STEMI Care Committee Meeting
Tuesday, November 7th, 10:00 AM –12:00 PM

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

Meeting Minutes: Yvonne Newson, EMS Specialist

ITEM	**Details** (Key facts, Questions, Concerns)	**Action Items/Decision**
Welcome and Introductions	Meeting start time 10:00 am	None
Approval of Minutes – August 15, 2023	Motion: Tressa Naik Second: Jeremy Veldstra	None
Old Business	**Discussion**	**Action Items/Decision**
• GWTG and ImageTrend Patient Registry	Sydney - Delay in moving to Imagetrend Patient Registry due to the transition from NEMISIS 3.4 to 3.5. I was able to do some of the test uploads and figure out mapping. AHA is now building the instructions for us. As soon as I have those instructions and Mark can create accounts, we will have Serena and others willing to test the upload process. Regarding the timeline for data upload, we are asking our hospitals to do it within 90 days after the quarter, giving an entire quarter to upload the previous quarter's data. It will be placed into a policy once this trial process has happened.	Sydney will send out instructions after receiving them from AHA.

	Greg Kann- At the agency, we decided to synchronize all the specialty care data (Stroke, STEMI, Trauma) quarterly. Julie Currington- Can you give an example of what it will look like on the EMS side? Sydney Freer- The Patient Registry is the hospital data on Stroke and Trauma. We hope to have the same kind of data for STEMI, where I can pull data from the EMS and hospital side instead of contacting the hospitals for the information. Julie Currington- Also curious about the data points that will be used through the registry. Are they going to be data points that match 3.5? Sydney Freer- That is the goal.	
New Business	**Discussion**	**Action Items/Decision**
• Policies to Review: PD# 9014 – Pediatric Cardiac Dysrhythmias (New Policy Versions)	Greg Kann- In the past, our policies were very text-heavy; we are moving more into these flow chart pathways and giving medics a more field-friendly review. This will be coming to MAC/OAC for approval, with all these policies moving into the May 1st rollout. Sydney Freer- Any content change will be brought to the MAC/OAC meetings. Regarding this policy (Pediatric Cardiac Dysrhythmias), we are breaking out from Pediatric Cardiac Dysrhythmias into separate policies, one for bradycardia and the other for tachycardia.	

Data Review and Analysis	Discussion	Action Items/Decisions
STEMI Dashboards	Visual Slide 2023 3rd Quarter Data IV starts are being established, but documentation of location is not being recorded. Visual Slide of STEMI rolling 4 Quarters Data Julie Currington – Should this be a truly important measure? There are so many factors involved, like Cardiac Arrest. A true time would be patient contact to the first 12-lead. Note: One Cardiac Arrest was documented Brian Morr – Is this measured time with the first medical contact? Yvonne Newson – On scene time and left scene time for the unit that transported the patient. Brian Morr – Let's measure based on the AHA guidelines: the first medical contact time, the time of the first 12- leads, and the time of the alert. Greg Kann –We will discuss the first medical contact to ECG time on another slide. We still have limitations on how to accurately measure this time, the engine medic who arrives and does an EKG. Note: In a little over 55%, there are STEMI Pre-Arrival Notifications but with no recording of ECG of STEMI on eVitals.03 or eDevice.08	

	Brian Morr – In 3.4, if the medic documents Septal STEMI, the State will reject it. Do we know if that has been fixed in 3.5? Sydney Freer – I was unaware of that, but we can look into it and get back to you. <u>Visual Slide of Unit Arrived Scene to First ECG</u> Greg Kann – As I mentioned before, we are having a difficult time when it is an engine medic first arrives and does that initial EKG. Julie Currington – I propose that we have a Data Workshop. Because this is a number that we can pull, it is a valid number, and it is extremely important because it is arguing ALS contact. Greg Kann- The reason we want to look at this is that we want to make sure our providers, when they receive whatever pre-arrival information, are prepared for these time-sensitive situations. We can see this as a system. I understand this data set is limited, but the system is under 10 minutes. Moving forward, we will be looking at the 90th percentile because there are patients for whom medics are being called out for abdominal pain or other things that, on the surface, are non-cardiac—causing some patients to have the EKG at the 20-minute mark. Serina Felcher – Is there going to be a roundabout for those patients that are missed, where you look at the agency that is at 19 minutes. Are you going to look into the impediments?	Sydney Freer or Yvonne Newson – Speak with Mark at the state about rejecting “Septal STEMI.” SCEMSA to schedule a STEMI data meeting with fire and private providers

	Brian Morr – Under the AHA rules for EMS, it differs from what you get for hospitals. Some agencies require you to take the patient to the privacy of the ambulance for the 12-lead. We also throw it out as an outlier if the patient needs a respiratory or airway intervention. Greg Kann – We all have these cases where the patient arrives with a non-cardiac complaint, sits in the waiting room for an hour and a half, and then gets into a room, and STEMI shows on the ECG. And this will be happening on the field just as much, I would argue even more, as in the hospital. Serina Felcher – I am saying when looking at first medical contact, I have to look at the other intercepts that may be problematic. Dawn Warner – The data may be more meaningful, too. Consider also the hospital side, such as cases with airway issues or caused delays in other treatments. Serina Felcher – Dr. Kann, are you encouraging these agencies to become part of that AHA award? Greg Kann- I have not explicitly made requirements for that, but it is a goal I would like to achieve. But when we have data like this, we need to be talking to those agencies and asking why we are having delays. And we do have in our policy the first ECG within 10 minutes.	

	Julie Currington – What I think can help us get better is reaching out to Agency 4 (Average time < 5 minutes); what are your best practices?	
Case Presentations	**Discussion**	**Action Items/Decisions**
• SMCS • Dignity Health • Metro Fire • UC Davis	I. Serina Felcher presentation on Sutter Heart & Vascular Institute • Trials and Tribulations for Meeting AHA Hospital Recognition • Roles of EMS and Hospitals (transferring and receiving) in meeting the AHA criteria II. Michelle Norris's case presentation with Sac Fire III. Adam Blitz case presentation with Paramedic Matt B. IV. Jeremy Veldstra, Dawn Warner, and MD case presentation	Yvonne Newson- Data for the next meeting. How many Cardiac Arrest (CA) and how many CA after STEMI?
Round Table	**Discussion**	**Action Items/ Decisions**
Closing and recap of any action items	Davide Magnino – Hopefully, by February, the Agency will be in its new suite in the same building. Sydney is our new Specialty Care Coordinator and will now have Specialists positions opening up.	None
Adjournment	Adjourned at 11:45 pm	**Next meeting: February 20, 2024 10 am – 12 pm**

Department of Health Services Emergency Medical Services Agency
STEMI Care Committee
2024 Case Presentation Rotation

Date:	2/20/2024	5/21/2024	8/20/2024	11/19/2024
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	Amelia Hart	April Yeargin, RN STEMI	Debbie Madding, RN, BS, MICN	Dawn Warner, RN, MSN, CCRP
Secondary		Wendin Gulbransen			Lisa Hayhurst, RN Director	George Fehrenbacher, Dr	Jeremy Veldstra RN-MICN

SCENE Calls (911-Response) - 2023 - 3Quarter	Incident Count	Percentages	Notes
Total ePCRs received	83,307	100%	All records
Responses (911-Response/Primary Response Area “PRA”)	60,385	72.48%	of total responses
Treated and Transported (of 911-Response/PRA)	**33,000**	**54.65%**	of 911 responses transported to the ED
Primary Impressions of Scene calls treated and transported	**Incident Count**	**Percentages**	**Notes**
Chest Pain - STEMI	191	0.58%	
Chest Pain - Suspected Cardiac	1,250	3.77%	
Syncope/Near Syncope	886	2.68%	
IV Starts	**Incident Count**	**Percentages**	**Notes**
Right Side	97	6.73%	of treated and transported with Primary Impression STEMI / Suspected Cardiac
Left Side	373	25.88%	of treated and transported with Primary Impression STEMI / Suspected Cardiac
Not Recorded/Not Applicable/Other Peripheral/Blank	971	67.38%	of treated and transported with Primary Impression STEMI / Suspected Cardiac

STEMI Dashboard - EMS Data

STEMI	System Total 2022- 3Q	System Total 2022- 4Q	System Total 2023- 1Q	System Total 2023- 2Q	System Total 2023- 3Q
Total transported patients with primary impression of STEMI	149	148	143	126	191
90th Percentile Scene Time to Unit Depart Scene of Primary Impression STEMI with (+) ECG of STEMI	00:18:23	00:16:42	00:19:41	00:18:14	0:19:00
Patient with eVitals.03 or eDevice.08 documenting ECG of STEMI	84	58	50	60	65
Percentage of STEMI primary impressions with a STEMI ECG	57%	39%	35%	47.62%	34.03%
Patients with a pre-arrival notification (of STEMI ECG)	76	51	47	56	52
% Pre-arrival notification (of STEMI ECG)	90%	88%	94%	93.33%	80%
Total of patients with No ECG of STEMI documentation, but with a STEMI pre-arrival notification					106
% Pre-arrival notification (No ECG STEMI / Total)					55.50%

STEMI Primary Impression for Treated and Transported Patients

Hospital Name	2022-4Q	2023-1Q	2023-2Q	2023-3Q
KHR	10	11	8	18
KHN	0	1	0	0
KHS	29	33	37	36
MHF	0	0	2	0
MGH	23	15	12	37
MSJ	41	39	39	43
SMCS	19	23	15	30
MHS	1	0	1	1
SRMC	8	8	4	8
UCD	17	13	8	18
Out of Area	0	0	0	0
Totals	**148**	**143**	**126**	**191**

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

Transporting Agency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total Average
Agency 1	4.27	5.94	4.36	7.38	8.06	8.36	7.58	4.38	10.86	6.80
Agency 2	10.84	8.65	7.95	11.39	7.42	7.38	8.43	9.88	4.88	8.53
Agency 3	14.24	19.10	16.43	15.19	9.00	11.15	10.80	15.74	10.58	13.58
Agency 4	4.60	4.67	5.21	5.40	3.57	4.34	4.46	4.86	4.30	4.60
Agency 5	5.54	5.16	0.00	8.72	17.41	14.95	8.69	8.34	6.66	8.39
Agency 6	10.23	12.26	8.26	13.17	11.49	15.79	7.38	6.80	10.79	10.69
System	**9.78**	**9.65**	**7.63**	**10.44**	**7.74**	**9.79**	**7.41**	**7.74**	**7.40**	**8.62**

Patients with ECG prior to arrival time excluded from report.

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

Transporting Agency	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Agency 1	1	5	6	8	7	8	4	6	4	49
Agency 2	25	13	19	21	19	20	22	22	19	180
Agency 3	8	6	2	4	1	4	2	4	4	35
Agency 4	24	22	16	11	16	14	19	20	19	161
Agency 5	2	4	0	5	4	6	6	3	7	37
Agency 6	7	7	8	4	4	6	8	12	10	66
Total	**67**	**57**	**51**	**53**	**51**	**58**	**61**	**67**	**63**	**528**