

#### **EMS System Overview**

EMCC December 2022

#### The EMS System of Care





# **EMS Agency Roles and Responsibilities**



#### Local EMS Agency (LEMSA)



SAN MATEO COUNTY HEALTH EMERGENCY MEDICAL SERVICES Statutory responsibility and authority to plan, implement, evaluate, and regulate all aspects of the County-wide EMS system. This includes the establishment of Exclusive Operating Areas (EOA) for services and applies to all providers of EMS, both public and private:

- Emergency Ambulance Transport
- First Responder Emergency Medical Services
- Emergency Medical Dispatch Center(s)
- Emergency Receiving Hospitals
- Specialty Care Centers

24/7 County-level responsibility for medical control of the EMS system as well as coordination and management of emergency medical and disaster healthcare services, including mutual aid.

# EMS System Structure and Resources



#### EMS System Structure and Resources





- The City of South San Francisco has a grandfathered EOA and provides ambulance services via its fire department.
- Within the County EOA, paramedics on fire companies have responded, in addition to those on AMR's ambulances, to 9-1-1 emergency medical calls since 1999.
- The system is a public/ private partnership between AMR and the fire service, promulgated and overseen by the County EMS Agency. The system benefits patients with timely and high-quality paramedic services and strong integration and collaboration between the fire service and ambulance transport provider.
- A single dispatch center (PSC) performs all Emergency Medical Dispatch (EMD) services, dispatching the closest fire apparatus and an ambulance to every medical incident Countywide.
- Professional emergency care begins with emergency medical dispatchers gathering information and providing callers with pre-approved instruction in accordance with the Medical Priority Dispatch System (MPDS).
- By design, fire department paramedics and EMTs typically arrive on scene first and perform initial assessment and treatment.
- Ambulance paramedics and EMTs assume care and transport the patient to the appropriate facility. Fire department paramedics assist when necessary.
- PSC, the FIRE EMS JPA and AMR adhere to the medical direction and standards provided and overseen by the County EMS Agency.
- The County's EMS system is highly collaborative, and its success has served as a model which has been emulated in many other areas of the State.

JPA Paramedic First Responder Services Support



EMERGENCY MEDICAL SERVICES

- Fire JPA First Responder Fees \$5,296,231.14 (FY 2022/23)
- Four (4) fully equipped ALS emergency quick response/ command vehicles for JPA Supervisors, including maintenance
- Durable and disposable medical equipment and supplies for fire ALS first response apparatus:
  - LIFEPAK-15 cardiac monitor/ defibrillators, and maintenance
  - Video guided airway devices
  - Medications (including rotation to prevent expiration)
  - Electronic health record system and computers/ tablets (data support)
- State-of-the-art software for clinical and operational performance monitoring and quality improvement
- Field-based clinical specialist support

### EMS Response Time Requirements



#### Response Time Requirements

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





#### 9-1-1 Emergency First Response Services Performance Report

EMCC December 2022

## **JPA Agreement and Terms**



#### JPA Overall Compliance Summary

Agreement Section	Criteria	Findings of Performance Review
9(A)	Records review and audits	Compliant
16(A)	Compliance with inspections and investigations	Compliant
17	17 Compliance with Response Time Requirements	
18	Compliance of JPA with Agreements	Compliant

# **Records Review and Audits**



#### Certification and Accreditation



70 EMT Recertifications

**16** Paramedic Initial Accreditations

167 Paramedic Reaccreditations

# Compliance with Inspections and Investigations



# Inspections



**37** Stations Visited

51 S Response Appara

ALS Response Apparatus Inspected

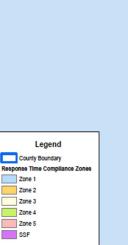
#### **Compliance with Response Time Standards**

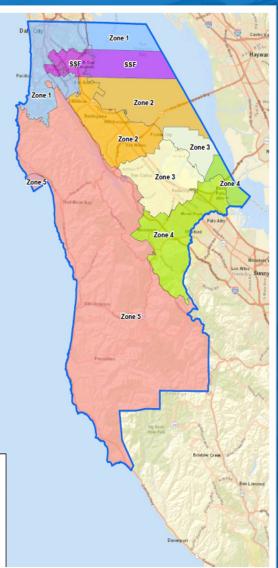


### Response Time Zones

Area	Requirement		
Each Zone	90%		







#### Response Time Compliance Summary

Overall Compliance	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
July 2021	90.43%	94.30%	95.27%	97.51%	93.41%
August 2021	91.10%	93.11%	94.21%	93.58%	94.30%
September 2021	90.51%	93.59%	94.88%	95.52%	92.47%
October 2021	90.35%	93.84%	93.24%	95.99%	88.80%*
November 2021	89.30%*	92.63%	94.14%	97.06%	98.00%
December 2021	87.85%	92.60%	94.15%	95.05%	94.00%
January 2022	90.18%	93.37%	95.45%	96.71%	96.15%
February 2022	92.27%	93.13%	93.50%	96.99%	95.81%
March 2022	92.18%	92.67%	92.12%	95.31%	94.48%
April 2022	91.63%	93.67%	94.58%	95.65%	92.12%
May 2022	91.02%	93.84%	94.01%	97.53%	95.98%
June 2022	90.74%	92.65%	91.46%	95.97%	95.81%

\* The County EMS Agency exempted the JPA from late responses for the purposes of response time compliance for the months of October and November 2021. In the boarder interest of protecting the health of the public from COVID-19, at the County's request, the JPA consistently committed significant front-line medical staff resources throughout these months in support of County mass vaccination efforts.



# **Community Engagement**



# **Community Engagement**



# Summary



#### JPA Overall Compliance Summary

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9(A)	Records review and audits	Compliant
16(A)	Compliance with inspections and investigations	Compliant
17 Compliance with Response Time Requirements		Compliant
18	Compliance of JPA with Agreements	Compliant



#### 9-1-1 Emergency Ambulance Services Performance Report

EMCC December 2022

## **AMR Agreement and Terms**



#### AMR Overall Compliance Summary

Agreement Section	Criteria	Findings of Performance Review
1.4(A)(1)	Overall compliance with the terms and conditions of the Agreement	Compliant
1.4(A)(2)	Compliance with Response Time Standards	Compliant
1.4(A)(3)	Effectiveness of quality management program in assuring the consistent delivery of high-quality clinical care	Compliant
1.4(A)(4)	Financial stability	Compliant
1.4(A)(5)	Cooperation of Contractor's personnel in collaborating with the EMS Agency and system stakeholders to deliver efficient, effective and compassionate prehospital care to the residents and visitors of the County	Compliant
1.4(A)[6]	Customer satisfaction	Compliant
1.4(A)(7)	Community engagement, including education and prevention activities	Compliant

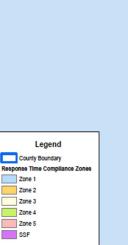
### Compliance with Response Time Standards

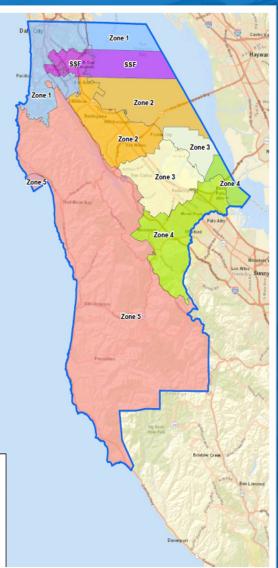


### Response Time Zones

Area	Requirement		
Each Zone	90%		







#### Response Time Compliance Summary: Year 3

Overall Compliance	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5
July 2021	91.66%	93.13%	94.63%	91.40%	91.57%
August 2021	90.50%	91.77%	91.89%	92.47%	90.32%
September 2021	90.58%	90.37%	93.29%	92.90%	92.04%
October 2021	89.88%	90.12%	90.91%	89.67%	88.99%
November 2021	92.02%	93.94%	93.45%	94.61%	94.44%
December 2021	91.15%	90.79%	94.07%	91.07%	95.48%
January 2022	90.58%	93.28%	94.15%	91.64%	93.95%
February 2022	93.68%	94.29%	95.61%	96.03%	94.26%
March 2022	91.67%	92.96%	93.87%	92.26%	96.28%
April 2022	90.78%	93.28%	93.81%	94.00%	93.09%
May 2022	90.94%	90.36%	90.81%	90.63%	94.81%
June 2022	90.37%	91.89%	92.98%	92.12%	93.84%



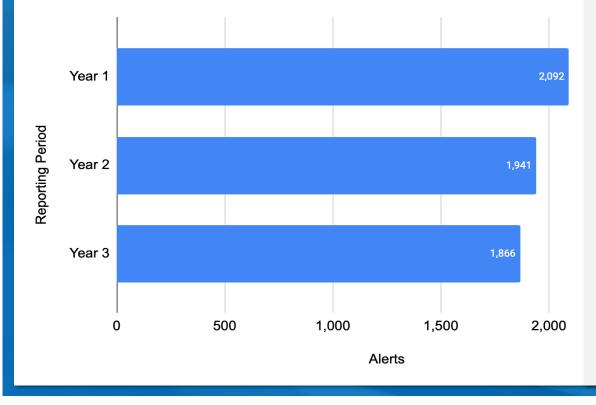
### Effectiveness of Quality Management Program and Clinical Care



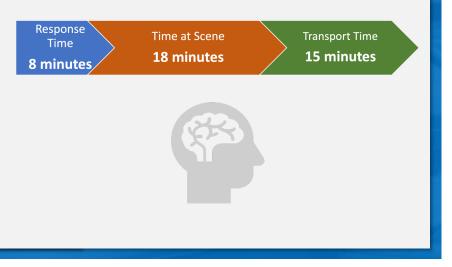
# Quality Management: STEMI System of Care



# Quality Management: Stroke System of Care



#### Q1 2022 EMS Times



# **Financial Stability**



#### AMR Financial Performance



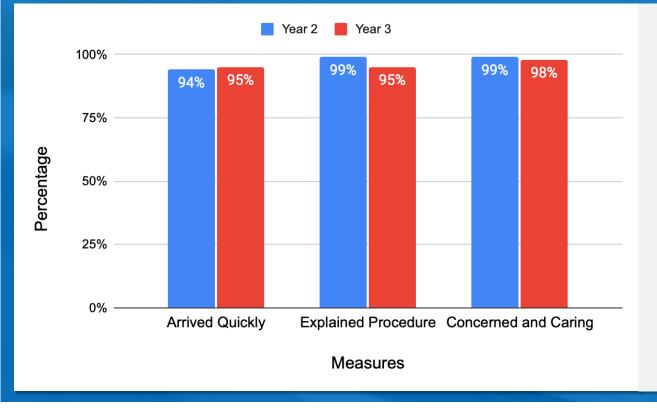
SAN MATEO COUNTY HEALTH EMERGENCY MEDICAL SERVICES

	202	1 Actual
Total Transports		34,476
Operating Revenue	\$	35,449,991
Operating Expense (less County Fees)	\$	28,827,353
County Service Fees:		
Dispatch Fees		1,077,408
Radio System Maintenance Fees		136,027
Oversight and Monitoring Fees		976,170
JPA First Responder Fees		4,994,799
Total County Fees	\$	7,184,404
Total Operating Expenses		36,011,758
Earnings from Operations	\$	(561,766)
Net Income (after Taxes)	\$	(411,959)
Collection Rate		26.1%
Payor Mix		
Medicare		46.1%
Medicaid		22.2%
Insurance		18.4%
Uninsured		13.3%
Total		100.0%
Earnings from Operations    Net Income (after Taxes)   Collection Rate   Payor Mix   Medicare   Medicaid   Insurance   Uninsured		(561,76) (411,95) 26.1 46.1 22.2 18.4 13.3

# **Customer Satisfaction**



#### Survey Results: Overall Care Over Time



#### **Survey Questions**

- 1. Did the paramedics arrive quickly?
- 2. Did the paramedic crew explain what they were doing and why?
- 3. Did the paramedics act in a concerned and caring manner?

# Survey Results: Patient Comments – July 2021 to June 2022

- The crew acted quickly and professionally. Thanks to them my recovery was complete. Thank you for a job well done. July 2021
- Thank you so much for how you responded to me and my husband. All of you were very caring and attentive. Everyone was extremely prompt to care for my husband. There is no way to express my gratitude to each of you. We appreciate all that you do! – August 2021
- I really appreciate what you did for me! I was so scared and the confidence this crew had put me at ease! Thank you! September 2021
- They were wonderful. I had dislocated my hip. The driver was very gentle. They were friendly and reassuring.— October 2021
- Excellent care! Plus leader was bilingual with English and Japanese, which helped in my situation. November 2021
- They were wonderful. Caring, explaining, knowledgeable, friendly. I felt safe and well cared for. December 2021

Survey Question – Did the paramedics arrive quickly? Did the paramedics act in a concerned and caring manner? Did the paramedic crew explain what they were doing and why?



# **Community Engagement**



#### Community Engagement Events



SAN MATEO COUNTY HEALTH EMERGENCY MEDICAL SERVICES



#### Community Engagement Events



SAN MATEO COUNTY HEALTH EMERGENCY MEDICAL SERVICES

Date	Event	Location
7/3/19	Hands Only CPR/Stop the Bleed	San Mateo County Housing Authority
7/13/19	Hands Only CPR	Facebook
8/1/19	How to Call 9-1-1/Hands Only CPR	Lincoln Elementary School
8/6/19	Nation Night Out	Not Listed
9/21/19	SMC Disaster Preparedness Day	San Mateo Event Center
10/5/19	Family Resource Expo	San Mateo Event Center
10/17/19	EMS Professions Lecture	The Nueva School
10/18/19	Hands Only CPR/ Stop the Bleed	The Nueva School
11/9/19	North County Health Fair	Serramonte Shopping Center
11/12/19	Hands Only CPR/Stop the Bleed	San Mateo County Housing Authority
11/14/19	MSU Demo/Stroke Awareness	Bay Area Stroke Conference
11/23/19	At Risk Youth Build-A-Bear	Not Listed
12/11/19	How to Call 9-1-1/Hands Only CPR	College Park Elementary
12/21/19	Hands Only CPR/Stop the Bleed	CHP Redwood City
1/30/20	Stop the Bleed	Hillsborough Schools
2/23/20	Via Heart Project Teen Heart Screen	College of San Mateo
2/26/20	Car Seat Safety Check	Stanford
4/17/20	PPE Training	Various Skilled Nursing Facilities
7/10/21	Sheriff Activity League Bicycle Rodeo	St. Anthony's Catholic Church, Menlo Park
8/3/21	National Night Out	Colma Community Center
8/31/22	Trunk or Treat	Brisbane
10/8/21	Half Moon Bay High School Football	HMB High School
4/9/22	Touch A Truck	Port of Redwood City
4/23/22	CHP Family Event	Redwood City
4/30/22	Children's Book Day	Daly City
4/30/22	Employee Appreciation Event	San Mateo Event Center
5/14/22	Falcon Fest	Foster City Elementary School
5/21/22	Healthcare on the Square	Redwood City
6/1/22	ASTL	Burlingame AMR
6/11/22	San Mateo County Pride Event	San Mateo
6/11/22	Bark and Brewfest	Burlingame SPCA
6/12/22	Nueva School Graduation	Hillsborough
6/15/22	Cardiac Care Symposium	Burlingame AMR

## Cooperation with EMS Agency and System Stakeholders



#### **EMS System Collaboration**



# Summary



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# COUNTY OF SAN MATEO



#### **THANK YOU**