



Stroke Care Committee Meeting
 Tuesday, November 19, 2024, 1:00 PM – 3:00 PM
 9616 Micron Ave. Suite 900, Sacramento, CA. 95827
 Conference Room 1

Facilitators: Gregory Kann, M.D. EMS Agency Medical Director
 Minutes: Katey Cloonan, EMS Specialist

ITEM	Details (Key facts, Questions, Concerns)	Action Items/Decision
Welcome and Introductions	Meeting start time 1:00 pm	None
Approval of Minutes – August 20, 2024	Motion to Approve: Dr. Tressa Naik Second: Jeremy Veldstra	None
Old Business	Discussion	Action Items/Decision
Stroke COMPASS Documentation	Stroke Compass Project <ul style="list-style-type: none"> • Dr. Kevin Keenan and the Sacramento County EMS Agency (SCEMSA) are studying pre-hospital tools for identifying large vessel occlusion (LVO) strokes. • Tools such as VAN and LA Motor Scores are being evaluated for effectiveness. • Data collection is planned to begin in January 2025, targeting 120 patients over 6-8 months. 	



Data Review and Analysis	Discussion	Action Items/Decision
<p>EMS Stroke Data</p> <p>Hospital / EMS Data Comparison</p>	<p>EMS System Data Review</p> <ul style="list-style-type: none"> • EMS received nearly 100,000 patient care reports (PCRs) in Q2 2024. <ul style="list-style-type: none"> ◦ 35% resulted in patient transport to emergency departments. ◦ Stroke-related primary impressions accounted for 2.79% (948 cases). • Discussion was had about reporting on the glucose measurement. Compliance has been steady at 98%. <ul style="list-style-type: none"> ◦ The committee deliberated on whether SCEMSA should continue reporting on glucose measurements in the Stroke Review Committee, with the general consensus being that it was not needed. • Pre-arrival stroke notifications occurred in 839 cases (just under 90%), conversation was had about reasons why some pre-arrival notifications were missed. • Discussions focused on improving data collection and standardizing reporting methods. <p>Data Dashboard Analysis</p> <ul style="list-style-type: none"> • Stroke dashboards for Q3 2023 to Q2 2024 reviewed. <p>EMS Hospital Comparison</p> <ul style="list-style-type: none"> • Out of 472 patients identified in patient registry, 192 (~40%) were documented as stroke alerts both by EMS and the receiving hospital. 	



	<ul style="list-style-type: none"> • EMS data lacked PCRs for 191 cases, potentially due to patients being out-of-county or issues with inconsistent PCR numbering • Efforts are underway to standardize PCR numbers for accurate matching between EMS and hospital records. • Review of 89 non-stroke-alert cases revealed: <ul style="list-style-type: none"> ○ 50 cases with negative Cincinnati scores, extended last-known-well times, or other complicating factors. ○ 39 cases where stroke was not considered by EMS, with common presentations including dizziness and ALOC. • Education is emphasized to ensure crews keep stroke high on their differential diagnosis list. 	
Case Presentations	Discussion	Action Items/Decisions
<p>Methodist Hospital</p> <p>Sutter Roseville Hospital</p> <p>Kaiser Hospital Roseville</p>	<ol style="list-style-type: none"> 1. Methodist Case: <ul style="list-style-type: none"> ○ 55-year-old male with an M1 occlusion. ○ Door to needle within 38 minutes of arrival and underwent thrombectomy. NIH reduced from 11 to 4. 2. Sutter Roseville Case: <ul style="list-style-type: none"> ○ 67-year-old presented with a right MCA occlusion. Door-to-groin puncture achieved in 59 minutes. 3. Kaiser Roseville Case: <ul style="list-style-type: none"> ○ 62-year-old with a right MCA stroke received timely TNK and mechanical thrombectomy. 	



Round Table	Discussion	Action Items/ Decisions
	<ul style="list-style-type: none"> • Suggestions for improving family contact methods, such as creating a hotline or leaving family cards with contact information. • Proposals for enhanced stroke awareness campaigns aligned with LVO training. • Ongoing challenges with using 911 for inter-facility transfers noted; improvements in IFT resource efficiency discussed. 	
Adjournment	Adjourned at 2:25 pm	Next meeting: February 18, 2025 1 PM – 3 PM



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

Date:	2/18/2025	5/20/2025	8/19/2025	11/18/2025
KHN		X		
KHR		X		
KHS	X			
MGH			X	
MHF			X	
MHS				X
MSJ	X			
SMCS			X	
SRMC				X
UCD		X		

Stroke Liaisons										
Contacts	KHN	KHR	KHS	MGH	MHF	MHS	MSJ	SMCS	SRMC	UCD
Primary	Jason Murray	Michelle Arvo	Sherry Whitcomb, JD, MSN, RN CPHQ	Emily Browne		Max Naximko, MSN, RN, SCRNI	Irina Rebello	Kandis Dowd	Jennifer Bingham	Kimberly Brink
Secondary	Jonathan Hartman MD					Anu Locricchio	Richard Otley, RN	Chase Childress	Patty McNamara	Dawn Warner
						Heidi Hollingsworth				

SCENE Calls (911-Response) – 2-Quarter 2024	Incident Count	Percentages	Notes
Total ePCRs received	95,666	100%	All records
Responses (Emergency Primary Response Area)	61,651	64.44%	of total responses
Treated and Transported	34,015	35.56%	of 911 responses transported to the ED
Primary Impressions of Treated and Transported -911-Response (Scene)	Incident Count	Percentages	
ALOC - (Not Hypoglycemia or Seizure) (R41.82)	1,218	3.58%	
Stroke / CVA / TIA (I63.9)	948	2.79%	
Sepsis (A41.9)	868	2.55%	
Patient Arrival for Stroke/ CVA/ TIA (I63.9)	Incident Count	Percentages	From ImageTrend Patient Registry (Hospital Data)
Private Vehicle	290	28.85%	
EMS from home/scene	472	46.97%	
Transfer From Another Hospital	227	22.59%	
Other /Unknown /Not Documented	16	1.59%	
Total Patient Count	1005	100%	

Stroke Dashboard - EMS Data

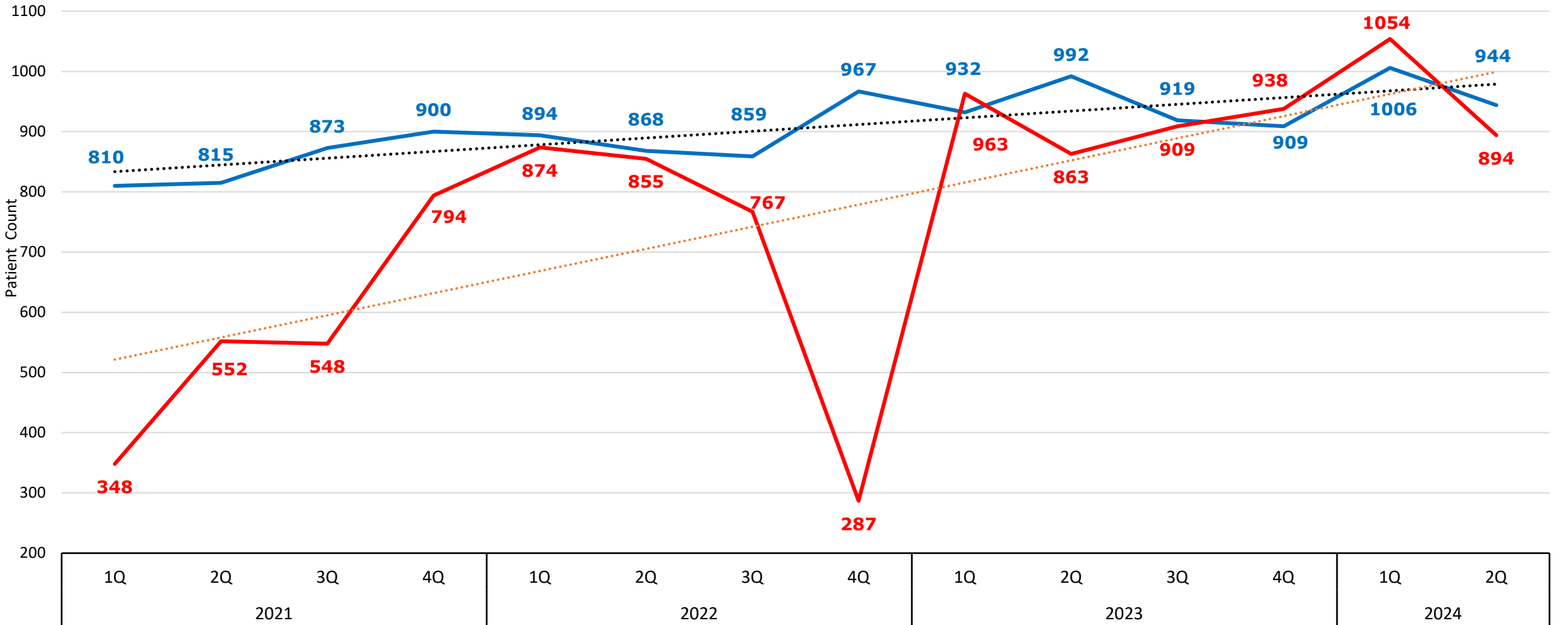
Stroke	System Total 2023 3Q	System Total 2023 4Q	System Total 2024 1Q	System Total 2024 2Q
Total transported patients with Primary impression of Stroke	919	909	1006	948
Number of patients with documented Stroke Screen	903	878	988	937
% of patients with documented Stroke Screen	98.26%	96.59%	98.21%	99.26%
Documented Glucose	875	863	968	926
% of documented Glucose	95.21%	94.94%	96.22%	98.09%
Patients with a Stroke pre-arrival notification	805	800	893	839
% of Stroke pre-arrival notification	87.60%	88.00%	88.77%	88.88%

Stroke Primary Impression for Treated and Transported Patients - EMS Data

Hospital Name	3Q-2023	4Q-2023	1Q-2024	2Q-2024
KHR	69	51	56	49
KHN	157	153	147	138
KHS	167	178	173	167
MGH	47	45	63	59
MHF	51	52	55	54
MSJ	173	191	215	201
MHS	69	78	78	60
VAMC	0	0	0	3
SMCS	97	75	121	88
SRMC	25	22	31	41
UCD	63	61	62	88
OOA	1	3	5	0
Total	919	909	1006	948

Trend Count of EMS Patients with Primary Impression of Stroke vs Hospital Stroke Patients

— EMS Count — Hospital Counts Linear (EMS Count) Linear (Hospital Counts)



EMS Hospital Comparison: 2024 - 2Q

Patient Registry Data Compared to EMS Data	Total	Notes
Total Hospital Strokes	1006	
Brought by EMS	472	
Stroke Alerted	192 (=40.68%)	
ePCR Not Found	191 (=40.47%)	102 of those the hospital documented pre-arrival notification (= 294 stroke alerted = 62.29%)
Not stroke alerted	89 (=18.86%)	
Of not alerted: Negative CPSS	50 (=56.18%)	Includes LKW +24 and unable to complete
Of Not Alerted No Stroke Scale Mentioned	39 (=43.82%)	