



STEMI Program Partners Meeting  
 Tuesday, May 16, 2023, 11:00 AM –12:30 PM  
 9616 Micron Ave. Suite 900, Sacramento, CA. 95827  
 Conference Room 1

Facilitator: Kevin Mackey, M.D.; EMS Agency Medical Director

Meeting Minutes: Sydney Freer, EMS Specialist

<b>ITEM</b>	<b>Details</b> (Key facts, Questions, Concerns)	<b>Action Items/Decision</b>
Welcome and Introductions	Meeting start time 11:00 am	None
Approval of Minutes – August 16, 2022 February 21, 2023	<b>August 16, 2022:</b> Motion: Tressa Naik Second: Jeremy Veldstra  <b>February 21, 2023:</b> Motion: Jeremy Veldstra Second: Adam Blitz	
<b>Old Business</b>	<b>Discussion</b>	<b>Action Items/Decision</b>
None	None	None



New Business	Discussion	Action Items/Decision
<p>-Change the Date of the November Meeting                      -Contract Responsibility                      -Policies to Review: PD# 8030.26: Discomfort-Pain of Suspected Cardiac Origin</p>	<p><b>Discussion: PD#8030:</b>                      -Dr. Mackey: Last time any statements were made about Nitroglycerin’s use for chest pain was by the American College of Cardiology in 2013. We all agree that Nitroglycerin is not going to fix a STEMI, but the question of whether to use it in the presence of a STEMI is the discussion I wanted to have today. Do the ER doctors at our hospitals use Nitroglycerin in the setting of a STEMI?                      -Speaker: If anything we use NitroPace but even that is few and far between now.                      -Jeremy Veldstra: Rarely.                      -Speaker: The response of cardiologists in other meetings about Nitro has been that they do not care.                      -Dr.Mackey: I am looking at S-SV’s policy and the one reason I like it is because it forces the prehospital provider to actually look at, read, and interpret the 12-lead for themselves.                      -Julie Carrington: We would need to have regular basic 12-lead interpretation review.                      -David Buettner: I would advocate that it does help with pain so there is a benefit.                      -Dr.Mackey: It should be worded “use with caution in patients with suspected inferior MI” which takes me back to my original point, does it raise the bar with our clinicians?                      -Julie Carrington: Giving the education is great and it is not an additional burden.                      -Dr.Mackey: We can also table this for the next meeting with the new medical director.</p>	<p>-November meeting date moved to 11/14/23                      -Hospitals to send Sydney updated contact information for required positions</p>



	<p>-Jeremy Veldstra: The statement in the policy that says "obtain 12-lead ECG if the patient ECG is consistent with an acute STEMI by software algorithm..." I am bringing this up based off a case a couple weeks ago that came to us. The prehospital ECG did not call it a STEMI, but when the patient arrived the field ECG was clearly a STEMI. I am wondering if we need to change this to rely on our practitioners ability to review what they are reading?</p> <p>-Dr. Mackey: This is not a decision we are making today because it is going to require a significant lift.</p> <p>-Sydney Freer: If we are changing the "by software algorithm only" in the policy, is there a concern of over alerting on the hospital side?</p> <p>-Dr. Mackey: They are still going to transmit and a middle step could be "software interpretation and confirmed by the paramedic".</p> <p>-Jeremy Veldstra: I don't personally have a concern of that for my institution.</p> <p>-Tressa Naik: I am fine with over alerting, we can handle the activation side of it.</p> <p>-Dr. Mackey: I don't feel that today is the day to make that decision, I think this is a small step. With Nitroglycerin, since the only document we have is 2013, we take this back.</p> <p><b>General Consensus:</b> Leave this policy the way it is.</p> <p>-Julie Carrington: I would like to request to have more ongoing education for STEMI's with / from the facilities.</p> <p>-Dr. Mackey: I am sharing with you right now an email that Captain Morr sends out to the crews. So UCDMC sent us the outcome on this patient, he goes through and calls out all the important things that have happened with that patient. He sends this to the crew and it even says "if you look at the 12-lead you</p>	<p>-Review this policy again in August with potential changes to software algorithm requirement / addition of paramedic review of ECG interpretation</p>
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	<p>ran” and he attaches the field 12-lead to it. So the crews look at this, they get positive feedback for the things they nailed, the hospital outcome information, and sometimes cath lab images. We are jumping ahead to “Feedback to the Field” under directors report. But, if we keep doing this, everyones game is going to come up and we get to the point we are reading our own 12-leads.</p>	
<b>Data Review and Analysis</b>	<b>Discussion</b>	<b>Action Items/Decisions</b>
STEMI Dashboards	<p>-Review of data:</p> <ul style="list-style-type: none"> <li>• SCEMSA to follow up on reporting multiple primary impressions and how that is affecting data</li> <li>• SCEMSA to include left side IV data in next meeting</li> </ul>	-SCEMSA to report out on left sided IV starts
<b>Directors Report</b>	<b>Discussion</b>	<b>Action Items/Decision</b>
Feedback to the Field	<p><b>Discussion: Feedback to the Field:</b></p> <p>-Wendin Gulbransen: Could we just give you the connection to connect the hospital data to the EMS data?</p> <p>-Sydney Freer: Yes, but the GWTG data won’t include cath lab feedback. It will have final clinical diagnosis but actual ECG feedback won’t be included.</p> <p>-David Buettner: We need to pick out, on a system level, what are the quality pieces that we want to pick out and look at?</p> <p>-Sydney Freer: At the state level they are trying to get to using ImageTrend Patient Registry for STEMI. We are hoping a couple of our hospitals will be willing to start trialing that reporting to us and the state.</p> <p>-April Yeargin: I do a feedback report that I send to you, but it is not like that email. I don’t know if we want to standardize that?</p>	-Standardization of STEMI feedback to providers accomplished by hospital STEMI coordinators



	<p>Also, I am looking to get that feedback report in 24 hours so often times I don't have the PCR.</p> <p>-Sydney Freer: I have seen those reports and I have had the issue of I don't know where to send them to get that information to the correct place. The biggest problem is that without a run number and with it deidentified, even if I send it to one of the agencies, I don't know that it can get to the right person.</p> <p>-April Yeargin: I have recently started putting the agency on them. If you need more information on it, we can easily do that.</p> <p>-Dr. Mackey: What may help is if the providers get together and develop a standardized thing and send it to each coordinator when we come across a chart that would require feedback. I don't want to create more work.</p> <p><b>General Consensus:</b> Standardization of feedback is needed.</p> <p>-Speaker: Are we looking at first medical contact to 12-lead?</p> <p>-Dorthy Rodriguez: No. It was a metric that we were looking at. We were working with Mark Roberts trying to find out where that number originates from when I pull it out of ImageTrend. We are interested in it, but I don't want to report information without knowing how we got to that number.</p> <p>-Brian Morr: I have that information.</p> <p>-Julie Carrington: I would like to be a part of that conversation because I will show him where he might be a little off.</p>	
Case Presentations	Discussion	Action Items/Decisions
<ul style="list-style-type: none"> <li>• Kaiser Hospital Roseville</li> <li>• Mercy San Juan</li> </ul>	<p>-No presentations</p>	



<b>Round Table</b>	<b>Discussion</b>	<b>Action Items/ Decisions</b>
<p>Closing and recap of any action items</p>	<p>-Jeremy Veldstra: Julie, I will reach out to one of our physicians who loves to teach 12-lead stuff and see if he would be willing to do something for us.                      -Julie Carrington: I think a recorded something that could be distributed would be great.</p> <p>-Dr. Mackey: What I want to get to is one form, from all the providers, that goes to the hospitals so that you are not getting many different forms requesting information.                      -Jeremy Veldstra: My suggestion then is to get what is sent out by the hospitals, and you guys take what that is and make it what you want.                      -Sydney Freer: Who should our hospitals be sending the information to?                      -Jeremy Veldstra: The hospitals should be sending them directly to the providers.                      -Dr. Mackey: Can I ask a favor, Julie can you and Brian get together and come up with something?</p> <p>-Sydney Freer: Moving back to data, if I can have a couple hospitals help with the move into ImageTrend and seeing what that will look like with Mark Roberts.                      -Wendin Gulbransen: Would you not use GWTG?                      -Sydney Freer: That is the goal.</p>	<p>-Sydney to follow up regarding GWTG and ImageTrend Patient Registry</p>
<p><b>Adjournment</b></p>	<p>Adjourned at 12:30 pm</p>	<p><b>Next meeting: August 15, 2023</b></p>



**Department of Health Services Emergency Medical Services Agency  
STEMI Care Committee  
2023 Case Presentation Rotation**

<b>Date:</b>	<b>2/21/2023</b>	<b>5/16/2023</b>	<b>8/15/2023</b>	<b>11/14/2023</b>
<b>KHR</b>		X		
<b>KHS</b>	X			
<b>MGH</b>				X
<b>MSJ</b>		X		
<b>SMCS</b>			X	
<b>SRMC</b>			X	
<b>UCDMC</b>				X

**STEMI Liaisons**

<b>Contacts</b>	<b>KHR</b>	<b>KHS</b>	<b>MGH</b>	<b>MSJ</b>	<b>SMCS</b>	<b>SRMC</b>	<b>UCD</b>
<b>Primary</b>	<a href="#">Heather Beere, MSN, MBA</a>	<a href="#">Jennifer Bowers</a>	<a href="#">Maryam Gol</a>	<a href="#">Amelia Hart</a>	<a href="#">April Yeargin, RN STEMI</a>	<a href="#">Debbie Madding, RN, BS, MICN</a>	<a href="#">Dawn Warner, RN, MSN, CCRP</a>
<b>Secondary</b>		<a href="#">Heather Beere, MSN MBA</a>			<a href="#">Lisa Hayhurst, RN Director</a>	<a href="#">George Fehrenbacher, Dr</a>	<a href="#">Jeremy Veldstra RN-MICN</a>

<b>SCENE Calls (911-Response) - 2023 - 1Quarter</b>	<b>Incident Count</b>	<b>Percentages</b>	<b>Notes</b>
Total ePCRs received	79,128		All records
Responses (911-Response)	57,198	72.28%	of total responses
<b>Treated and Transported (of 911-Response)</b>	<b>31,833</b>	<b>55.65%</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	143	0.44%	
Chest Pain - Suspected Cardiac	1169	3.67%	
Syncope/Near Syncope	908	2.85%	



# STEMI Dashboard - EMS Data

<b>STEMI</b>	<b>System Total 2022- 2Q</b>	<b>System Total 2022- 3Q</b>	<b>System Total 2022- 4Q</b>	<b>System Total 2023- 1Q</b>
Total transported patients with primary impression of STEMI	137	149	148	143
90 <sup>th</sup> Percentile Unit arrived scene to Unit Depart Scene of Primary Impression STEMI with (+) ECG of STEMI	00:16:52	00:18:23	00:16:42	00:19:41
Patient with eVitals.03 or eDevice.08 documenting ECG of STEMI	58	84	58	50
Percentage of STEMI primary impressions with a STEMI ECG	42%	57%	39%	35%
Patients with a pre-arrival notification (of STEMI ECG)	52	76	51	47
% Pre-arrival notification	90%	90%	88%	94%

## STEMI Primary Impression for Treated and Transported Patients

<b>Hospital Name</b>	<b>2022-2Q</b>	<b>2022-3Q</b>	<b>2022-4Q</b>	<b>2023-1Q</b>
KHR	8	10	10	11
KHN	0	0	0	1
KHS	30	47	29	33
MHF	0	0	0	0
MGH	22	19	23	15
MSJ	35	37	41	39
SMCS	24	18	19	23
MHS	0	0	1	0
SRMC	5	1	8	8
UCD	13	16	17	13
Out of Area		1		
<b>Totals</b>	<b>137</b>	<b>149</b>	<b>148</b>	<b>143</b>