

PREHOSPITAL MEDICAL ADVISORY COMMITTEE MEETING AGENDA (PMAC)

PMAC MEMBERS PER POLICY 8202:

Base Hospital Physician
Andrew Pachon, MD - RUHS

Non-Base Hospital Physician Erin Noud, DO – San Gorgonio

Non-Base Hospital RN Kim McGranahan, RN - Kaiser

<u>Pediatric Critical Care Physician</u> Melanie Randall, MD - RUHS

<u>Stroke Hospital Coordinator - RN</u> Kathy Cash, RN - Eisenhower Health

STEMI Hospital Coordinator - RN Katherine Baca, RN - Temecula Valley

<u>Prehospital Liaison Nurse (PLN)</u> Robin Boardman, RN – JFK Memorial

<u>Trauma Program Medical Director</u> Stephen Kernop - RUHS

<u>Public Transport Medical Director</u> Zeke Foster, MD – Multiple FD

<u>Private Transport Medical Director</u> Seth Dukes, MD - AMR

<u>Fire Department Medical Director</u> Steve Patterson, MD – Corona FD

EMS Officers

Jennifer Antonucci – Murrieta FD

<u>Public Transport Medical Rep (Paramedic/RN)</u> Scott Philippbar – County Fire

<u>Private Transport Medical Rep (Paramedic/RN</u> Dawn Downs – Symbiosis Care

Non-Transport Agency Rep (Paramedic/RN)
Noelle Toering - Palm Springs FD

Riverside County Policy Association Donald Sharp – RSO Undersheriff

<u>Tribal Partner Representative</u> Ken Cardin - Morongo Fire

<u>Private Air Transport Medical Director</u> Brian Harrison – Air Methods

EMS Training Program Representative Bob Fontaine - Moreno Valley College This Meeting of PMAC on: Monday, December 2, 2024 09:00 – 11:00 am

Riverside University Health System: 26516 Cactus Ave, Moreno Valley, CA 92555

1. CALL TO ORDER & HOUSEKEEPING (5 Minutes)

Andrew Pachon, MD (Chair)

2. ATTENDANCE (taken based on participant sign in sheet)

Evelyn Pham (REMSA)

3. APPROVAL OF MINUTES (5 Minutes)

August 26, 2024 Minutes — Andrew Pachon, MD (Attachment A)

4. STANDING REPORTS (5 Minutes)

- **4.1.** Trauma System—Shanna Kissel (Attachment B)
- 4.2. STEMI System— Loreen Gutierrez (Attachment C)
- **4.3.** Stroke System— Loreen Gutierrez (Attachment D)

5. Other Reports (15 Minutes)

- 5.1. EMD Update David Platz
- **5.2.** California Resuscitation Outcomes Consortium Trial Update Dr. Vaezazizi

6. DISCUSSION ITEMS, UNFINISHED & NEW BUSINESS

- **6.1.** 3308 Data review Holly Anderson (30 Minutes)
- **6.2.** CQI/ Policy/ Education Kristie Hinz (60 Minutes) (Attachment E)
- **6.3.** 2025 Clinical Calendar REMSA (Attachment F)

7. REQUEST FOR DISCUSSIONS (5 MINUTES)

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 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.

8. 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 Chair.

9. NEXT MEETING / ADJOURMENT (1 Minute)

2025 Dates:

February 3, May 12, September 29, December 1

PMAC Agendas with attachments are available at: www.rivcoready.org/remsa. Meeting minutes are audio recorded to facilitate dictation for minutes. Any questions or comments please contact REMSA staff.

TOPIC	DISCUSSION	ACTION			
1. CALL TO ORDER	Dr. Andrew Pachon called the meeting to order at 9:06 a.m.				
2. Virtual Attendance	Attendance taken based on sign-in list				
3. Approval of Minutes	Dr. Foster, Multiple Fire Departments, motioned to approve the minutes. Tim Buckley, Soboba Fire seconded the motion.	The May 13, 2024 PMAC meeting minutes were approved with no changes.			
4. STANDING REPORTS					
4.1. Trauma System Updates	 REMSA policies affected trauma treatment went into effect July 1, 2023. QI of Versed and Push-Dose Epi will be reported out at November and February TAC. Tentative trauma policies will be updated for July 2025 4302 – Traumatic injuries, to include traumatic arrest 5301 – Critical Trauma Patient 5302 – Trauma Continuation of Care DRMC will be going through ACS Level I Survey in November REMSA 2022 Trauma Plan update was approved by EMSA. 	Information only.			
	2023 update to be submitted by September.				
4.2. STEMI System Updates	 STEMI 2022 System Plan approved by EMSA, 2023 plan update to be submitted by September. The STEMI Dashboard posted on rivcoready.org was updated to reflect quarter 1, 2024 data. 	Information only.			
4.2 Shada Sashara	3. Q1, 2024 STEMI data uploaded to EMSA.	Information only			
4.3. Stroke System Updates	 Stroke System Plan update 2022 approved by EMSA, 2023 plan update to be submitted by September. The Stroke Dashboard posted on rivcoready.org was updated to reflect quarter 1, 2024 data. Stroke data State reporting completed for Q1, 2024. 	Information only.			
5. OTHER REPORTS					
5.1. EMD Update	 EMD hired new employee David Platz, Senior EMS Specialist, who will take over the EMD program. EMD data, the first 6 months of the year still running, all the EMD centers together combined. Call distribution for the first 6 months are still very consistent. 	Information only.			
5.2. CATT/Buprenorphine/ Leave Behind Naloxone	 CATT update, in mid-August, switched from using clinical therapists to Behavioral Health Specialists III. In doing this, adds flexibility, while still maintaining the same level of service offered. Buprenorphine main reason for delays from last year was due to the subsidy's navigation services. San Gorgonio and Desert Regional has their subsidy navigation program in place for this, and Eisenhower is hiring for their program soon. Since the launch of the Leave Behind Naloxone program, we've handed out over 350 kits, and had 32 	Information only.			

	roversale Decembly added Manager Sign	
	reversals. Recently added Morongo Fire as an agency	
5.3. California	that is now offering the kits.All documentation has been submitted, now we are	Information only.
Resuscitation Outcomes	just waiting for the grant process.	iniormation only.
Consortium Trial Update		
Consortium mai opuate		
	Once we go live, it will be a phased in implementation, and as a county we do not know which phase we will	
	enter in yet.	
	More to come on this	
6. DISCUSSION ITEMS,	• Wore to come on this	
UNFINISHED & NEW		
BUSINESS		
Unfinished Business	None	
6.1. EMS Buprenorphine	Dr. Philine Endres-Shafter presented her discoveries on	Discussion.
	Prehospital Buprenorphine. In the presentation, she discussed:	
	Medication for Addiction Treatment (MAT)	
	Current pathway to Buprenorphine	
	Gaps in our current model	
	Prehospital pathway	
	Success stories from other communities	
	California Bridge Model	
	Roadblocks to implementation	
	Within the presentation she also touched on why it is important	
	and the biggest challenge we see for prehospital	
	Buprenorphine.	
6.2. CQI	A friendly reminder to the providers that medication errors	Information only.
	continues to be an issue and is being reviewed by REMSA.	
	REMSA also encouraged the agencies to pay close attention to	
	these errors and re-educate if needed.	
	October CQILT will be the meeting to bring forth presentation	
	for change requests on policies. The request must follow Policy	
	8301 guidelines.	
6.3. Policy/Education	Updated trauma policies will be reviewed at the October CQILT.	Information only.
	DELICATE ALL MARIE III III III III III III III III III	
	REMSA is working on the MCI policy, with a tentative rollout	
	date in 2025. REMSA would also like to get a group of	
C A Mobile Integrated	individuals together to work on and review the policy.	Information only
6.4. Mobile Integrated	The Mobile Integrated Health Program continues to run in the	Information only.
Health Program	Hemet area. The program focuses on finding alternative resources for patient care follow-up with individuals who are	
	high users of the 9-1-1 system to prevent re-entry. They are	
	partnering with behavioral health workers to triage. It is still in	
	the early stages, but the program is looking towards working	
	with IEHP as a good opportunity to build on this system.	
6.5. CARES Annual Report	Catherine Farrokhi, PHD, reviewed the 2023 CARES data	Information only.
olor cartes allined hepoil	summary. Discussion was had on the differences between	iniormation only.
	Riverside County, the U.S. and Nationwide. Continued	
	inversible country, the o.o. and ination wide. Continued	

	August 20, 2024	
	conversation focused on the findings that were significant in	
	2023.	
	A question was brought up regarding the CARES report if it is	
	possible to differentiate which patients were treated with	
	RHEART or AHA methodologies. Christopher Linke, AMR is	
	currently working on this breakdown of data and will report	
	more when it is available.	
7. Request for Discussions	Seth Dukes, MD, requested to discuss with PMAC on the	
	confusion with IV Piggyback (IVPB) in the protocols. PMAC had	
	an in-depth discussion on whether it was needed to clarify the	
	distinction between IV piggyback and IV infusion, or if we are	
	using it interchangeably. Providers expressed their concerns	
	that the issue is, they are unable to do IV Piggyback properly as	
	defined due to equipment limitations. Instead, what they are	
	doing in the field, is actually defined as an infusion. A	
	suggestion was brought up to remove IV Piggyback completely	
	from protocol and use the term IV infusion instead. In doing	
	this the providers feel the language in protocol will be	
	consistent with their practices in the field.	
	Seth Dukes, MD, motioned to change the language in REMSA	PMAC approved to
	protocol to remove IV Piggyback and replace it with IV infusion,	change the language
	along with the appropriate time rate given as needed. Infusion	in REMSA protocol to
	and/or infusion tandem will also be added in the definitions	remove IV Piggyback
	page to further clarify. Zeke Foster, MD, seconded the motion.	and replace it with IV
	Dr. Vaezazizi reminded the Committee that this change request	infusion with the
	is not currently on the agenda and to be mindful of these rapid	appropriate time rate
	off-agenda change requests in the future.	given as needed.
	PMAC votes: 0 – opposed, 0 – abstained, All – in favor to pass	
	the change.	
8. Announcements	PMAC discussed changing the time of future meetings	Information only.
	to correlate better with EMCC.	
	Cal Fire announced Chief Scott Philippbar's promotion	
	and congratulated him.	
	 PMAC congratulated Dan Bates on his new position as 	
	Deputy Director of EMD.	
	Bob Fontaine announced the new paramedic program	
	that will start next year.	
9. NEXT	Monday, December 2, 2024 (9:00 – 11:00 a.m.) RUHS	Information only.
MEETING/ADJOURNMENT		
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PMAC Attendance:

Voting Members:		Attendees:
Andrew Pachon, MD, RUHS, Chair	Х	Brian DeMarco, RSO
Karan Singh, MD, San Gorgonio	Х	Wayne Ennis, AMR Desert
Kim McGranahan, RN, Kaiser	Х	Suzee Brein, AMR Riverside
Melanie Randall, MD, RUHS	Х	Lisa Higuchi, AMR
Kathy Cash, RN, Eisenhower	Х	Tim Buckley, Soboba Fire
Katherine Baca, RN, TVH		Ricky Harvey, Cal Fire
Robin Boardman, RN, JFK	Х	Ron Taggart, REACH
Stephen Kernop, RUHS	Х	Lori Maddox, RUHS
Zeke Foster, MD, Multiple FD	Х	Wayne Seacrist, Palm Springs Fire
Seth Dukes, MD, AMR	Х	Amanda Sweeden, Cal Fire
Steve Patterson, MD, Corona FD	Х	Carla Bolowich, Cal Fire
Jennifer Antonucci, Murrieta FD	Х	Chuck Clements, Riverside City Fire
Scott Philippbar, Cal Fire	Х	Candy Tanamachi, CRMC
Dawn Downs, Symbiosis Care	Х	Kelley Long, Corona Fire
Noelle Toering, Palm Springs FD	Х	Matt V Payne, Calimesa Fire
Donald Sharp, RSO		Thomas Wofford, Eisenhower
Ken Cardin, Morongo FD	X	Lacey Paige, Riverside Community Hospital
Brian Harrison, Air Methods		Richard Valenti, Cathedral City Fire
Bob Fontaine, MVC	X	Jason Sexton, RSO
		Charlie Hendra on behalf of Veronica Arellano, IVMC
REMSA:		D. Michelle Ingersoll, DRMC
Reza Vaezazizi, MD	X	Kati Phillippi, SGMH
Dan Bates	X	Anthony Roman, Kaiser
Shanna Kissel	X	Ryan Putnam, REACH
Holly Anderson	X	Julie Puzzo, MD, JFK
Kristie Hinz	X	Lacey Page, RCH
Evelyn Pham	X	Dan Sitar, RUHS
Dustin Rascon	X	Jamie Marliere, LLUMC-M
Catherine Farrokhi, PHD	X	Philine Endres-Shafer, MD, TVH
Nick Ritchey	X	
Mike Moore	Х	
Sean Hakam	Х	
James Lee	Х	
Karleen Wade	Х	
Henry Olson	Х	
David Platz	Х	

FOR CONSIDERATION BY PMAC

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DATE: November 1, 2024

TO: PMAC

FROM: Shanna Kissel, RN, Assistant Nurse Manager

SUBJECT: Trauma System

- 1. REMSA will continue to QI Versed and Push-dose Epi. Outcomes will be presented at February 2025 TAC. TAC in November 2024 is canceled.
- 2. Tentative trauma policies (4302, 5301, 5302) were presented at August TAC with approval to move forward excluding conversations around Pediatrics. Further conversations are needed regarding some components of Pediatric Trauma.
- 3. DRMC will be going through ACS Level I survey on November 20th/ 21st, 2024.

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

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FOR CONSIDERATION BY PMAC

DATE: December 2, 2024

TO: PMAC

FROM: Loreen Gutierrez, RN, Specialty Care Coordinator

SUBJECT: STEMI System

- 1. STEMI 2022 System Plan update approved by EMSA, 2023 plan update to be submitted
- The STEMI dashboard posted on Rivcoready website was updated to reflect Q2 2024 data related to the Image Trend STEMI patient registry. https://rivcoready.org/remsa/programs#2741959481-1182105694
- 3. Q2. 2024 STEMI data uploaded to EMSA.

Next STEMI Committee meeting is January 13, 2025 meeting dates were approved at the October meeting. The meeting will continue to run via TEAMS conference.

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

FOR CONSIDERATION BY PMAC

DATE: December 2, 2024

TO: PMAC

FROM: Loreen Gutierrez, RN, Specialty Care Coordinator

SUBJECT: Stroke System

- 1. Stroke System Plan update 2022 plan approved by EMSA. 2023 update to be submitted with the 2023 EMS-Plan
- 2. San Gregornio will be designated as a Primary Stroke Center on December 1, 2024
- 3. The Stroke dashboard posted on Rivcoready website was updated to reflect Q2 2024 data related to the Image Trend Stroke patient registry.
- 4. https://rivcoready.org/remsa/programs#2741959481-1532242908
- 5. Stroke data State reporting completed for Q2 2024.

Next Stroke Committee meeting is February 6, 2025, via TEAMS conference meeting dates were approved at the November stroke meeting.

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

FOR CONSIDERATION BY PMAC

DATE: December 2, 2024

TO: PMAC

FROM: Kristie Hinz, RN, Prehospital Program Coordinator

SUBJECT: Proposed Policy Changes Overview

REMSA:

1. 3308 - BRUE language update

- 2. 4302 Traumatic Injury/Arrest Policy language review and changes
- 3. 4801 Obstetrical Emergencies/Newborn Deliveries NEW (attached protocol)
- 4. Universal Patient/Standards of Care NEW (attached protocol)
- 5. IV Infusion/Volume Control Device review of language changes and update
- 6. 4403 Symptomatic Tachycardia ESRD Treatment language review and update
- 7. 4105 ALS Drug Cards (Adenosine) WPW proposed language removal

RIVERSIDE COUNTY FIRE DEPARTMENT:

- 1. Adenosine changes to administration (single syringe vs. double syringe technique)
- 2. Addition of pediatric iGel
- 3. Addition of BLS iGel

MORENO VALLEY COLLEGE:

1. Addition of nebulized epinephrine to medications

CORONA FIRE DEPARTMENT:

- Expanded use for TXA (postpartum hemorrhage and epistaxis) and dose/route (2 gm slow IVP) change
- 2. Sepsis protocol/notification from the field
- 3. New IO site use distal femur

PALM SPRINGS FIRE DEPARTMENT:

1. Ketorolac – pain scale changes (remove restriction or expand for treatment of higher pain scale



4801

Obstetrical Emergencies/Newborn Deliveries



Treatment Protocol

Last Reviewed: July 1, 2025 Last Revised: July 1, 2025

PRE-D	ELIVERY
BLS Patient Management	ALS Patient Management
 Establish, maintain, and ensure: A. Patent airway. Oropharyngeal suction and/or airway adjuncts (OPA/NPAs) as clinically indicated B. O2 Saturation C. O2 and/or ventilate as clinically indicated D. If delivery is not imminent, transport in position of comfort, preferably on left side E. If the delivery is suspected to be imminent, allow the patient to remain in a position of comfort, visualize the perineum, and determine if there is time to transport F. If delivery is imminent (crowning, bulging of perineum, and/or pushing), stay on scene and prepare to assist with delivery Oxygen As clinically indicated. Titrate to maintain, or increase, SpO₂ to a minimum of 94%. If the mother is experiencing complications, increase oxygen flow rate so that SpO₂ greater than or equal to 98%. 	 Establish, maintain, and ensure peripheral IV and/or IO access for emergency stabilization Consider the need for additional sites as clinically indicated Interpret and continuously monitor cardiac rhythm, BP, and SpO₂. Waveform/digital capnography and blood glucose as clinically indicated For suspected pre-eclampsia or eclampsia Standing order: may be given prophylactically Magnesium Sulfate 5 gm IV, infuse in 50- 100 mL Normal Saline, administer over 10 minutes. ADDITIONAL ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO). **OR** Magnesium Sulfate 2.5 gm IM x2. ADDITIONAL ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO). For eclamptic seizures unresponsive to Magnesium Sulfate INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO). Midazolam 2.5 mg slow IVP/IOP **OR** Midazolam 5 mg IM/IN.

DELIVERY

BLS and ALS

Routine Delivery

- A. Placenta should deliver within 10-30 minutes. Do not wait on scene. Place placenta in a plastic bag and transport with mother.
- B. If infant is vigorous, wait 60 seconds after delivery, then clamp cord at approx. 3 inches and 4 inches, cut in between clamps.
- C. If neonate is not vigorous, clamp cord and begin resuscitation

Prolapsed Cord

- A. Elevate mother's hips with pillows
- B. Insert gloved hand into vagina, with gentle pressure, remove presenting part off cord
- C. Transport immediately while retaining this position. Do not remove hand until relieved by hospital
- D. Covered exposed cord with saline-soaked gauze

• Breech Presentation

- A. Expedite transport to the nearest facility with OB services
- B. Position the mother as clinically indicated (left lateral recumbent with legs/hips elevate or knees to chest)

Nuchal Cord (Cord wrapped around neck)

- A. Slip cord over the head and off the neck
- B. If cord is tightly wrapped around the neonates neck and unable to remove, clamp and cut cord

MOTHER PC	OST-DELIVERY
BLS Patient Management	ALS Patient Management
Controlled bleeding using appropriate measures, as clinically indicated A. Massage fundus vigorously B. Baby to breast C. High-flow O2	For shock associated with postpartum hemorrhage Adults: 250 mL IV/IO bolus. MAY REPEAT AS CLINICALLY INDICATED TO A MAX ADMINISTRATION OF 2 L. Push Dose Epinephrine 0.01 mg (0.01 mg/mL concentration) IVP/IOP. MAY REPEAT AS CLINICALLY INDICATED EVERY 1-5 MIN TO MAINTAIN A SBP > 90 ADMINISTRATION OF TRANEXAMIC ACID (TXA) FOR POSTPARTUM HEMORRHAGING IS NOT PERMITTED.

NEONATE POST-DELIVERY/RESUSCITATION							
BLS Patient Management	ALS Patient Management						
Dry, stimulate and then swaddle in a dry receiving blanket and head cover. Place with the mother as clinically indicated	 Establish, maintain, and ensure peripheral IV and/or IO access for emergency stabilization Consider the need for additional sites as clinically indicated 						

APGAR	0	1	2			
Appearance	Blue	Pink Core / Blue Extremities	Pink			
Pulse	Absent	Slow	Fast			
Grimace	Absent	Weak	Strong			
Activity	Absent	Weak	Strong			
Respirations	Absent	Weak	Strong			

- Assess using the APGAR scoring system at 1 minute and 5 minutes. Based on APGAR scores, presentation, and clinical assessment:
 - Suction mouth first then nose only if signs of obstruction by secretions present
 - Monitor SpO₂ while attached to the right upper extremity (a preductal location)
 - Provide blow-by oxygen as indicated
 - If APGAR at 5 minute check is 7 or less, assess blood glucose level. If blood glucose is less than 45 mg/dl, treat for hypoglycemia.

PATIENT MUST BE ALERT WITH GAG REFLEXES INTACT

Neonates: Glucose Gel (buccal) PO AS TOLERATED.

MAY REPEAT PRN TO ACHIEVE AND/OR MAINTAIN

CORRESPONDING AGE APPROPRIATE BG LEVEL

IF HR LESS THAN 100 BPM OR POOR RESPIRATORY RATE, EFFORT, OR PERSISTENT CENTRAL CYANOSIS

- Administer oxygen and stimulate for 30 seconds.
- If no response, assist ventilations with PPV and supplemental oxygen at a rate of 40-60 breaths per minute.

IF HR LESS THAN 60 BPM

- Assist ventilations with PPV and supplemental oxygen at a rate of 40-60 breaths per min
- Organize the resuscitation team and perform high performance CPR according to current REMSA training and standards with a 3:1 compression ratio at a rate of 120/min
 - Ensure high performance CPR by utilizing assigned roles and tasks during resuscitation (i.e., Pit Crew CPR)
 - ➤ Emphasize correct hand placement, compression depth (1/3" 1/2") and rate (120/min) with complete chest recoil
 - Minimize interruption of chest compressions
 - Avoid hyperventilation

For Neonatal Resuscitation Post Delivery

 When required, ensure high performance CPR is being performed according to current REMSA training and standards. Attach, interpret, and continuously monitor EtCO2. If EtCO2 is less than 10 mmHg, attempt to improve CPR quality

Normal Saline 10 ml/kg IV/IO rapid infusion

PATIENT MUST BE ALERT WITH GAG REFLEXES INTACT

Neonates: Glucose Gel (buccal) PO AS TOLERATED.

MAY REPEAT PRN TO ACHIEVE AND / OR MAINTAIN

CORRESPONDING AGE APPROPRIATE BG LEVEL

INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).

Dextrose 5 mL / kg (10% solution) IV/IO bolus or infusion.

INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).

Epinephrine 0.01 mg/kg (0.1 mg/mL concentration) IVP/IOP.

Naloxone 0.1 mg/kg IVP/IOP/IM/IN.

ADDITIONAL ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).

INITIAL AND REPEAT ADMINISTRATIONS REQUIRE A BASE HOSPITAL ORDER (BHO).

Sodium Bicarbonate 1 mEq/kg IVP/IOP.

DISCONTINUING RESUSCIATION OF A NEONATAL PATIENT REQUIRES A BASE HOSPITAL PHYSICIAN ORDER (BHPO)

Patient Disposition

- CONTACT A SINGLE BASE HOSPITAL FOR ALL OBSTETRICAL DELIVERIES, PATIENTS EXPERIENCING PRE-ECLAMPSIA/ECLAMPSIA AND WITH ANY COMPLICATION OF CHILDBIRTH
- Do not attempt resuscitation on the neonate if they are younger than 22 weeks gestation **WITH** no signs of life after delivery.
 - Neonates delivered before 22 weeks gestation have a low chance of survival. If mother is encountered in labor with a gestational age younger than 22 weeks, in many instances the neonate will not survive.
 - o If gestation age is unknown, findings of less than 22 weeks are:
 - > Eyelids fused shut
 - Foot length less than 40 mm
 - > Transparent skin
 - ➤ Weight less than 2 pounds
 - > Low muscle tone







Universal Care; Responsibility for Patient Management; Patient Management Protocol



Treatment Protocol

Last Reviewed: Month Day, Year Last Revised: Month Day, Year

PURPOSE

Facilitate appropriate initial assessment and management of any EMS patient and link to appropriate specific treatment protocols as directed by the findings within the Standards of Care Guideline. Perform assessments and interventions as noted below within the providers scope of practice.

Patient/Scene Management

- 1. Assess scene safety
 - a. Evaluate for hazards to EMS personnel, patient, bystanders
 - b. Safely remove patient from hazards prior to beginning medical care
 - c. Determine the number of patients
 - d. Determine mechanism of injury or potential source of illness
 - e. Request additional resources if needed. Cancel, reduce, or increase priority of responding equipment as clinically indicated and operationally required
 - i. Request air ambulance as clinically indicated and operationally required
 - ii. Consider declaring a mass patient/mass casualty incident (MPI/MCI), go to REMSA Protocol 3305 (Multiple Patient/Casualty Incident (MPI/MCI) Management)
- 2. Use appropriate personal protective equipment (PPE)
 - a. Consider suspected or confirmed hazards on scene
 - b. Consider suspected or confirmed highly contagious infectious disease (i.e. contact, droplet, or airborne)
- 3. Consider cervical spine stabilization and/or spinal precautions if traumatic injury is suspected

Primary Survey

Airway, breathing, circulation should be assessed; however, there may be circumstances to reprioritize and evaluate circulation, airway, breathing when significant hemorrhage is recognized. As clinically indicated, obtain the patients age and weight (reported by written document, patient/parent, or EMS estimation). Classify patient as pediatric if appearing or known to be 14 years of age or less.

- 1. Airway: assess for patency and open airway as clinically indicated
 - a. Head tilt/chin lift
 - b. Jaw thrust
 - c. Suction as clinically indicated
 - d. Consider the need for an airway adjunct or definitive airway (i.e. OPA, NPA, iGel, orotracheal intubation)
 - Patients with laryngectomies or tracheostomies, remove all objects or clothing that may be obstructing the
 opening, suction as clinically indicated, maintain the flow of the prescribed oxygen and reposition the head
 and/or neck
- 2. Breathing:
 - a. Evaluate rate, breath sounds, accessory muscle use, retractions, patient positioning, oxygen saturation
 - b. Provide supplemental oxygen as clinically indicated for target O2 of 94-98% SPO2 and based on clinical presentation
 - c. Evaluate ETCO2 as clinically indicated and per treatment policy requirements
- 3. Circulation:
 - a. Control any major external hemorrhage (i.e. direct pressure, hemostatic gauze, tourniquet placement)
 - b. Assess for pulse
 - i. If none go to REMSA Protocol 4405 (*Medical Cardiac Arrest*) or REMSA Protocol 4302 (*Traumatic Injury/Traumatic* Arrest) treatment protocols as applicable
 - ii. Assess rate and quality of radial, brachial, and/or carotid as clinically indicated
 - iii. Evaluate perfusion skin color, temperature, moisture, and capillary refill

- 4. Disability:
 - a. Evaluate patient responsiveness: Glasgow Coma Scale (GCS) or AVPU (Alertness, Verbal, Pain, Unresponsive). mLAPSS as clinically indicated.
 - b. Evaluate gross motor and sensory function in all extremities
 - c. For found/reported altered mental status or suspected stroke, obtain blood glucose level and treat as clinically indicated
 - d. If acute stroke suspected go to REMSA Protocol 4502 (Suspected Stroke)
- 5. Expose: removal of clothing and/or obstructions on patient as appropriate to complaint and physical exam requirements
 - a. Be considerate of patient modesty
 - b. Consider warming/cooling measures as appropriate and clinically indicated
- 6. Assess for urgency of transport if any critical injuries or illnesses are discovered during the primary survey
 - a. Prior to transport: Consider need for specialty care destinations (i.e. Stroke, STEMI, Trauma) and contact REMSA authorized base hospital as required by REMSA protocols.
 - b. Contact Level I/II Trauma base for any instances where multiple patients are present (MPI/MCI) for early notification and patient distribution.

Insert treatment protocols for emergency stabilization of the patient when indicated early in the assessment. Follow clinically indicated treatment protocols when the patient requires emergency interventions within the providers scope of practice.

Secondary Survey

The performance of the secondary survey should not delay patient transport in critical patients. Secondary surveys should be tailored to the patient's presentation and chief complaint. Secondary survey should be completed after the primary survey has ruled out any immediate interventions that need to be performed on the patient based on assessment finding.

- 1. Head
 - a. Pupils
 - b. Ears
 - c. Naso-oropharynx
 - d. Skull and scalp
- 2. Neck
 - a. Jugular venous distention
 - b. Tracheal position
 - c. Spinal tenderness
- 3. Chest
 - a. Retractions
 - b. Breath sounds
 - c. Chest wall tenderness, deformity, crepitus, and excursion
- 4. Abdomen/Back
 - a. Tenderness or bruising
 - b. Abdominal distention, rebound, or guarding
 - c. Spinal tenderness, crepitus, or step-offs
 - d. Pelvic stability or tenderness
- 5. Extremities: evaluate all four extremities as indicated
 - a. Pulses
 - b. Edema
 - c. Deformity/crepitus
- 6. Neurologic
 - a. Mental status/orientation (if the patient has a history of an altered mental status, document if they are at baseline or not)
 - b. Motor/sensory
- 7. Evaluate for medical equipment the patient may have (e.g. pacemaker/defibrillator, LVAD, insulin pump, dialysis fistula)

Insert treatment protocols for patient disposition. If during either the primary or secondary survey, critical findings are discovered, appropriate interventions should be performed within providers scope of practice as indicated in the appropriate treatment protocol. Follow operationally indicated treatment protocols when required for patient disposition and transport destination decisions.

Vital Signs/History

Obtain baseline vital signs (an initial full set of vital signs is required: pulse, blood pressure, respiratory rate, neurologic status assessment, pulse oximetry as indicated, waveform capnography as indicated)

- 1. Stable patients will have at least two sets of pertinent vital signs. Vital signs are taken 10 to 15 minutes apart and, if transported, taken shortly before arrival at the receiving facility. Vital signs may be taken more often as clinically indicated.
- 2. Critical patients will have vital signs taken every 5 minutes. Vital signs may be taken more often as clinically indicated.
- 3. Neurologic status assessment involves establishing baseline and then trending any change in patient neurologic status
 - a. Glasgow Coma Scale (GCS) should be used to gather baseline and treading changes in the patient.
 - e. If the patient is a suspected Stroke, mLAPSS is to be utilized and go to REMSA Protocol 4502 (Suspected Stroke)
- 4. Patients with cardiac or respiratory complaints:
 - a. Pulse oximetry
 - b. 12-Lead electrocardiogram (EKG) should be obtained promptly in patients with cardiac or suspected cardiac complaints when paramedic present
 - c. Continuous cardiac monitoring on scene and throughout transport
 - d. Waveform capnography to be used for patients with respiratory complaints (mandatory use on critical patients and those patients who require invasive airway management)
- 5. Patients with altered mental status:
 - a. Check blood glucose. If low, go to REMSA Protocol 4201 (Symptomatic Hypoglycemia)
 - e. Consider waveform capnography (mandatory use on critical patients and those patients who require invasive airway management)
- 6. Obtain **OPQRST** history:
 - a. Onset of symptoms
 - b. Provocation: location; any exacerbating or alleviating factors
 - c. Quality of pain
 - d. Radiation of pain
 - e. **S**everity of symptoms: appropriate pain scale for age and patient's presentation
 - f. Time of onset and circumstances around onset
- 7. Obtain **SAMPLE** history:
 - a. Symptoms
 - b. Allergies: medication, environmental, and foods
 - c. Medications: prescription and over the counter; bring containers to ED if possible
 - d. Past medical history
 - i. Look for medical alert tags, portable medical records, advanced directives
 - ii. Look for medical devices/implants (e.g. dialysis shunts, insulin pumps, pacemaker, central venous access port, gastric tubes, urinary catheter)
 - iii. For females of childbearing age, inquire about potential or recent pregnancy when applicable
 - e. Last oral intake
 - f. **E**vents leading up to the 911 encounter
 - i. In patients with syncope, seizure, altered mental status, or acute stroke, consider bringing the witness to the hospital or obtain their contact phone number to provide the receiving facility

Treatment and Interventions

Insert treatment protocols for patient disposition.

- 1. Administer oxygen as appropriate with a target of achieving 94-98% saturation and select the appropriate method of oxygen delivery to mitigate or treat hypercarbia associated with hypoventilation.
- 2. Place appropriate monitoring equipment as dictated by assessment findings; these may include:
 - a. Continuous pulse oximetry
 - b. Cardiac rhythm monitoring
 - c. Waveform capnography or digital capnometry
- 3. Establish vascular access if indicated or in patients who are at risk for clinical deterioration (IO if unable to obtain IV access in two attempts). Consider the need for additional sites.
- 4. Monitor pain scale if appropriate
- 5. Reassess patient after any treatment or intervention and/or as clinically indicated

Insert treatment protocols for patient management. Follow clinically indicated treatment protocols and interventions when required for patient management within the providers scope of practice. If a Medical or Trauma patient doesn't fit a specific treatment protocol, make base station contact for further direction.

Transfer of Care

The content and quality of information provided during the transfer of patient care to another party is critical for seamless patient care and maintenance of patient safety. Ideally, a complete electronic medical record should be provided to the next caregiver at the time of transfer of care. If provision of the completed medical record is not possible at the time of transfer of care, a detailed verbal report should be provided to the next caregiver.

- 1. The information provided during the transfer of care should include, but not limited to:
 - a. Patient's full name
 - b. Age
 - c. Chief complaint
 - d. History of present illness/Mechanism of injury
 - e. Past medical history
 - f. Medications
 - g. Allergies
 - h. Vital signs with documented times
 - Patient assessment, interventions, medications given by provider along with the timing and patient's response to such medications and interventions
- The detailed verbal report provided at the time of transfer of care does not take the place of or negate the requirement for the provision of a complete electronic or written medical record of the care provided by the EMS personnel.

Patient Safety Considerations

- 1. Be aware of legal issues and patient rights as they pertain to and impact patient care (e.g. patients with functional needs or children with special healthcare needs)
- 2. Be aware of potential need to adjust management based on patient age and comorbidities, including medication dosages
- 3. The maximum weight-based dose of medication administration to a pediatric patient should not exceed the maximum adult dose
- 4. Consider air medical transport, if available, for patients with time-critical conditions where ground transport time exceeds 30 minutes

Performance Measures

- 1. Abnormal vital signs should be address and reassessed
- 2. Response to treatments and medication therapy should be documented including pain scale when applicable and reassessment if appropriate
- 3. Limit scene time for patients with time-critical illness or injury unless clinically indicated
- 4. Blood glucose level obtained when indicated
- 5. Compliance with provision of critical information during patient transfer of care
- 6. Appropriate utilization of air medical services

Documentation Elements

- 1. At least two sets of vital signs should be documented for every patient
- 2. All patient interventions and response to care should be documented (i.e., improved, not improved)
- 3. If a 4-Lead and/or 12-Lead is placed on the patient, the findings (i.e. rhythm strip, 12-Lead) must be included in the ePCR documentation
- 4. All major changes in clinical status including, but not limited to, vital signs and data from monitoring equipment, should be documented
- 5. Unification of ePCR, between/within agencies is highly encouraged

Key Considerations

- 1. **Pediatrics**: a patient appearing or known to be older than 29 days but less than or equal to 14 years of age. If the age is unknown, any patient weighing less than 36 kg/79.2 lbs **AND** whose length (measured from crown to heel) falls within the range of any commercially available, standardized length-based pediatric resuscitation tape.
 - a. Use a weight-based assessment tool (length-based tape or other system) to estimate patient weight and guide medication therapy and adjunct choices.
 - b. Consider using the pediatric assessment triangle (appearance, work of breathing, circulation) when first approaching a child to help with assessment.
- 2. **Geriatrics**: a patient appearing or known to be 65 years of age of more
 - a. In these patients, medications can have prolonged effects if there is preexisting renal disease (i.e., on dialysis or a diagnosis of chronic renal insufficiency) or hepatic disease (i.e., severe cirrhosis or end-stage liver disease).
- 3. **Secondary Survey**: if the patient has critical primary survey problems, it may not be possible to complete. Every effort should be made to complete in route to the receiving facility.
- 4. Critical Patients: proactive patient management should occur simultaneously with assessment.
 - a. Ideally, one provider should be assigned to exclusively monitor and facilitate patient-focused care
 - b. Other than lifesaving interventions that prevent deterioration enroute, treatment and interventions should be initiated as soon as practical but should not impede extrication or delay transport to definitive care.



2025 REMSA Clinical Calendar

JANUARY							FEBRUARY						MARCH					APRIL									
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	\mathbf{W}	T	F	S
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5	6	7	8	CQILT	10	11	2	PMAC/ EMCC	4	5	6	7	8	2	3	4	5	6	7	8	6	7	STEMI	9	CQILT	11	12
12	13	STEMI	15	16	17	18	9	10	STROKE	12	13	14	15	9	10	11	12	13	14	15	13	14	15	16	17	18	19
19	20	21	22	23	24	25	16	17	18	TAC	20	21	22	16	17	18	19	20	21	22	20	21	22	23	24	25	26
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				STROKE	2	3	1	2	3	4	5	6	7			1	2	3	4	5						1	2
4	5	6	7	8	9	10	8	9	10	11	12	13	14	6	7	STEMI	9	CQILT	11	12	3	4	5	6	STROKE	8	9
11	PMAC/ EMCC	13	14	15	16	17	15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
18	19	20	TAC	22	23	24	22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	TAC	21	22	23
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		SEPT	EM	BER					OC'	ГОВ	BER			NOVEMBER						DECEMBER							
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7	8	9	10	11	12	13	5	6	STEMI	8	CQILT	10	11	2	3	4	5	STROKE	7	8	7	8	9	10	11	12	13
14	15	16	17	18	19	20	12	13	14	15	16	17	18	9	10	11	12	13	14	15	14	15	16	17	18	19	20
21	22	23	24	25	26	27	19	20	21	22	23	24	25	16	17	18	TAC	20	21	22	21	22	23	24	25	26	27
28	PMAC/ EMCC	30					26	27	28	29	30	31		23	24	25	26	27	28	29	28	29	30	31			
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Jan 1	New Year's	May 26	Memorial Day	Nov 11	Veterans Day
Jan 20	MLK Day	June 19	Juneteenth	Nov 27	Thanksgiving
Eab 12	Abroham Linaaln Dday	In1x7 /	Indonandanaa Day	Nov. 28	Day often Thenl

Feb 12 Abraham Lincoln Bday July 4 Independence Day Nov 28 Day after Thanksgiving

Feb 17 George Washinton Bday Sept 1 Labor Day Dec 25 Christmas

Oct 13 Columbus Day Dec 26 Day after Christmas

TtT dates March 17th- 21st

Policy proposals due

Proposal/ PMAC agenda goes out

EMSO days