



STEMI Care Committee Meeting
 Tuesday, August 20th, 10:00 AM –12:00 PM

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

Meeting Minutes: Sydney Freer, EMS Coordinator

| ITEM | Details (Key facts, Questions, Concerns) | Action Items/Decision |
|---------------------------------------|--|-----------------------|
| Welcome and Introductions | Meeting start time 10:00 am | None |
| Approval of Minutes – May 21, 2024 | Motion: Julie Carrington Second: Jeremy Veldstra | None |
| Old Business | Discussion | Action Items/Decision |
| ImageTrend Patient Registry | <p>Sydney Freer: I have one hospital that has not uploaded data into ImageTrend Patient Registry. I am seeing good data from the rest of the hospitals. There is one issue on the ImageTrend side of things where I cannot see EMS numbers, but that is not a problem from your end. Because I am missing one hospital, I did not do the data comparison between EMS STEMI Alerts and the hospital STEMI data. I am planning on doing that data project prior to the next meeting.</p> <p>Brian Morr: If I wanted to get individual outcome data what data points would I give you? EMS Number? Name? DOB?</p> <p>Sydney Freer: Yes, any or all that. The only problem with getting outcome data directly from me is that I do not</p> | |



| | <p>receive data from the hospitals until 90 days past the end of the quarter. So, our hospital liaisons are still going to be the best point of contact for timely outcome info.</p> <p>Brian Morr: UCD has a great one pager feedback. I am not getting that from the other STEMI hospitals.</p> <p>Serina Felcher: Our STEMI Coordinator went on a leave of absence, but I will make sure you all start to get that feedback again if I can get your contact information. It is a requirement that we send feedback within 24 hours.</p> <p>Julie Carrington: By who? Kaiser does not do that.</p> <p>Amelia Hart: I want us to do that, and we don't. I need something to show that it is required.</p> <p>Sydney Freer: At MSJ I had this conversation but it was during the transition of STEMI program management so I will follow up again with them. I will also follow up with Kaiser because I was under the impression feedback was still happening following our discussions last year.</p> <p>Sydney Freer: The policy additions discussed last meeting regarding post-ROSC care will be approved at the next MAC meeting and so go live May of next year.</p> | <p>Sydney to share EMS contact information with hospital STEMI liaisons.</p> <p>Sydney to follow up with hospitals regarding feedback to the field.</p> |
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| Data Review and Analysis | Discussion | Action Items/Decisions |
| <p>EMS STEMI Data</p> <p>Hospital and EMS Comparison</p> | <p><u>Slide One:</u> Julie Carrington: There is a new data point that is Positive 12-Lead to Alert. They want that to be 10 minutes or less. Alert can be electronic or verbal. We want to open discussion for what that means.</p> <p>Brian Morr: We only transmit STEMI 12-leads. So, I have always tracked EKG transmit time and verbal report time.</p> <p>Julie Carrington: It is hard to look at transmit time because of transmission issues. We are looking at two</p> | |



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| | <p>fields that we can employ, one is STEMI Alert called at and the other is When the radio communication was given. We have to look at what our agency process is in the field based on how many providers you have. With us having captains there that can radio in and say "we are on scene and have a positive 12-lead and you will get a full report soon", that would start the ball rolling.</p> <p>Dr. Kann: Is it readily apparent to your crew that the 12-lead has not gone? Ideally you can track the time and then have another process to fall back on when that fails.</p> <p>Sydney Freer: I was asked about having patient information on the 12-leads when they are transmitted to match the patient to the 12-lead. Is that an option and what would that look like?</p> <p>Julie Carrington: The age and gender are there at a minimum because the monitor needs that. We are in the process of training on 12-leads, and we are asking them now to put patient initials.</p> <p>Dr. Kann: There is the potential for a patient safety issue when trying to match an EKG to a patient upon arrival when there are not patient identifiers. There was a near miss at one of our facilities. This will be an ongoing process for us all to try and identify best practices for what to put on the EKG.</p> <p>Amelia Hart: Are you going to be asking all the EMS Providers to do it the same way?</p> <p>Dr. Kann: I would like to. So, we will see how the Cosumnes and KHS initials lands and bring that back to the larger group.</p> | <p>Committee to discuss patient information on ECGs at future meetings.</p> |
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| | <p><u>Slide 2:</u> Serina Felcher: Are you measured on this 90th percentile scene time? What is the average time they are looking for?</p> <p>Brian Morr: At my agency, they need to do a 12-lead within 5 minutes 90% of the time. And transmit within 2 minutes. And they are off scene less than 10 minutes after ambulance arrival. The big issue we are seeing here is that paramedics are sitting there without an ambulance available.</p> <p>Dr. Kann: Also, every scene call is going to be different. It is a great conversation for EMS folks to be able to paint the picture of what they deal with.</p> <p>Amelia Hart: I think it would be helpful to steal part of Rudnicki's presentation showing this person had a heart attack, these ambulances were on the wall, this was the closest medic, and this is how long it took for when the cardiologists are here.</p> <p>Julie Carrington: Also, for your presentation, including the EMS side of things for them to provide information on the condition of the patient.</p> <p><u>Slide Two:</u> Sydney Freer: One thing me and Fred noticed when looking at this data was that the numbers of 'ECG of STEMI' and 'STEMI alerts' are both higher than the number of patients with a primary impression STEMI. I know primary impression is multi-faceted and has a lot of options, but I want us to encourage using the STEMI primary impression when we have a positive ECG and are calling an alert.</p> <p>Julie Carrington: The Zols overread. So, it may be positive as STEMI, but the patient presentation leads them to not think that.</p> | <p>Metro Fire to present on ambulance availability during time sensitive events.</p> |
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| Case Presentations | Discussion | Action Items/Decisions |
|---------------------------|--|--|
| Case Presentation: SRMC | Patient Presentation: Debbie Madding and April Williams | |
| Round Table | Discussion | Action Items/Decisions |
| | <p>Julie Carrington: We are currently training on our STEMI process with the monitors and adding patient initials. To help combat the first medical contact time, I have added some validations for when a medic answers they are not the first on scene. And I will be tracking that.</p> <p>Brian Morr: We switched to ImageTrend yesterday morning so please let me know if you are having issue seeing our ePCRs.</p> <p>Adam Blitz: In March we trained on how to find where your artifact is coming from, and it has really made a difference.</p> <p>Debbie Madding: We are going to Sierra Nevada for a run review on Thursday the 29th and the topic is STEMI review and transport. All are welcome.</p> | |
| Adjournment | Adjourned at 11:15 am | Next meeting: November 19, 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 | 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 |

| SCENE Calls (911-Response) - 2024 - 1Quarter | Incident Count | Percentages | Notes |
|---|-----------------------|--------------------|--|
| Total ePCRs received | 86,485 | 100% | All records |
| Responses (Emergent Response) | 60,516 | 69.97% | of total responses |
| Treated and Transported (Emergent Response) | 33,415 | 38.64% | of 911 responses transported to the ED |
| | | | |
| Primary Impressions of Scene calls treated and transported | Incident Count | Percentages | Notes |
| Chest Pain - STEMI | 162 | 0.48% | of treated and transported |
| Chest Pain - Suspected Cardiac | 1,160 | 3.47% | of treated and transported |
| Syncope/Near Syncope | 899 | 2.69% | of treated and transported |
| | | | |
| IV Starts | Incident Count | Percentages | Notes |
| Right Side | 175 | 7.88% | of treated and transported with Primary Impression STEMI / Suspected Cardiac/ Syncope |
| Left Side | 816 | 36.72% | of treated and transported with Primary Impression STEMI / Suspected Cardiac /Syncope |
| Not Recorded/Not Applicable/Other Peripheral/Blank | 1158 | 52.12% | of treated and transported with Primary Impression STEMI / Suspected Cardiac / Syncope |

STEMI Dashboard - EMS Data

| STEMI | System Total 2023 2Q | System Total 2023 3Q | System Total 2023 4Q | System Total 2024 1Q |
|---|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| Total transported patients with primary impression of STEMI | 126 | 191 | 157 | 162 |
| 90 th Percentile Scene Time to Unit Depart Scene of Primary Impression STEMI and (+) ECG of STEMI (Transporting Unit) | 00:18:14 | 0:19:00 | 0:23:31 | 0:18:45 |
| Patient with eVitals.03 or eDevice.08 documenting ECG of STEMI (All Patients, Regardless of Primary Impression) | 60 | 65 | 56 | 172 |
| Percentage of STEMI primary impressions with a STEMI ECG | 47.62% | 34.03% | 35.67% | 83.95% |
| All patients with a pre-arrival notification (of STEMI ECG) | 56 | 52 | 53 | 182 |
| % Pre-arrival notification (of STEMI ECG) | 93.33% | 80% | 94.64% | 85.38% |
| Total of patients with No ECG of STEMI documentation, but with a STEMI pre-arrival notification | | 106 | 86 | 28 |
| % Pre-arrival notification (No ECG STEMI / Total) | | 55.50% | 54.78% | 17.28% |

STEMI Primary Impression for Treated and Transported Patients

| Hospital Name | 2023-2Q | 2023-3Q | 2023-4Q | 2024-1Q |
|---------------|------------|------------|------------|------------|
| KHR | 8 | 18 | 9 | 11 |
| KHN | 0 | 0 | 0 | 1 |
| KHS | 37 | 36 | 53 | 39 |
| MHF | 2 | 0 | 1 | 0 |
| MGH | 12 | 37 | 22 | 25 |
| MSJ | 39 | 43 | 42 | 39 |
| SMCS | 15 | 30 | 15 | 22 |
| MHS | 1 | 1 | 1 | 0 |
| SRMC | 4 | 8 | 5 | 8 |
| UCD | 8 | 18 | 9 | 16 |
| Totals | 126 | 191 | 157 | 162 |

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

Patients with ECG prior to arrival time excluded from report.

| Transporting Agency | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total Average |
|---------------------|--------------|-------------|--------------|-------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Agency 1 | 7.38 | 8.06 | 8.36 | 7.58 | 4.38 | 10.86 | 13.40 | 8.63 | 15.42 | 5.36 | 5.63 | 5.58 | 8.39 |
| Agency 2 | 11.39 | 7.42 | 7.38 | 8.43 | 9.88 | 4.88 | 11.67 | 5.77 | 8.87 | 8.71 | 6.81 | 7.29 | 8.21 |
| Agency 3 | 15.19 | 9.00 | 11.15 | 10.80 | 15.74 | 10.58 | 18.23 | 15.41 | 15.53 | 14.59 | 9.93 | 10.72 | 13.07 |
| Agency 4 | 5.40 | 3.57 | 4.34 | 4.46 | 4.86 | 4.30 | 8.31 | 6.53 | 4.21 | 5.08 | 4.72 | 5.81 | 5.13 |
| Agency 5 | 8.72 | 17.41 | 14.95 | 8.69 | 8.34 | 6.66 | 3.07 | 8.22 | 9.95 | 4.4 | 5.89 | 5.25 | 8.46 |
| Agency 6 | 13.17 | 11.49 | 15.79 | 7.38 | 6.80 | 10.79 | 5.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.90 |
| System | 10.21 | 9.49 | 10.33 | 7.89 | 8.33 | 8.01 | 10.01 | 7.43 | 9.00 | 6.36 | 5.50 | 5.78 | 8.19 |

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

| Transporting Agency | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| Agency 1 | 8 | 7 | 8 | 4 | 6 | 4 | 11 | 6 | 13 | 6 | 7 | 4 | 84 |
| Agency 2 | 21 | 19 | 20 | 22 | 22 | 19 | 19 | 19 | 22 | 10 | 16 | 25 | 234 |
| Agency 3 | 4 | 1 | 4 | 2 | 4 | 4 | 4 | 7 | 3 | 3 | 6 | 3 | 45 |
| Agency 4 | 11 | 16 | 14 | 19 | 20 | 19 | 16 | 16 | 21 | 24 | 15 | 21 | 212 |
| Agency 5 | 5 | 4 | 6 | 6 | 3 | 7 | 4 | 4 | 5 | 3 | 3 | 4 | 54 |
| Agency 6 | 4 | 4 | 6 | 8 | 12 | 10 | 6 | 10 | 6 | 1 | 4 | 2 | 73 |
| Total | 53 | 51 | 58 | 61 | 67 | 63 | 60 | 62 | 70 | 47 | 51 | 59 | 702 |