Stroke Care Committee Meeting
Wednesday, May 14th 2025, 11:30 AM – 12:30 PM

Facilitator: Gregory Kann, M.D.; EMS Agency Medical Director

Meeting Minutes: Christine Devere, EMS Specialist

ITEM	Details (Key facts, Questions, Concerns)	Action Items/Decision
Welcome and Introductions	Meeting start time 11:30 am	None
Approval of Minutes – February 18, 2025	Motion: Adam Blitz Second: Matt Burruel	None
Old Business	**Discussion**	**Action Items/Decision**
PCR numbers on Hospital Data	• Discuss missing EMS run numbers, which affects the comparison of hospital and EMS data. • The goal for 2025 is to standardize the EMS run number used in the PCR on the hospital side. • Review stroke receiving center designation policy 2529 and stroke critical care system policy 6002 and be prepared to provide public comments.	Coordinate with hospitals to ensure EMS PCR numbers are consistently documented for tracking purposes Specialty Care stakeholders to review policies #2529 and #6002

Data Review and Analysis	Discussion	Action Items/Decisions
Quarterly EMS Data Hospital and EMS Comparison	• Imagetrend data issues, specifically in Get With The Guidelines vs Imagetrend ratio. • Specific data points include primary impressions for altered level of consciousness, stroke, CVA or TIAs, and sepsis patients. • Percentage of patients alerted in the field vs those with a final clinical diagnosis of Stroke. • Question regarding benchmark against other EMS systems • Ongoing conversations about introducing scoring pathways to up-triage patients in the pre-hospital environment.	Provide education and feedback to EMS providers on cases where stroke scales were not documented for patients later diagnosed with stroke.
Case Presentations	**Discussion**	**Action Items/Decisions**
• UC Davis • Kaiser North • Kaiser Roseville	• UC Davis: 66-year-old patient found down in the yard with left-sided weakness and a positive CPSS. The patient underwent a successful thrombectomy, and the case is used as an example of good EMS practice. • Kaiser North: 77-year-old male patient with acute onset left-sided facial droop and paralysis. Pre notification at 14:33. The patient received TNK within 20 minutes of arrival, meeting the door-to-needle time goal. • Kaiser Roseville: 35-year-old female with subacute left-sided weakness. The patient underwent a CT scan, which showed a hyperdense right MCA, indicating a clot. The patient was transferred to	Consider "dual alerting" patients that are meet more than one criteria i.e. trauma and stroke

	Kaiser Sacramento for urgent thrombectomy. Complete recovery and discharged with no deficits.	
Round Table	**Discussion**	**Action Items/Decisions**
	• UC Davis: Comprehensive Stroke recertification in January. Sponsoring a lunch and learn at the hospital with additional stroke awareness events in May.Stroke support group for stroke survivors Sydney Freer will be leaving SCEMSA to return to school, Katey Cloonan (CloonanK@saccounty.gov) will be assuming Specialty Care coordinator tasks in interim, effective Monday.	
Adjournment	**Adjourned at 12:30 am**	**Next meeting: TBD**

SACRAMENTO COUNTY

Department of Health Services Emergency Medical Services Agency
STEMI Care Committee
2025 Case Presentation Rotation

Date:	2/18/2025	5/14/2025	8/19/2025	11/18/2025
KHR		X		
KHS	X			
MGH				X
MSJ	X			
SMCS			X	
SRMC		X		
UCDMC				X

STEMI Liaisons

Contacts	KHR	KHS	MGH	MSJ	SMCS	SRMC	UCD
Primary	Heather Beere, MSN, MBA	Jennifer Bowers	Maryam Gol	Scott Brunton, RN	April Yeargin, RN STEMI	Debbie Madding, RN, BS, MICN	Taufa Lee
Secondary		Wendin Gulbransen		Amelia Hart	Serina Felcher	George Fehrenbacher, Dr	Jeremy Veldstra RN-MICN

https://dhs.saccounty.gov/PUB/EMS/Pages/Committees/STEMI%20Review%20Committee/STEMI-Review-Committee.aspx

Hospital / EMS Stroke Data

4Q 2024

SCENE Calls (911-Response) – 4-Quarter 2024	Incident Count	Percentages	Notes
Total ePCRs received	81,702	100%	All records
Responses (Emergency Primary Response Area)	59,219	72.48%	of total responses
Treated and Transported	**37,010**	**45.29%**	of 911 responses transported to the ED
Primary Impressions of Treated and Transported -911-Response (Scene)	**Incident Count**	**Percentages**	EMS Data
ALOC - (Not Hypoglycemia or Seizure) (R41.82)	1081	2.92%	
Stroke / CVA / TIA (I63.9)	1019	2.75%	
Sepsis (A41.9)	1018	2.75%	
Patient Arrival for Stroke/ CVA/ TIA (I63.9)	**Incident Count**	**Percentages**	Hospital Data (From GWTG)
Total Patient Count	1167	100%	
EMS from home/scene	512	43.87%	
Transfer From Another Hospital	351	30.07%	
Private Vehicle	296	25.36%	
Other /Unknown /Not Documented	8	0.68%	
Stroke alerted in field w/final clinical dx of Stroke			Hospital Data (Patient Registry)
Total Patient Count	263	28.77%	% = of In County Stroke Primary Impressions

Stroke Dashboard - EMS Data

Stroke	System Total 2024 1Q	System Total 2024 2Q	System Total 2024 3Q	System Total 2024 4Q
Total transported patients with Primary impression of Stroke	1006	948	1018	1019
Number of patients with documented Stroke Screen	988	937	996	1003
% of patients with documented Stroke Screen	98.21%	99.26%	97.83%	98.43%
Documented Glucose	968	926	1001	1019
% of documented glucose	96.22%	98.09%	98.33%	100.00%
Patients with a Stroke pre-arrival notification / or no due to over 24hrs	893	839	895	922
% of Stroke pre-arrival notification	88.77%	88.88%	87.91%	90.48%
Stroke Primary impression arriving at out of County Hospitals	98	90	90	105
% Stroke Primary impression taken to out of county hospitals	9.74%	9.49%	8.84%	10.30%

Positive stroke Scale Less than 24hour onset without a documented Stroke Alert (eDisp.24)

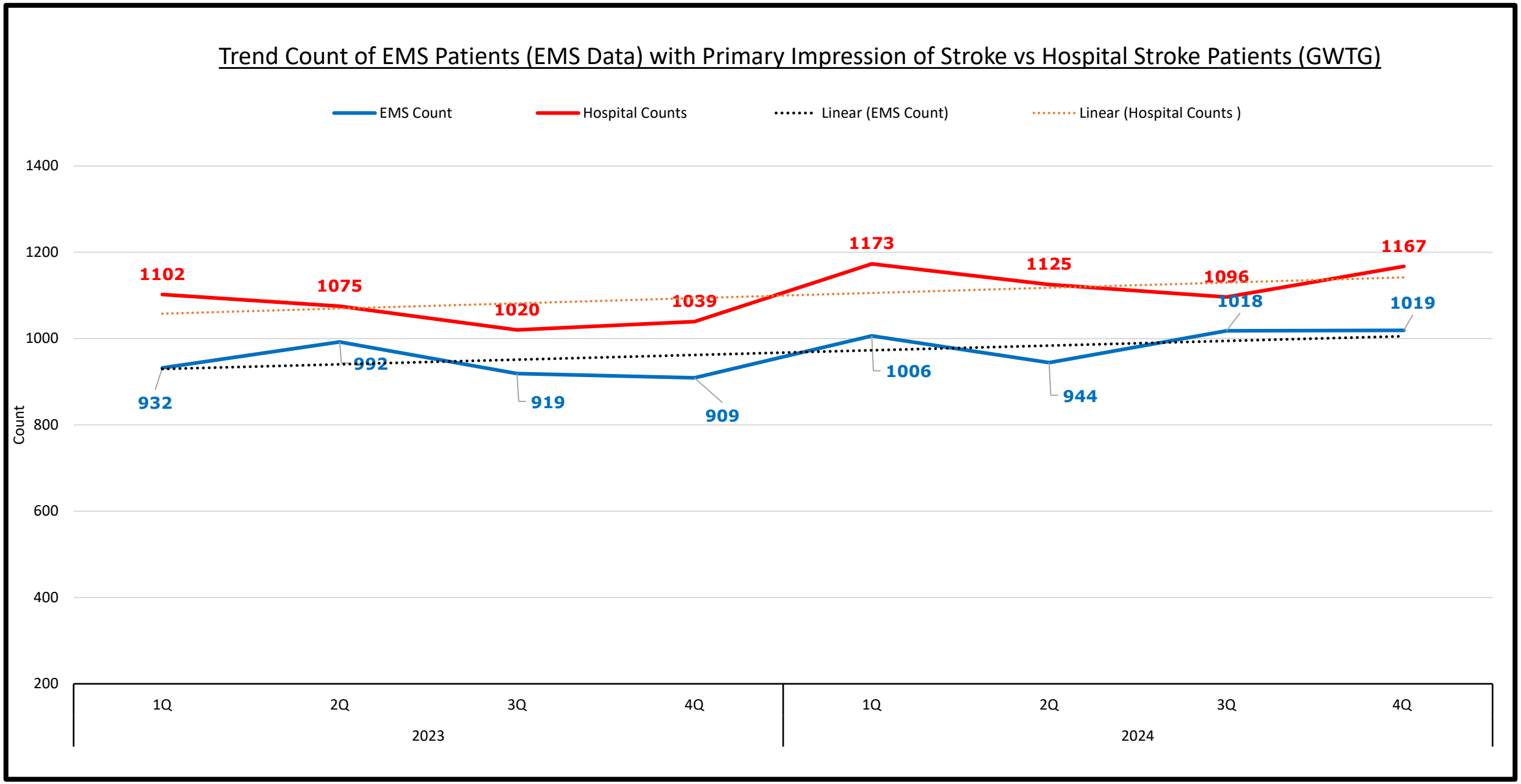
Audit Findings	Count of Findings
Alert documented in narrative	20
Alert likely done patient taken straight to CT no alert in narrative	1
Base contact for pt refusal left sided weakness, pt decided to transport	1
Confusion more than normal no other symptoms, no alert	1
Curling rt arm leaning no alert	1
Difficulty with speech and walking says positive scale no alert	1
Facial droop no alert	7
Lt sided weakness no alert	2
Over 24hrs change x5days	1
Positive new Aphasia no alert documented	1
Shallow respirations / slurred speech no alert	1
Slurred speech new onset no alert	1
SOB unequal grips / no alert	1
Grand Total	**39**

Stroke Primary Impression for Treated and Transported Patients - EMS Data

Hospital Name	1Q-2024	2Q-2024	3Q-2024	4Q-2024
KHR	56	49	54	57
KHN	147	138	160	162
KHS	173	167	189	167
MGH	63	59	65	71
MHF	55	54	59	68
MSJ	215	201	192	193
MHS	78	60	73	82
VAMC	0	3	0	0
SMCS	121	88	110	90
SRMC	31	41	32	42
UCD	62	88	80	81
OOA	5	0	4	6
Total	**1006**	**948**	**1018**	**1019**

Hospital Stroke Calls	**Count**	**Percentages**
Total Hospital Stroke Patients	**1167**	**100%**
Brought in by EMS	**512**	**43.87%**
Of Patients Brought in by EMS	**Count**	**Percentages**
Stroke Alerted (or identified but care transferred)	**300**	**58.59%**
Blank / PCR Not Found/ Out of County provider	**50**	**9.76%**
Symptoms Greater than 24 Hours	**25**	**4.80%**
Missed in the Field (Not including Symptoms >24 hours)	**137**	**26.75%**
Of Missed in the Field	**Count**	**Percentages**
No Stroke Scale documented	**34**	**25.36%**
Negative CPSS (including TIA = resolved)	**74**	**53.62%**
Inconclusive/Unable to complete	**24**	**17.39%**
Positive	**5**	**3.62%**
Top 5 Primary Impressions of Missed in Field		
ALOC	**42**	**30.65%**
General Weakness	**20**	**14.59%**
Headache/HTN	**14**	**10.21%**
Dizziness/Vertigo	**12**	**8.75%**
Syncope	**8**	**5.83%**
Other (N/V, Trauma, Sepsis, Behavioral etc.)	**43**	**31.38%**

Trend Count of EMS Patients (EMS Data) with Primary Impression of Stroke vs Hospital Stroke Patients (GWTG)



Positive CPSS no Stroke alert

- "Cincinnati Stroke Scale performed, positive. Pt placed on monitor and 12 lead obtained, negative STEMI. Pt monitored en route to KHN without further incident or changes." BP 215/127
  *No Stroke scale score, Primary Impression Stroke/CVA/TIA alert per EMS PCR or Hospital data
- "Arrive on scene to find patient sitting on floor of hallway and apartment complex weak, unable to speak, but with purposeful movement and eyes were tracking. Patient had curling of his right arm, was unable to stand and a lean to the right hand side while sitting down." BP 175/116
  *Documented as CPSS positive, Primary Impression Stroke/CVA/TIA - no Stroke alert per EMS PCR or Hospital data
- "PT POSITIVE ON THE STROKES CALE FOR RIGHT SIDED FACIAL DROOP. PER FAMILY, PT MORE CONFUSED THAN NORMAL." BP 173/80
  *Documented as CPSS positive, Primary Impression Stroke/CVA/TIA no Stroke alert per EMS PCR or Hospital data
- "Upon assessment, patient had significant left sided facial group and right sided Arm weakness. Patient was transported code 3 to MHS." BP 193/91
  * Documented as CPSS positive, Primary Impression Stroke/CVA/TIA no Stroke alert per EMS PCR or Hospital data
- "PT IS A&OX4 WITH A CC OF L ARM NUMBNESS AND WEAKNESS. SUDDEN ONSET OF NOT BEING ABLE TO MOVE HER ARM FOLLOWED BY NUMBNESS WITH PIN AND NEEDLE SENSATIONS THAT WOULD NOT RESOLVE. PT IS POSITIVE FOR LEFT ARM WEAKNESS BUT NO SIGNS OF ARM DRIFT, FACIAL DROOP, OR SLURRING SPEECH. PTS LEFT ARM APPEARS MORE PALE THAN THE RIGHT AND PT IS GETTING AN SPO2 WITH A GOOD PLETH OF 88-90% ON HER LEFT HAND WHILE GETTING 95-98% WITH A GOOD PLETH ON THE RIGHT HAND." BP182/135
  *Documented as Inconclusive CPSS, Primary Impression General Weakness - no Stroke alert per EMS PCR or Hospital data

No CPSS Performed

- “Patient states he has had nausea with vertigo on going since Friday. Patient vital signs on scene hypertensive, patient has not taken BP medication since Friday.” BP 207/114 Primary Impression N/V
- “Patient AOx0 GCS 9. Per roommate on scene patient is normally AOx4 GCS 15.” BP 195/104 Primary Impression ALOC
- “Pt’s c/c is nausea and vomiting. Pt stated the room was spinning and he felt dizzy. Pt stated he began to have a headache after vomiting.” BP 200/113 Primary Impression N/V
- “Pt started having a headache 3 days ago. Pt has taken Tylenol as prescribe but without relief. Pt says the pain has gotten worse and can’t handle the pain.” BP 190/82 Primary Impression Headache
- “PATIENT HAD AN UNWITNESSED FALL LAST NIGHT AND HAS BEEN ON THE GROUND FOR APPROXIMATELY 12-14 HOURS. PATIENT WAS A/O4 BUT WAS UNABLE TO GIVE A CLEAR STORY ON THE EVENT. REPORTED DIZZINESS WHENEVER SHE MOVED” BP 197/90 Primary Impression “No medical Complaint”