

# Sacramento County Emergency Medical Services Agency STEMI Committee Meeting



Date and Time: November 13, 2025, 10:00 AM – 12:00 PM  
Location: EMS Conference Room, 9616 Micron Avenue, Suite 940, Sacramento, CA 95827  
Facilitator(s): Gregory Kann, MD FACEP

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## 1. Welcome, Attendance, and Approval of Minutes

- a. Discussion Points:
  - i. Introductions completed for all in-person and virtual participants.
  - ii. Minutes from the prior meeting were reviewed and approved.
- b. Action:
  - i. Motion to approve prior meeting minutes approved without changes.
  - ii. Motion: Brian Morr; Second: Serina Felcher

## 2. ECMO CPR Pilot Discussion

- a. Discussion Points:
  - i. Program in early phases at this time.
  - ii. CARES data shows countywide down-trending ROSC and survival metrics.
  - iii. ECMO CPR considered as the “back-end” missing link in the chain of survival.
- b. Details:
  - i. Intended patient profile:
    1. Age ~15–65
    2. Witnessed arrest
    3. Shockable rhythm
  - ii. Rapid transport capability (goal <30 minutes to cannulation)
  - iii. Proposed workflow mirrors a STEMI alert: prehospital activation → direct transport to Sutter → bypass ED → cath lab cannulation.
  - iv. LA County & San Diego have long-standing ECMO CPR programs with promising outcomes.
  - v. Operational considerations:
    1. Transport must occur under LUCAS compressions.
    2. Fire agencies (Metro, Sac City, Consumes) expected to be key partners due to having LUCAS devices.
    3. Hospital-to-hospital ECMO transfers deemed unlikely to meet required timelines.



- vi. Pilot policies under development, modeled on LA/SD protocols.
- vii. Target pilot launch anticipated summer 2026.

c. Action:

- i. SCEMSA, Sutter, and EMS providers to continue planning early 2026.
- ii. Additional stakeholder meetings to be scheduled after New Year.

### 3. Hospital Data Cross-Reference Guides

- a. Discussion Points
  - i. Need identified for standardized data-entry expectations across hospitals.
  - ii. Variability in what hospitals provide for STEMI, Stroke, and Specialty Care measures.
- b. Details:
  - i. Cross-reference guide will be attached to all relevant SCEMSA policies.
  - ii. Requested additions from hospitals:
    - 1. Stroke: CT time and first device/intervention time.
    - 2. STEMI: door-to-balloon time, first ED ECG.
  - iii. These metrics support AHA Get With The Guidelines requirements and joint agency-hospitals.
  - iv. Some hospitals have stopped sending data directly to specialty coordinators due to workload centralization.
- c. Action:
  - i. SCEMSA to distribute the draft data guide to hospitals for additional input.
  - ii. Hospitals encouraged to notify SCEMSA of data gaps or reporting issues.



## 4. STEMI Data Review – 2025 Q2

- a. Discussion Points:
  - i. Q2 included over 90,000 PCRs and 40,000 transports.
  - ii. 208 STEMIs documented during the quarter.
  - iii. Nearly 100% alignment between primary impression STEMI and ECG-confirmed STEMI.
- b. Details:
  - i. Scene times for true STEMIs remain <15 minutes – meeting national benchmarks.
  - ii. Pre-arrival notifications at 94% compliance.
  - iii. Some ECGs did not display STEMI on the monitor, but eDevice-08 transmitted STEMI-positive data → requires follow-up conversation.
  - iv. Primary impression selection challenges remain (i.e., choosing SOB instead of STEMI despite ECG findings).
  - v. ECG transmission remains critical for workflow.
- c. Action:
  - i. SCEMSA to investigate instances of eDevice-08 STEMI transmissions without corresponding monitor display.
  - ii. Education to continue around accurate primary and secondary impression selection.

## 5. Case Reviews – Mercy General Hospital & UC Davis Medical Center

## 6. Roundtable Updates

- a. UC Davis:
  - i. Scheduled Service Diversion – Strike
  - ii. All STEMI patients will be diverted Nov. 18 & 19<sup>th</sup>.
- b. Sacramento Fire Department:
  - i. SORT teams are connecting patients with treatment and resources to help.
  - ii. MIH coming in the next couple months
  - iii. TAD Program rollout slower but progressing
- c. SCEMSA
  - i. TAD Updates
- d. Metro Fire:
  - i. Celebrating 25-years of service!



e. Mercy General:

- i. Concern raised that discrepancies in the State Time Audit Tool require a timestamp to be counted as a discrepancy.
- ii. Hospitals encouraged to ensure that they are adding timestamps – not just notes as this will not count as a discrepancy without the time.

f. Cosumnes Fire

- i. CPR Saturdays revived; growing community participation
- ii. AED registration and PulsePoint maintenance improving system-wide readiness.
- iii. MIH program is going well!
  - 1. 44 patients enrolled in the high-utilizer program; 66% reduction in 911 use.
  - 2. MIH teams performing home safety checks, mobility assistance, and linkage to outpatient care.

g. Dispatch:

- i. Hands-to-Chest CPR instructions being looked at more in-depth

## 7. Adjournment

Next meeting scheduled for **February 17, 2026**.



## Emergency Medical Services STEMI Care Committee 2025 Meeting Dates

Day	Date	Time	Location
Tuesday	February 17, 2026	10:00 AM - 11:30 PM	Sacramento County EMS Agency 9616 Micron Ave Suite 900 Conference Room 1
Tuesday	May 12, 2026	10:00 AM - 11:30 PM	Sacramento County EMS Agency 9616 Micron Ave Suite 900 Conference Room 1
Tuesday	August 18, 2026	10:00 AM - 11:30 PM	Sacramento County EMS Agency 9616 Micron Ave Suite 900 Conference Room 1
Tuesday	November 17, 2026	10:00 AM - 11:30 PM	Sacramento County EMS Agency 9616 Micron Ave Suite 900 Conference Room 1

# Hospital / EMS STEMI Data

2Q 2025

<b>SCENE Calls (911-Response) - 2025 - 2Quarter</b>	<b>Incident Count</b>	<b>Percentages</b>	<b>Notes</b>
Total ePCRs received	90,445	100%	
Responses (Emergency Primary Response Area)	67,687	74.83%	of total responses
<b>Treated and Transported</b>	<b>40,381</b>	<b>44.64%</b>	<b>of 911 responses transported to the ED</b>
<b>Primary Impressions of Scene calls treated and transported</b>	<b>Incident Count</b>	<b>Percentages</b>	<b>Notes</b>
Chest Pain - STEMI	208	0.52%	of treated and transported
Chest Pain - Suspected Cardiac	1471	3.64%	of treated and transported

# STEMI Dashboard - EMS Data

<b>STEMI</b>	<b>System Total 2024 3Q</b>	<b>System Total 2024 4Q</b>	<b>System Total 2025 1Q</b>	<b>System Total 2025 2Q</b>
Total transported patients with primary impression of STEMI	152	158	175	208
90 <sup>th</sup> Percentile Scene Time to Unit Depart Scene of Primary Impression STEMI and (+) ECG of STEMI <b>(Transporting Unit)</b>	0:19:16	00:16:11	00:20:09	00:14:48
Patient with eVitals.03 or eDevice.08 documenting ECG of STEMI <b>(All Patients, Regardless of Primary Impression)</b>	162	152	157	210
Percentage of STEMI primary impressions with a STEMI ECG	80.92% <i>(123 patients)</i>	86.70% <i>(137 patients)</i>	85.71% <i>(157 patients)</i>	96.39% <i>(194 patients)</i>
All patients with a pre-arrival notification (of STEMI ECG)	119	133	157	198
% Pre-arrival notification (of STEMI ECG)	78.94%	88.07%	100%	94.28%
Total of patients with No ECG of STEMI documentation, but with a STEMI pre-arrival notification	25	15	16	14
% Pre-arrival notification (No ECG STEMI / Total)	16.44%	9.49%	9.14%	6.73%

# STEMI Primary Impression for Treated and Transported Patients

<b>Hospital Name</b>	<b>2024-3Q</b>	<b>2024-4Q</b>	<b>2025-1Q</b>	<b>2025-2Q</b>
KHR	8	14	8	16
KHN	2	0	2	3
KHS	45	33	46	47
MHF	0	0	0	0
MGH	26	30	16	28
MSJ	27	34	42	62
SMCS	16	27	37	22
MHS	0	0	0	1
SRMC	6	4	5	4
UCD	22	16	19	25
VAMC				
<b>Totals</b>	<b>152</b>	<b>158</b>	<b>175</b>	<b>208</b>

## Patient Count per Agency of STEMI Primary Impression or ECG of STEMI

Transporting Agency	23-Jul	23-Aug	24-Sep	24-Oct	24-Nov	24-Dec	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25
Alpha One	3	4	4	3	11	3	5	2	3	5	9	5
AMR	9	9	5	8	2	6	6	5	6	6	3	5
Cosumnes	11	6	6	4	3	8	9	6	4	9	5	4
Folsom	1	3	4	3	4	5	4	3		3		2
Medic	1											
Norcal						1				1		
Metro	20	22	11	15	24	12	23	16	17	24	29	25
Sac Fire	24	14	34	23	27	22	23	27	16	22	21	30
<b>Total</b>	<b>69</b>	<b>58</b>	<b>64</b>	<b>56</b>	<b>71</b>	<b>57</b>	<b>70</b>	<b>59</b>	<b>46</b>	<b>70</b>	<b>67</b>	<b>71</b>

# Unit Arrived Scene to First ECG for Primary Impression of STEMI or ECG of STEMI in Decimal Minutes

Provider	24-Jul	24-Aug	24-Sep	24-Oct	24-Nov	24-Dec	25-Jan	25-Feb	25-Mar	2Q-2025
Alpha							9.4	7.8		26.50
AMR	1.37		6	5			3.07	4		14.34
Cosumnes	20.65	9.07	32.15	39.18	12.19	22.83	12.6	15.57	20.57	13.94
Folsom	3.98	19.39	32.82	7.03	8.24	2.96	17.01	2		13.21
Metro	8.93	13.05	9.12	12.6	13.78	16.69	11.21	14.15	7.95	13.93
NorCal						2				
Sac Airport			9.9				27.18			
Sac Fire	15.5	5.98	12.4	11.74	11.53	11.78	17.05	13.41	16.1	14.37

Average Scene to First 12 Lead in minutes (System Average 8 min)										
Provider	24-Jul	24-Aug	24-Sep	24-Oct	24-Nov	24-Dec	25-Jan	25-Feb	25-Mar	2Q-2025
Alpha							7	7		16
AMR	1		6	5			3	4		8
Cosumnes	13	6	18	22	9	11	8	10	21	9
Folsom	4	13	18	7	7	2	11	2		7
Metro	6	7	6	8	8	9	7	9	5	8
NorCal						2				
Sac Airport			10				27			
Sac Fire	8	3	6	6	7	6	8	6	9	8

## Hospital Data STEMI 2025 2Q

<b>Hospital STEMI Calls</b>	<b>Count</b>	<b>Percentages</b>
<b>Total Hospital STEMI Patients (Confirmed AMI – STEMI and non-STEMI only)</b>	<b>185</b>	<b>100%</b>
<b>Brought in by EMS</b>	<b>101</b>	<b>54.59%</b>
<b>Of Patients Brought in by EMS</b>		
<b>STEMI Alerted per Hospital Data</b>	<b>88</b>	<b>87.13%</b>
<b>Not STEMI Alerted per Hospital Data</b>	<b>13</b>	<b>12.87%</b>
<b>Of Patients Not STEMI Alerted</b>		
<b>Cardiac Arrest</b>	<b>0</b>	<b>0%</b>
<b>Blank / PCR Not Found / Out of County EMS</b>	<b>2</b>	<b>15.38%</b>
<b>Initial ECG not STEMI positive</b>	<b>9</b>	<b>69.23%</b>
<b>No ECG Mentioned</b>	<b>2</b>	<b>15.38%</b>

## EMS Data STEMI 2025 2Q

<b>EMS Data</b>		
Total Transported Patients with Primary Impressions of STEMI	208	
Primary Impression STEMI transported to Sacramento Hospitals	188	90.38% (of 208)
Positive EKG STEMI	194	93.26% (of 208)
EKG STEMI transported to Sacramento Hospitals	175	90.20%

# Non-STEMI Impression with STEMI in Vitals or Device 2025-2Q

Findings	Primary Impression
56F - SOB AND CHEST PRESSURE - INITIAL 12-LEAD DISREGARDED AS FALSE POSITIVE BY MEDIC DUE TO ARTIFACT. 2ND 12-LEAD MANUALLY INTERPRETED A-FIB W/ARTIFACT.	RESPIRATORY DISTRESS/OTHER (J80)
68M - RIGHT UPPER QUADRANT PAIN RADIATING TO MID STERNAL X1WK. 4-LEAD = NSR. 12-LEAD = NSR. (EDEVICE.08 +STEMI)	ABDOMINAL PAIN/PROBLEMS (GI/GU) (R10.84)
28M - COMPLAINING OF LEFT SIDED CHEST PAIN X30 MIN. 12-LEAD = NSR. (EDEVICE.08 +STEMI)	OVERDOSE/POISONING/INGESTION (F19)
67F - WITH C/O FEELING LIGHTHEADED WITH HR OF 50. 12-LEAD X2: FIRST: ***STEMI SECOND: UNDETERMINED UNDERLYING RHYTHM, ANTERIOR INFARCT WITH RBBB.	HEADACHE - NON-TRAUMATIC (R51)
62 F - IS A/O X 4, GCS 15 AND COMPLAINING OF MIDSTERNAL CHEST PAIN AND HEADACHE.	CHEST PAIN - SUSPECTED CARDIAC (I20.9)
38M - HYPERTENSIVE AT 218/100 12-LEAD NSR WITH A NEW ONSET LEFT BBB. 12-LEAD TRANSMITTED FOR BASE CONTACT INTERPRETATION; PER DR. KALETSKI, NO STEMI NOTED. (EVITALS.03=STEMI)	GENERAL WEAKNESS (R53.1)
69F-MULTIPLE SEIZURES. 12-LEAD STEMI DURING TRANSPORT. UPGRADED C-3 KAISER ALERTED PER NARRATIVE / 12 LEAD GIVEN TO MD	SEIZURE - ACTIVE (G40.901)
74F-DIZZINESS. 12 LEAD EKG DONE PTA BY E37 = STEMI. SECONDARY 12-LEAD DID NOT SHOW STEMI. TRANSPORTED PT C3 TO SRMC. STEMI ALERTED PER NARRATIVE	NAUSEA/VOMITING (R11.2)
83F CHEST PAIN / DID NOT READ STEMI UNTIL TRANSFERRING CARE AT SRMC	CHEST PAIN - NOT CARDIAC (R07.89)
77F SEVERE RESPIRATORY DISTRESS. PATIENT PLACED ON CPAP. NO MENTION OF ECG FINDINGS IN NARRATIVE. (EDEVICE.08 +STEMI)	RESPIRATORY DISTRESS/PULM EDEMA/CHF (J81.0)
78M - CC N/V. PATIENT DENIED CHEST PAIN, SHORTNESS OF BREATH, ABDOMINAL PAIN, HEADACHE, DIZZINESS, DIARRHEA, RECENT TRAUMA, AND RECENT ILLNESS. NO MENTION OF ECG FINDINGS (EDEVICE.08=STEMI)	NAUSEA/VOMITING (R11.2)
60M SEPSIS ALERT - EN ROUTE 12-LEAD PROVIDES 2 STEMI ALERTS; MGH ADVISED AND 12-LEAD TRANSMITTED.	SEPSIS (A41.9)
79M ALOC/FEVER X2 DAYS/SEEN AT VA AND DX W/ENCEPHALOPATHY. TRANSPORTED C2 TO KHS SEPSIS ALERT. NO MENTION OF ECG IN NARRATIVE (EVITALS.03 = STEMI)	ALOC - (NOT HYPOGLYCEMIA OR SEIZURE) (R41.82)
69F - CONFUSION FEBRILE AND DECREASED SPO2 ON ROOM AIR. SEPSIS ALERTED C-3 UCD. NO MENTION OF ECG IN NARRATIVE (EVITALS.03 = STEMI)	SEPSIS (A41.9)
76M SUDDEN WEAKNESS AND DIFFICULTY SPEAKING. TRANSPORT C3W/STROKE ALERT, EN ROUTE MONITOR SHOWS STEMI	STROKE/CVA/TIA (I63.9)
66M - SEIZURE W/HX OF SEIZURE. No mention of ECG in narrative (eVitals.03 = STEMI)	SEIZURE - POST (G40.909)