



**PREHOSPITAL MEDICAL ADVISORY COMMITTEE MEETING AGENDA (PMAC)**

PMAC MEMBERS PER POLICY 8202:

Air Transport Provider Representative  
11-Kent McCurdy

American Medical Response  
5-Douglas Key

BLS Ambulance Service Representative  
12-Lori Lopez

Cathedral City Fire Department  
5-Justin Vondriska

Corona Regional Medical Center  
1-Robert Steele, MD  
4-Tamera Roy

County Fire Chiefs' Non-Transport ALS Provider  
10-Vacant

County Fire Chiefs' Non-Transport BLS Provider  
9-Phil Rawlings (Vice Chair)

Desert Regional Medical Center  
1-Joel Stillings, D.O.  
4-Kristie Borba

Eisenhower Health  
1-Mandeep Daliwhal, MD  
4-Susan Young

EMT / EMT-P Training Programs  
6-Maggie Robles

EMT-at-Large  
13 David Olivas

Paramedic-at-Large  
14-Sarah Coonan

Hemet Valley Medical Center  
1-Todd Hanna, MD  
4-Victoria Moor

Idyllwild Fire Protection District  
5-Patrick Reitz

Inland Valley Regional Medical Center  
1-Zeke Foster MD  
4-Daniel Sitar

JFK Memorial Hospital  
1-Troy Cashatt, MD  
4- Molly Leddy

Kaiser Permanente Riverside  
1-Jonathan Dyreyes, MD  
4-Carol Fuste

**This Meeting of PMAC is on:**

**Monday, July 23, 2018**

**9:00 AM to 10:30 AM**

**The Towers of Riverwalk**

**4210 Riverwalk Parkway, Riverside**

**First Floor Conference Rooms**

1. **CALL TO ORDER & HOUSEKEEPING (3 Minutes)**  
Misty Plumley
2. **PLEDGE OF ALLEGIANCE (1 Minute)**  
Zeke Foster, MD (Chair)
3. **ROUNDTABLE INTRODUCTIONS (5 Minutes)**  
Zeke Foster, MD (Chair)
4. **APPROVAL OF MINUTES (3 Minutes)**  
April 23, 2018 Minutes— Zeke Foster, MD (Attachment A)
5. **STANDING REPORTS**
  - 5.1. Trauma System—Shanna Kissel (Attachment B)
  - 5.2. Stroke System— Dan Sitar (Attachment C)
  - 5.3. STEMI System— Dan Sitar (Attachment D)
6. **Other Reports**
  - 6.1. EMCC Report—Kristen Clements
7. **DISCUSSION ITEMS, UNFINISHED & NEW BUSINESS (60 Minutes)**
  - 7.1. CQI Update – Lisa Madrid (Attachment E)
  - 7.2. Education / Policy Update – Misty Plumley (Attachment F)
  - 7.3. CARES Data Review – Dr. V (Attachment G)
  - 7.4. Provider Recognitions – REMSA Staff
  - 7.5. PMAC Membership Review (Training Program Mgrs Rep.) – Misty Plumley
8. **REQUEST FOR DISCUSSIONS**  
Members can request that items be placed on the agenda for discussion at the following PMAC meeting. References to studies, presentations and supporting literature must be submitted to REMSA three weeks prior to the next PMAC meeting to allow ample time for preparation, distribution and review among committee members and other interested parties.

Loma Linda University Med. Center Murrieta

1-Kevin Flaig, MD  
4-Kristin Butler

Menifee Valley Medical Center

1-Todd Hanna, MD  
4-Janny Nelsen

Kaiser Permanente Moreno Valley

1-George Salameh, MD  
4-Katherine Heichel-Casas

Palo Verde Hospital

1-David Sincavage, MD  
4-Carmelita Aquines

Parkview Community Hospital

1-Chad Clark, MD  
4-Guillean Estrada

Rancho Springs Medical Center

1-Zeke Foster, MD (Chair)  
4-Sarah Young

Riverside Community Hospital

1-Stephen Patterson, MD  
4-Sabrina Yamashiro

Riverside County Fire Department

5-Scott Visyak  
8-Tim Buckley

Riverside County Police Association

7-Sean Hadden

Riverside University Health System Med. Center

1-Michael Mesisca, D  
4-Kay Schulz

San Geronio Memorial Medical Center

1-Richard Preci, MD  
4-Trish Ritarita

Temecula Valley Hospital

1-Pranav Kachhi, MD  
4-Jacquelyn Ramirez

Trauma Audit Comm. & Trauma Program Managers

2-Frank Ercoli, MD  
3-Charlie Hendra

Ex-officio Members:

1-Cameron Kaiser, MD, Public Health Officer  
2-Reza Vaezazizi, MD, REMSA Medical Director  
3-Bruce Barton, REMSA Director  
4-Jeff Grange, MD, LLUMC  
5-Phong Nguyen, MD, Redlands Community Hospital  
6-Rodney Borger, MD, Arrowhead Regional Medical Center

Members are requested to please sit at the table with name plates in order to identify members for an accurate count of votes

Please come prepared to discuss the agenda items. If you have any questions or comments, call or email Misty Plumley at (951) 201-4705 / [mplumley@rivco.org](mailto:mplumley@rivco.org). PMAC Agendas with attachments are available at: [www.rivcoems.org](http://www.rivcoems.org). Meeting minutes are audio recorded to facilitate dictation for minutes.

**9. ANNOUNCEMENTS (15 Minutes)**

This is the time/place in which committee members and non-committee members can speak on items not on the agenda but within the purview of PMAC. Each announcement should be limited to two minutes unless extended by the PMAC Chairperson.

**10. NEXT MEETING / ADJOURNMENT (1 Minute)**

October 23, 2018—4210 Riverwalk Parkway First Floor Conference Rooms

PMAC Draft Minutes  
April 23, 2018

TOPIC	DISCUSSION	ACTION
1. CALL TO ORDER		
2. PLEDGE OF ALLEGIANCE	Misty Plumley led the Pledge of Allegiance.	
3. ROUNDTABLE INTRODUCTIONS	Self-introductions were facilitated by Misty Plumley.	
4. APPROVAL OF MINUTES		The January 22, 2018 PMAC meeting minutes were approved with no changes.
5. STANDING REPORTS		
5.1 Trauma System Updates	<p>Shanna announced she will be attending the Statewide Trauma Summit first week of May and will report back with a summary after. EMSA approved TXA for Local Optional Scope in March. Providers who did not participate in the trail study will be required to attend mandatory educational training. Dr. Vaezazizi added the inclusion criteria will change a little, but he anticipates it will align with protocols. TXA is not an optional item and all providers will carry and administer TXA.</p> <p>Ketamine trial study started April 1, 2018 and to date there has been 2 administrations.</p>	Information only.
5.2 Stroke System Updates	<p>Dan announced a correction to Attachment C, the public comment for State Stroke regulations would be open through May 21<sup>st</sup>, not May 6<sup>th</sup>.</p> <p>REMSA has been collaborating with ICEMA to develop stroke registry forms and data reports while waiting on the purchase of the ImageTrend registry.</p> <p>LAMS scale to be implemented tentatively October 1<sup>st</sup>.</p> <p>Quarterly data reports posted on the REMSA.US website will include Google Data Studio format to be more interactive.</p> <p>Committee agendas and meeting minutes are also posted on the website.</p>	Information only.
5.3 STEMI System Updates	<p>STEMI system update is the same as the stroke system update.</p> <p>CARES data is still in the validation period and a report will be released once it is complete.</p> <p>Dr. Vaezazizi added there was a lot of missing data in 2017 due to the transition and movement to NEMSIS. Outcome data was several hundred behind, however he acknowledged and thanked the hospitals for their hard work in completing the task. In</p>	Information only.

PMAC Draft Minutes  
April 23, 2018

	2018, we will keep monthly checks to ensure smooth data reporting. As we change our protocols going forward, the real-time of CARES will be exceptionally valuable.	
<b>6. OTHER REPORTS</b>		
<b>6.1 EMCC Report</b>	<p>Kristen gave a brief overview from the last EMCC meeting.</p> <p>Dan and Ralph, who is now the County AED Coordinator spoke on community CPR AED and are coordinating with AMR to put in 18 new AEDs and to train personnel to register and how to use them.</p> <p>James EMD update included information on the influenza surge in December and January, since then it is steadily declining but is lasting through the year a little longer than anticipated.</p> <p>Behavior Health report was tabled due to their absence at the meeting. They will be discussing 5150s with RUHS.</p> <p>Kristen mentioned the committee has a few vacancies to fill.</p> <p>There are changes to REMSA with employees moving to new positions and their updated roles.</p> <p>Report on patient offload delays were discussed briefly but not in depth as Ambulance Association was not present to delve deeper in the conversation.</p> <p>There were no action items at the EMCC meeting.</p>	Information only.
<b>7. DISCUSSION ITEMS, UNFINISHED &amp; NEW BUSINESS</b>		
<b>7.1 CQI Update</b>	<p>Lisa announced The EMS Authority released the new CORE Measure report that includes 16 new. She will be working on building the reports and modifying them to our standards before we report them to the state. She also mentioned, hospitals that are already doing CARES are compliant and do not need to re-do them. There is a two week period to send reports that includes narratives, incident reports and PCRs.</p>	Information only.
<b>7.2 Education/Policy Update</b>	<p>Misty stated in order to keep pace with all of the changes it would be necessary to update policies bi-annually. She is working towards a Fall protocol update.</p>	

PMAC Draft Minutes  
April 23, 2018

	<p>Discussion amongst attendees raised concern with the delivery mechanism of providing consistent training. Misty assured that proper training will be delivered; either through online, in person or controlled groups. The plan is to tentatively have a curriculum available by September or early Fall.</p> <p>Tourniquet recommendation: TAC approved the use of the SWAT-T Tourniquet and the addition of the SOFT-T device. REMSA would like to add these devices into REMSA 3301 Drug and Equipment list, without being brand specific if possible.</p> <p>Dr. Vaezazi clarified with the PMAC members that moving forward with TAC recommendation allows for more flexibility and creates a guideline for following standards not brand name specificity.</p> <p>REMSA 4102 Universal Patient Protocol (specifically patient types requiring BH contact)</p> <p>The STEMI Committee has made a recommendation to PMAC that BH contact no longer be required in the case of a paramedic identified or ECG monitor identified STEMI. BH contact would still be allowable, and encouraged in cases where paramedic judgment identifies BH contact as necessary.</p> <p>In comparison with data, it shows paramedic field interpretation and MD interpretation of STEMI was 97% accurate. Thus, validating that paramedics can make the correct judgement call to transport patient to a STEMI center and mandating BH contact may lead to delay of care.</p> <p>The STEMI Committee has also made a recommendation that all cardiac arrest patients be transported to STEMI Receiving Centers, this transport should occur without a requirement for BH contact.</p> <p>Study and data looked at about 1500 cases of all cardiac arrest patients that were transported to a STEMI center without</p>	<p>PMAC members approved to move forward with no objections.</p> <p>PMAC voted to support the STEMI Committee recommendation of no longer requiring BH contact in the case of a paramedic or ECG monitor identified STEMI. The motion passed without opposition.</p> <p>PMAC voted to support the STEMI Committee recommendation that all cardiac arrest patients be transported to STEMI Receiving centers without requirement to BH contact.</p>
--	---	--

PMAC Draft Minutes  
April 23, 2018

	requirement for BH contact, had 3x the survival rate.	The motion passed without opposition.
<b>7.3 EMD Update</b>	James announced that the Medical Priority Dispatch System Card includes submersion of 6 or more hours as an obvious death. Currently, REMSA does not categorize submersion of 6 or more hours as an obvious death criteria within REMSA protocols.	PMAC members all agreed submersion of 6 or more hours should be defined as an obvious death with no objections.
<b>7.4 MCI Policy Planning Update</b>	Ralph presented an overview of the MCI workgroup's hosted drill that took place on March 12, 2018. During the drill, participants reviewed a scenario during a high school football game bleachers collapse with over 100 attendees injured. Adjudication of the case called for more standardization of communication for providers all around to work together collaboratively. The full-scale MCI drill will be in August.	Information only.
<b>7.5 Voting, Member Review</b>	Tabled to next meeting in July.	
<b>8. REQUEST FOR DISCUSSIONS</b>	There were no requests at this time.	
<b>9. ANNOUNCEMENTS</b>	Riverside County Fire Department announced they have two open positions; looking to hire a Senior EMS Specialist and an EMS Specialist.  RUHS inquired when will the supply of Ketamine be available to all, as some cities are seeing very little of the supply coming in. Currently, there is a supply backorder, which should be resolved shortly for distribution.	Information only.
<b>10. NEXT MEETING/ADJOURNMENT</b>	July 23, 2018 4210 Riverwalk Parkway First Floor Conference Rooms.	Information only.

**FOR CONSIDERATION BY PMAC**

DATE: June 26, 2018

TO: PMAC

FROM: Shanna Kissel, RN, Assistant Nurse Manager

SUBJECT: Trauma System

1. EMSA approved TXA for Local Optional Scope in March. Effective July 1<sup>st</sup>, TXA policy 5801 was removed from the policy manual and replaced with 4301- Shock due to trauma, 4302- Traumatic Injuries, and TXA was added to the drug and equipment list. The age for the patient was adjusted to align with REMSA definition of an adult patient defined as 15 years of age or older.
2. Ketamine Trial study began on April 1, 2018 for pain associated with acute traumatic injury and acute burn injury, to date there have been # administrations. Ketamine was approved by the Commission to be moved into local optional scope, REMSA has submit the application for approval from EMSA, pending approval.
3. Imagetrend trauma registry will be implemented in the beginning of 2019 for the trauma centers, in addition to them continuing to utilize Digital Innovations. They will now be able to link pre-hospital records through Imagetrend.

ACTION: PMAC should be prepared to receive the information and provide feedback to REMSA.

## FOR CONSIDERATION BY PMAC

Attachment C

Page 1 of 1

Date: July 23, 2018

TO: PMAC

FROM: Dan Sitar, Specialty Care Consultant, RN

SUBJECT: Stroke System

1. Public comment on the Stroke regulations closed on May 21<sup>st</sup> and are now in the hands of the State Office of Administrative Law. The updated proposed text can be accessed at: <https://ems.ca.gov/public-comment/>
2. LAMS scale to be implemented in the Fall. Stroke destination will not be affected by LAMS score initially.
3. Quarterly data from hospitals now includes expanded CSR/Coverdell data elements. Patient inclusion criteria to expand as the registry is developed. Registry purchase pending.
4. Stroke Committee agendas, meeting minutes, draft and final quarterly reports can all be found on [www.remsa.us](http://www.remsa.us) site at this link: <http://www.remsa.us/documents/programs/stroke>
5. The next Stroke meeting will be held in the Vineyard room at 4210 Riverwalk Parkway on August 16th, 2018 from 1:00 to 3:00 PM.

Action: PMAC should be prepared to receive the information and provide feedback to the EMS Agency



**FOR CONSIDERATION BY PMAC**

Attachment D

Page 1 of 1

Date: July 23, 2018

TO: PMAC

FROM: Dan Sitar, Specialty Care Consultant, RN

SUBJECT: STEMI System

1. Public comment on the State STEMI regulations closed on May 21<sup>st</sup> and the draft sits with the State Office of Administrative Law. The updated proposed text can be accessed at: <https://emsa.ca.gov/public comment/>
2. STEMI Image Trend registry: Purchase pending
3. Changes to policies regarding base contact for STEMI patients and STEMI center destination for OHCA patients slated to go live in the Fall.
4. STEMI Committee agendas, meeting minutes, draft and final quarterly reports can all be found on [www.remsa.us](http://www.remsa.us) site at this link: <http://www.remsa.us/documents/programs/stemi>
5. The next STEMI meeting will be held in the Vineyard room at 4210 Riverwalk Parkway on July 26th, 2018 from 10:00 to 12:00 PM.

Action: PMAC should be prepared to receive the information and provide feedback to the EMS Agency

**FOR CONSIDERATION BY PMAC**

Attachment E

Page 1 of 1

Date: July 23, 2018

TO: PMAC

FROM: Lisa Madrid, EMS Specialist

SUBJECT: CQI Update

The CORE Measures were submitted by the deadline which was June 30. REMSA will be producing a report for the next PMAC to share the results.

CQILT was held on June 21st, the meeting minutes are posted on the REMSA.US website. The next meeting is on September 20th.

Action: PMAC should be prepared to receive the information and provide feedback to the EMS Agency

## FOR CONSIDERATION BY PMAC

Date: July 23, 2018

TO: PMAC

FROM: Misty Plumley, Senior EMS Specialist

SUBJECT: Education / Policy Update

We are moving towards our Fall Education Update, with a rollout of curricula in September and training to be completed by November. The proposed Fall P&P Manual update will focus on:

*Administrative Policies:*

- REMSA 3102 clarifying language for use of an Alternative Ambulance
- REMSA 3301 clarifying language for consistency with Helmet and Chemical Suit equipment
- REMSA 9210 to add Childbirth/Neonatal Resuscitation in place of Restraints for ALS SCV

*Treatment Protocols:*

- REMSA 4102: adapting patient types requiring BH contact (as discussed in April 2018 PMAC)
- REMSA 4503: addition of the LAMS Scale to the mLAPSS
- REMSA 4407: addition of glucose monitoring to neonatal resuscitation (\*added change to REMSA 4103 for oral glucose dosing)
- REMSA 4702: addition of verbiage to aid with complicated childbirth presentations (prolapsed cord, breech presentation)

Action: PMAC should be prepared to receive the information and provide recommendation to move proposed policy changes to draft and stakeholder comment period.

# CARES Summary Report

## Demographic and Survival Characteristics of OHCA

End of the Event: Dead in Field, Pronounced Dead in ED, Ongoing Resuscitation in ED | Arrest Witness Status: All | Resuscitation Attempted by 911 Responder: Yes | Presumed Cardiac Arrest Etiology: Presumed Cardiac Etiology, Respiratory/Asphyxia, Drowning/Submersion, Electrocutation, Other, Drug Overdose, Exsanguination/Hemorrhage | Service Date: 01/01/17 - 12/31/17

Data	Riverside CA N=1747	California N=8746	National N=76215
<b>Age</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76184</b>
Mean	65.6	65.3	62.0
Median	69.0	67.0	64.0
<b>Gender (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76210</b>
Female	688 (39.4)	3147 (36.0)	28962 (38.0)
Male	1059 (60.6)	5599 (64.0)	47248 (62.0)
<b>Race (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76174</b>
American-Indian/Alaskan	6 (0.3)	17 (0.2)	270 (0.4)
Asian	65 (3.7)	532 (6.1)	1518 (2.0)
Black/African-American	202 (11.6)	775 (8.9)	17307 (22.7)
Hispanic/Latino	357 (20.4)	1090 (12.5)	4111 (5.4)
Native Hawaiian/Pacific Islander	6 (0.3)	77 (0.9)	304 (0.4)
White	958 (54.8)	3584 (41.0)	36339 (47.7)
Unknown	153 (8.8)	2671 (30.5)	16325 (21.4)
<b>Location of Arrest (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76215</b>
Home/Residence	1294 (74.1)	6162 (70.5)	53240 (69.9)
Nursing Home	224 (12.8)	1016 (11.6)	8668 (11.4)
Public Setting	229 (13.1)	1568 (17.9)	14307 (18.8)
<b>Arrest witnessed (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76215</b>
Bystander Witnessed	795 (45.5)	3371 (38.5)	27887 (36.6)
Witnessed by 911 Responder	135 (7.7)	998 (11.4)	9380 (12.3)
Unwitnessed	817 (46.8)	4377 (50.0)	38948 (51.1)
<b>Who Initiated CPR? (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76215</b>
Not Applicable	0 (0.0)	2 (0.0)	48 (0.1)
Bystander	732 (41.9)	3439 (39.3)	30063 (39.4)
First Responder	498 (28.5)	2696 (30.8)	22309 (29.3)
Emergency Medical Services (EMS)	517 (29.6)	2609 (29.8)	23795 (31.2)
<b>Was an AED applied prior to EMS arrival? (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76210</b>
Yes	86 (4.9)	1106 (12.6)	22056 (28.9)
No	1661 (95.1)	7640 (87.4)	54154 (71.1)
<b>Who first applied automated external defibrillator? (%)</b>	<b>N=86</b>	<b>N=1106</b>	<b>N=22036</b>
Bystander	53 (61.6)	240 (21.7)	4595 (20.9)
First Responder	33 (38.4)	866 (78.3)	17441 (79.1)
<b>Who first defibrillated the patient?* (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=74891</b>
Not Applicable	1249 (71.5)	6054 (69.2)	52196 (69.7)
Bystander	16 (0.9)	118 (1.3)	1178 (1.6)
First Responder	13 (0.7)	427 (4.9)	4244 (5.7)
Responding EMS Personnel	469 (26.8)	2147 (24.5)	17273 (23.1)
<b>First Arrest Rhythm (%)</b>	<b>N=1747</b>	<b>N=8745</b>	<b>N=76209</b>
Vfib/Vtach/Unknown Shockable Rhythm	302 (17.3)	1757 (20.1)	14019 (18.4)
Asystole	1051 (60.2)	4715 (53.9)	38237 (50.2)
Idioventricular/PEA	365 (20.9)	2024 (23.1)	16146 (21.2)
Unknown Unshockable Rhythm	29 (1.7)	249 (2.8)	7807 (10.2)
<b>Sustained ROSC (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76214</b>
Yes	460 (26.3)	2591 (29.6)	24249 (31.8)
No	1287 (73.7)	6155 (70.4)	51965 (68.2)
<b>Was hypothermia care provided in the field? (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76214</b>
Yes	2 (0.1)	84 (1.0)	3871 (5.1)
No	1745 (99.9)	8662 (99.0)	72343 (94.9)
<b>Pre-hospital Outcome (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76215</b>
Pronounced in the Field	662 (37.9)	3670 (42.0)	27219 (35.7)
Pronounced in ED	283 (16.2)	892 (10.2)	11006 (14.4)
Ongoing Resuscitation in ED	802 (45.9)	4184 (47.8)	37990 (49.8)
<b>Overall Survival (%)</b>	<b>N=1747</b>	<b>N=8746</b>	<b>N=76215</b>
Overall Survival to Hospital Admission	440 (25.2)	2353 (26.9)	21414 (28.1)
Overall Survival to Hospital Discharge	142 (8.1)	861 (9.8)	7949 (10.4)
With Good or Moderate Cerebral Performance	105 (6.0)	703 (8.0)	6392 (8.4)
Missing hospital outcome	14	49	173
<b>Utstein<sup>1</sup> Survival (%)</b>	<b>N=193</b>	<b>N=1065</b>	<b>N=8380</b>
	26.9%	33.6%	32.6%
<b>Utstein Bystander<sup>2</sup> Survival (%)</b>	<b>N=101</b>	<b>N=614</b>	<b>N=4935</b>
	29.7%	38.4%	36.5%

*Inclusion criteria: An out-of-hospital cardiac arrest where resuscitation is attempted by a 911 responder (CPR and/or defibrillation). This would also include patients that received an AED shock by a bystander prior to the arrival of 911 responders.*

*\*This is a new question that was introduced on the 2011 form.*

*<sup>1</sup>Witnessed by bystander and found in a shockable rhythm*

*<sup>2</sup>Witnessed by bystander, found in shockable rhythm, and received some bystander intervention (CPR by bystander and/or AED applied by bystander)*