injury and should be treated aggressively.
- An important item to monitor and document is a change in the level of consciousness by repeat examination.
- Limit IV fluids unless the patient is hypotensive.
- Concussions are traumatic brain injuries involving any number of symptoms including confusion, LOC, vomiting, or headache. Any prolonged confusion or mental status abnormality which does not return to the patient's baseline within 15 minutes of injury or any documented LOC should be evaluated by a physician.
- Do not overlook the possibility of associated domestic violence or abuse.



# Multi-System Trauma

For any traumatic injuries that involve multiple systems or isolated chest or abdominal injuries. For injuries involving the head, use Head Trauma

#### History

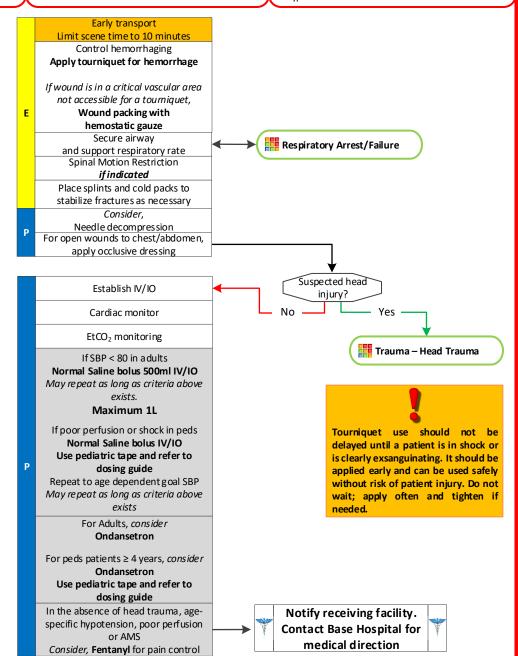
- · Time of injury
- Mechanism (blunt vs. penetrating)
- Damage to structure or vehicle
- Location of patient in structure or vehicle
- Restraints or protective equipment use
- Past medical history
- Medications

#### Signs and Symptoms

- · Evidence of trauma
- Pain, swelling, deformity, lesions, or bleeding
- AMS
- Unconscious
- Respiratory distress or failure
- · Hypotension or shock
- Arrest

#### **Differential**

- Chest:
  - Tension pneumothorax
  - Flail chest
  - Pericardial tamponade
  - Open chest woundHemothorax
- Intra-abdominal bleeding
- Pelvis or femur fracture
- · Spinal injury
- Head injury
- Hypothermia



# Multi-System Traumo

For any traumatic injuries that involve multiple systems or isolated chest or abdominal injuries. For injuries involving the head, use Head Trauma protocol

#### **Pearls**

- ALS procedures in the field do not significantly improve patient outcome in critical trauma patients.
- Basic airway management is preferred unless unable to effectively manage with BLS maneuvers. Utilize modified jaw thrust technique to open the airway.
- Intubation of head injury patients is best addressed at the hospital.
- Hypotension is age dependent and is not always a reliable sign. It should be interpreted in context with the patient's typical BP, if known. Shock may be present with a seemingly normal blood pressure initially.
  - Neonate: < 60mmHg or weak pulses</p>
  - Infant: < 70mmHg or weak pulses</p>
  - 1-10 years: < 70mmHg + (age in years x2)</li>
  - Over 10 years: <80mmHg</p>
  - Over 65 years: <110mmHg</p>
- Stabilize flail segments with bulky dressing.
- Cover eviscerated bowel with dry sterile dressing.
- Stabilize impaled object(s) with bulky dressing. Do not remove.
- Avoid hyperventilation. Maintain an EtCO<sub>2</sub> of 35 or greater, which may be unreliable if the patient was subject to multisystem trauma or poor perfusion.
- An important item to monitor and document is a change in the level of consciousness by repeat examination.
- Do not overlook the possibility of associated domestic violence or abuse.



- · Evidence of trauma or blood loss
- Events leading to arrest
- Estimated downtime

#### Signs and Symptoms

- Unresponsive
- Apneic
- Pulseless

#### Differential

Do not begin

resuscitation

Yes

No

Does the patient meet all of

the following criteria?

Do not begin

resuscitation

- Tension pneumothorax
- Cardiac tamponade
- · Hypovolemic shock
- · Spinal shock
- · Traumatic brain injury

Has a paramedic, EMT, designated first responder, or public safety officer found injuries incompatible with life, including one or more of the following

- Decapitation
- Incineration
- **Rigor Mortis**
- Decomposition
- Apnea with destruction and/or separation of the body from the heart, brain, liver, or lungs
- Multi-casualty incidents (MCIs) where triage principles preclude the initiation or continuation of resuscitation

#### **AT ANY TIME**

Return of spontaneous circulation



Multi-System Trauma



Tourniquet use should not be delayed until a patient is in shock or is clearly exsanguinating. It should be applied early and can be used safely without risk of patient injury. Do not wait; apply often and tighten if needed.



Yes

Pul seless

- Apneic
- No other signs of life, including purposeful movement or pupillary response
- Asystole or PEA < 40bpm Physical signs of trauma

or blood loss

Control hemorrhaging Apply tourniquet for hemorrhage

Begin continuous chest compressions Push hard (> 2 inches) and fast (110/min) Use metronome to ensure proper rate Change compressors every 2 minutes (Limit changes/pulse checks to < 5 seconds)

High flow oxygen via BVM

If suspected thoracic trauma, bilateral pleural decompression

If shockable rhythm, defibrillate

Asystole or PEA < 40bpm and EtCO<sub>2</sub> < 20 after 15 min.?

Terminate resuscitation

#### **Pearls**

Patients who do not qualify for field determination of death but have or develop cardiopulmonary arrest should be transported to the closest trauma center.



Control hemorrhaging

Apply tourniquet for hemorrhage

Begin continuous chest compressions

Push hard (> 2 inches) and fast (110/min)

Use metronome to ensure proper rate Change compressors every 2 minutes

(Limit changes/pulse checks to < 5 seconds)

High flow oxygen via BVM

Immediate transport to trauma center

If suspected thoracic trauma,

bilateral pleural decompression If shockable rhythm, defibrillate

Notify receiving facility.

**Consider Base Hospital** for medical direction

Treatment Protocol

# Burns

For any burn injury to skin. For inhalation injury, use primary impression Inhalation Injury. Use with primary impression Traumatic Injury if other trauma present

#### History

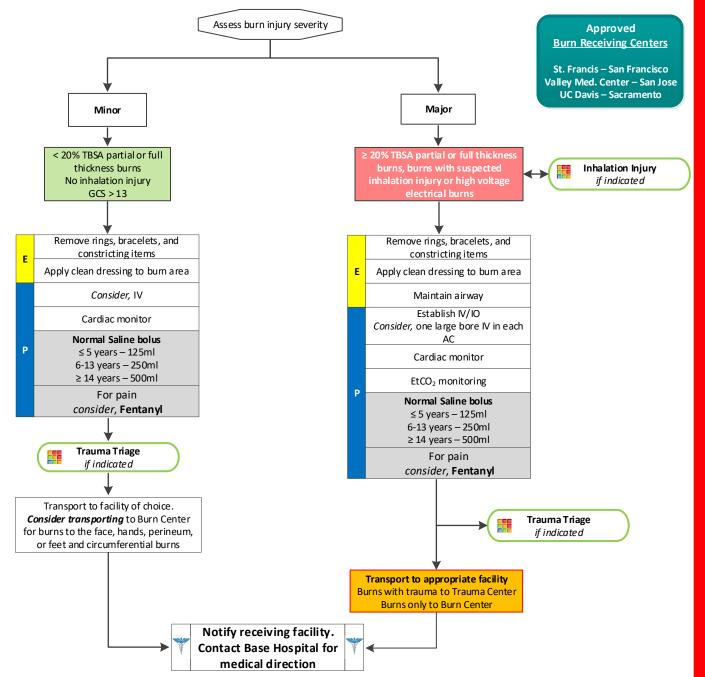
- Type of exposure (heat, gas or chemical)
- Inhalation injury
- · Time of injury
- Other trauma
- · Past medical history
- Medications

#### Signs and Symptoms

- Burns, pain, or swelling
- Dizziness
- · Loss of consciousness
- Hypotension/shock
- Airway compromise or distress could be presented as hoarseness or wheezing

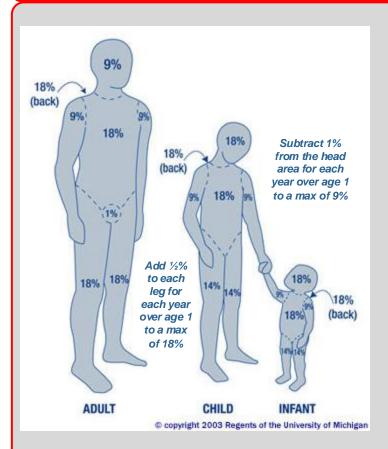
#### Differential

- Superficial red and painful (do <u>not</u> include in TBSA)
- Partial thickness blistering
- Full thickness painless with charred or leathery skin
- Chemical injury
- · Thermal injury
- Radiation injury
- Blast injury



# Burns

For any burn injury to skin. For inhalation injury, use primary impression Inhalation Injury. Use with primary impression Traumatic Injury if other trauma present



#### **Rule of Nines**

- Seldom will you find a complete isolated body part that is injured as described in the Rule of Nines. More likely, it will be portions of one area, portions of another, and an approximation will be needed.
- For the purpose of determining the extent of serious injury, differentiate the area with minimal (superficial) burn from those of partial or full thickness burns.
- When calculating TBSA of burns, include only partial and full thickness burns; do not include superficial burns in the calculation.

Burn Assessment Terminology		
Approved Terminology	Old Terminology	
Superficial	1 <sup>st</sup> degree	
Partial thickness	2 <sup>nd</sup> degree	
Full thickness	3 <sup>rd</sup> degree	

Burn assessment should be documented and reported using only approved terminology

#### **Pearls**

- Airway burns may lead to rapid compromise of the airway and can be identified by soot around the nares or mouth
  or visible burns or edematous mucosa in the mouth.
- Early intubation is required when the patient experiences significant inhalation injuries. If the patient requires advanced airway management that cannot be quickly achieved in the field, transport to the nearest facility for stabilization prior to transfer to the Burn Center. Do not wait for a helicopter if airway patency is a critical concern.
- Contact Burn Center prior to transport to confirm bed availability.
- For major burns, do not apply wet dressings, liquids or gels to burns unless it is to remove whatever caused the burn (i.e. dry chemical agent, etc.). Cooling large burns may lead to hypothermia.
- Burn patients are often trauma patients. If burns are evident in the presence of trauma, follow trauma triage guidelines and transport to trauma center if activation criteria is met.
- Circumferential burns to extremities are dangerous due to potential vascular compromise secondary to soft tissue swelling.
- Never administer IM pain medication into a burned area.
- IV/IOs may be placed through burns as a last resort.



## Data Collection-Calendar Year 2021

Stanford received 1,292 patients from San Mateo County during this twelve-month period. Based on data provided by Stanford, this number represents over 40% of all trauma patients that the hospital received via 911 system-initiated transports and the largest number of patients that Stanford received from any County.

During the same time period, 456 trauma patients were transported by the SMC EMS system to ZSFG, representing approximately 14% of all trauma patients that the hospital received via 911 system-initiated transport.

Stanford	Zuckerberg (ZSFG)	Total
Total n from SMC = 1,292	Total n from SMC =456	1,748
Blunt trauma = 1,224 (94.7%)	Blunt trauma = 416 (91.2%)	
Penetrating trauma =68 (5.3%)	Penetrating trauma = 40 (8.7%)	

## **Activation Levels**

Major Trauma activations of all trauma patients:

Stanford: 96 or 7.4%ZSFG: 98 or 21%

## **Admission Rates**

Of the 1,292 trauma patients originating in San Mateo County, transported from SMC to Stanford, 60% were admitted. Additionally, Stanford has an observation unit, of which 6% patients were admitted to. ZSFG admitted 65% of the trauma patients originating from San Mateo County.

## Mechanism of Injury

The top three mechanisms of injuries for trauma patients treated at Stanford consisted of falls, motor vehicle crashes, and bicycle crashes. Falls followed a bimodal distribution with the highest numbers of falls in the < 6 years of age and > 65 years of age and represented 47% of the trauma volume from San Mateo County.

ZSFG is located within the urban area of San Francisco. At this facility, motor vehicle crashes represent the largest mechanism of injury category at 31% followed closely by motor vehicle related crashes at 30%, falls 27%, and pedestrian-related injuries at 11%.

### COVID-19 and Trauma

Overall volumes were decreased during the pandemic at both centers as compared to prior years. Both centers were granted an extension of one-year on their ACS verification cycle due to the significant public health impacts of COVID-19 and remain verified at this time.

Both centers saw a decrease in volume initially with the shelter-in-place order that went into effect on March 17, 2020. Matthay, et al. from ZSFG, studied and subsequently published the DISTANCE study: Determining the impact of social distancing on trauma epidemiology during the COVID-19 epidemic-An interrupted time-series analysis.

J Trauma Acute Care Surg, Volume 90, Number 4.

Patients originating in San Mateo County are included in this study. With published findings showing although the shelter-in-place was associated with an overall decrease in trauma volume, violence- related injuries continued. Matthay et al, suggests addressing the underlying factors driving violence- related injuries during the shelter-in-place orders be a focus for public health efforts and gives us some valuable information as we forward plan for future pandemics.

# Trauma Care – Point of Wounding Kits Added to Apparatus

The National EMS Practice model reports control of hemorrhage as one of the preventable causes of death related to trauma. To standardize rapid triage and initial immediate-intervention patient care across multi-jurisdictional agencies, the EMS Agency secured grant funding and purchased point-of- wounding (POW) care kits. Standardized training was developed and implemented across all ALS agencies and these kits are now part of the required inventory on all front-line 911 EMS system response apparatus County-wide. These packs can be utilized at single-patient and mass-casualty incidents, promoting a standardized approach. The County Sheriff subsequently adopted and implemented a scaled-down version of the POW kit across its apparatus containing like supplies.



#### Response Pack Inventory:

- Roll up stretcher
- Set of Triage Tape (Green, Yellow, Red, Black & White stripe)
- Trauma shears
- Fox 40 whistle
- 4x4 hemostatic or similar dressings
- Wide tourniquet
- Emergency compression bandage
- Mouth-to-Mask device
- Russell chest seals
- 8" x 10" abdominal pads 1" roll cloth tape

## 2021 Objectives

The following proposed objectives were submitted with the last trauma plan submission. The status of each is indicated in the color red.

- Continue to monitor trauma center receiving hospital performance. The EMS Agency clinicians referenced earlier monitor the receiving hospital performance by participating in continuous quality improvement meetings for both centers, by reviewing the data presented at these meetings, participating in the case reviews, and referring cases to both centers for review.
- 2. Stay up to date on current best practices for trauma care. Discuss recommendations and promote high quality care and prevention programs amongst the receiving trauma centers serving SMC. By attending committee and regional meetings, participating in continuous quality improvement, and educational seminars, the EMS Agency stays up to date on relevant best practices including approaches to injury prevention.
- 3. Continue to monitor trauma scene time and discuss the findings with our prehospital stakeholders, making improvements when necessary. Although removed from the EMSA Core Measures, scene times with a goal of rapid transport to definitive care for comprehensive care for the full spectrum of injuries beyond the initial assessment and treatment is a goal. Therefore, scene times are monitored and discussed with our stakeholders.

## 2022 Objectives

- 1. Continue to evaluate the care provided to trauma patients originating in San Mateo County across the continuum via the various quality care committees.
- 2. Continue to promote public awareness involving injury prevention.
- 3. Evaluate trauma care policies, procedures, and trauma volume to ensure processes are current and reflect the needs of San Mateo County.
- 4. Continue to review and update work on the County's Multicasualty Incident (MCI) Plan

## Trauma Quality Improvement

The recently revised Trauma treatment protocols prioritize early recognition of the critical trauma patient as well as activation and notification to facilitate the trauma team being ready

when the patient arrives at the trauma center. Physiologic, anatomic, and mechanism criteria found in Operations policies are now listed in the Trauma Triage (T01) treatment protocol.

Limiting scene time to <10 minutes or documenting why doing so is not possible due to staging, extrication etc., is being taught in the trauma curriculum. There has been an ongoing effort to decrease trauma scene time. Although this has been removed from the Core Measure as it did not consider several considerations such as staging, trauma scene time is still monitored.

Base consultation is encouraged for trauma destination determination if there is any question about where the patient is best served relative to resources.

## Injury Prevention Public Education

The EMS Agency has been involved in public education related to injury prevention. Our involvement includes participation in Stop the Bleed, Elderly Falls, and other programs.

San Mateo County has also participated in data gathering efforts led by both trauma centers including ZSFG's and San Francisco's "Vision Zero" initiative related to motorized scooters and ride-share alternate transport modes designed to assess the impact of these methods of travel on injuries. The injury coding in our electronic data system has been expanded to provide much more specificity relative to motor vehicle collision and now includes motorcycles, motorized scooters, train, BART, and off-road vehicle for example.

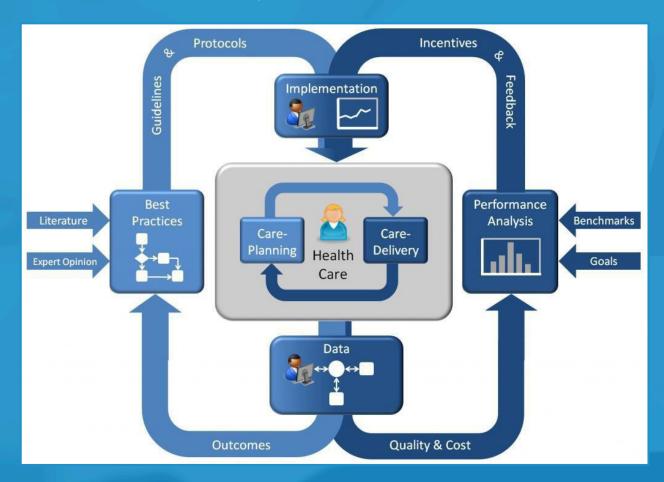
SMC's 911 ambulance services agreement with American Medical Response now requires the provision of a Community Education Service Advocate. This position collaborates with SMC to promulgate and support Injury Prevention programs within the County.

## Training and Education

All field crews are trained utilizing a standardized trauma curriculum that is evaluated and approved by the SMC EMS Medical Director as part of the annual training calendar for each 911 system provider agency.

# 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, trauma continuous quality improvement, and recommendations by the American College of Surgeons. Best practices in trauma care and current literature studies are discussed with key stakeholders at our quality meetings. Recommendations for practice change are discussed with our trauma centers and with our San Mateo County Medical Advisory Committee. Any sentinel events or concern over patient care as well as discussion regarding best practices are discussed weekly by the leadership team during an operational meeting.

# Annual Update

The EMS Agency updates the trauma system status plan and submits it annually to the California Emergency Medical Services Authority (EMSA). The updates include system changes and other information specified by EMSA.