Sacramento County Emergency Medical Services Agency (SCEMSA) Joint Medical Advisory (MAC)/Operational Advisory (OAC) Committees 9616 Micron Ave. Suite 960 Sacramento, CA. 95827 September 14, 2023



Agency	Representative	Agency	Representative
American Medical Response	Mark Mendenhall	Sutter Medical Center, Roseville	Rose Colangelo
American Medical Response	Paul Harper	Sutter Medical Center, Sacramento	Jen Denno
Cosumnes Fire Department	Tessa Naik, M.D.	Sutter Medical Center, Roseville	Debbie Madding
Folsom Fire Department	Bryan Sloane, M.D.	Versa Care	Dave Buettner
Folsom Fire Department	Mark Piacatini	Sutter Health	Zach Rucker
Sacramento City Fire	Brian Pedro	Kaiser Sac	Rich M.
UC Davis Medical Center	Samantha Brown, M.D.	UC Davis Medical Center	Jeremy Veldstra
Mercy San Juan/Alpha One	Nathan Beckerman, M.D.	Alpha One	Nige Coibian
NorCal Ambulance	Nic Scher	Alpha One	Matt Burruel
EDC ESA	Christy Jorgensen	Mercy San Juan	Amelia Hart
SCEMSA Sacramento Metropolitan	Kevin Mackey, M.D.	Methodist Hospital	Krystyna Ongjoco
Fire	John Rudnicki	Medic Ambulance	Brian Meader
Sacramento Metropolitan Fire Sacramento Metropolitan	David Sutton	Medic Ambulance	Lisa Curlee
Fire	Adam Blitz	American Medical Response	Jack Wood, D.O.
Reach/Calstar	Corey Collier	Kaiser	Sarah Henry
Cosumnes Fire	Robert Kasparian	Kaiser Sacramento	Greg Smith, M.D.
Sutter Health	Karen Scarpa, M.D.	Alpha One	Nick Coibain
SCEMSA Staff	All	Sutter Roseville	Heather Garcia
ITEM		DETAILS	ACTION
Icome and		NONE	NONE
roductions		NONE	NONE
olic Comment		NONE	NONE
utes Review		September 14, 2023	Approved: Dr. Naik and Dr. F None
EMA Updates		nino: CEMSIS Update – , 2023, CEMSIS 3.5 goes	None
		gives one quarter to work	
		the issues for our different	
		before 3.4 is gone. Please	
		ur vendors ASAP because	
		ler's data will not be	
	-	into CEMSIS once 3.4 is	
		will be turned off at 23:59	
	-	ber 31, 2023. If providers	
		g problems with their	
vendors, please reach out to Dave,			
	and he wi	II make a phone call to the	
		If make a phone call to the let the issue resolved. If	
	State to g your ager	•	

	accept it now. Data may be a little skewed while Dorthy and Yvonne	
	figure out the collection of both 3.4 and 3.5.	
	Ben Merin: Admin edit has been	
	made to PD#5060 – Hospital	
	Diversion (Edits can be seen below	
	under New Business). This has been	
	done to accommodate procedural	
	changes in EMS Resource regarding	
	Advisories.	All Departs Attached to Minutes
APOT/Wall Time Reports	Sacramento County is seeing general worsening in the month of August	All Reports Attached to Minutes
	with Covid increasing again.	
	Conversation has taken place with	
	stakeholders regarding PD# 5050,	
	and Dr. Kann has decided to push	
	the policy out early to help with wall	
	times that are currently worsening.	
	The policy went live on September 5 th	
	with the expectation that crews will	
	be trained on this policy by	
	November 1 st .	
	Dr. Kann explained the importance of	
	the patient being delivered to the hospital where they normally receive	
	care due to the length of time it	
	takes to transfer the patient to their	
	appropriate hospital. This excludes	
	STEMI, Stroke, and Trauma patients.	
	Getting patients to the right hospital	
	and their in-network hospital equates	
	to APOT. The problem lies with the	
	"pipe" from the ED to in-house	
	hospital beds and in-house hospital	
	beds to home/SNF. This is a problem	
	for APOT. If the "pipe" can be made	
	bigger by getting the patients to the right hospital the first time this will	
	directly impact APOT times.	
	Dr. Rose discusses the success of the	
	Quick Care Program that Alpha-One	
	has implemented. The patient that	
	can be treated on the EMS gurney	
	stays on the EMS gurney, is treated	
	by the ED doctor, and is transported	
	home by the same crew.	

Old Business		
PD# 8004 - Suspected	Approved with Edits:	Julie Carrington would like to know
Narcotic Overdose	Language removed under BLS:	why the Naloxone Leave Behind Kit
	3. 2mg dose may be repeated x 1 for	is included in this policy when it is a
	a max dose of 4 mg.	policy on its own already. She also
	6. If trauma is suspected, assess for	feels that the information in this
	traumatic injury per PD# 8015.	policy is more specific than the
	7. Spinal motion restriction when	information in the Naloxone Leave
	indicated per PD# 8044.	Behind policy. Dr. Kann states he
	8. Perform blood glucose	will take a look at it and make a
	determination.	decision whether to leave this
	9. If the patient is seizing, protect	information in this policy.
	the patient from further injury.	
	Language added under BLS:	
	3. May repeat every 5 minutes, as	
	needed, until the patient is breathing	
	spontaneously.	
	5. Perform blood sugar	
	determination. Refer to PD# 8002 –	
	Diabetic Emergencies.	
	Language removed under ALS:	
	2. a. Can also be given IM when IV	
	or IN is difficult or impossible.	
	• up to 6mg, IN or IM. If IN Naloxone	
	cannot be titrated, it should be given	
	per the manufacturer-specified	
	direction.	
	3. If blood glucose \leq 60 mg/dl, refer	
	to PD# 8002 Diabetic Emergencies.	
	(this is stated in the BLS section.)	
	Cross Reference: PD# 8015 –	
	Trauma	
	PD# 8044 – Spinal Motion Restriction	
	(SMR)	
	Language added under ALS: 2. a.	
	 May repeat every 5 minutes, as needed, titrate to adequate 	
	respiratory status.	
	Additional language added:	
	Naloxone Leave Behind Kit:	
	Indication:	
	A. History of illicit substance use or	
	active prescriptions for opioids.	
	B. History of physical exam findings	
	consistent with IV drug use – needle	
	marks, abscesses at injection sites.	
	C. Physical environment suggestive	
	Si i nysical chimonitiche suggestive	

	of illicit substance use – paraphernalia opioid pill bottles present at the scene. BLS or ALS: A. If respiratory distress or altered mental status, refer to appropriate county policy. B. Provide Naloxone Leave Behind Kit. C. Review indications for Naloxone use with a bystander, friend, or family member. D. Review instructions for use with a bystander, friend, or family member. E. Review the DHS opioid resource information sheet. Cross Reference: PD# 2002 – Naloxone Leave Behind	
New Business		
PD# 2002 – Narcan Leave Behind – NEW POLICY	Approved with no edits	Dr. Kann states that this policy is the framework for our providers to leave Narcan behind. Julie Carrington would like to know if this program is going to be "volunteer program" for agencies. Dr. Kann states this is a Sacramento County driven program, and they can provide training and phone numbers for follow up resources to the patients that the medics have left Narcan behind. Sacramento County is way behind in starting this program. A link will be provided for at a later date for Agencies to obtain the Narcan for this program.
PD# 2003 – BLS Tiered Response System – NEW POLICY	Approved with no edits or comments	Dr. Brown would like the paramedics to document in the transporting agencies narrative what they performed. Dr. Sloane suggests creating a sub-committee to discuss this. One speaker states documentation of the paramedic's assessment/treatment is already being done.

PD# 2004 – Patient Privacy – NEW POLICY	Approved with no edits or comments.	
PD# 2030 – Advanced Life Support Inventories	 Approved with edits: Language added under Policy: A. Providers may choose to carry only one narcotic analgesic (Fentanyl or Ketamine*) and only one non- narcotic analgesic (Acetaminophen or Ketorolac) for pain control. *Note: Although Ketamine is not a narcotic, it will be considered an option in lieu of Fentanyl if providers choose not to carry both. Language removed under medications: D50 OR D10% OR both Language added under medications: Dextrose: D50, D25, and D10 	
PD#2033 – Determination of Death	Approved with edits: Language added under Determination of Death Paramedic Only A.3. "Wide complex"	
PD# 5060 – Hospital Diversion	Administrative Edits. In Effect on the Website September 15, 2023: Language removed under Procedure: D. ADVISORY - Partial closure based on temporary limited service: 1. CT scanner unavailable: Prehospital personnel will transport a patient to the next most appropriate facility with CT services if the patient has any of the following signs or symptoms: a. Any patient with a Cincinnati Prehospital Stroke Scale (CPSS) > 0. b. Sudden onset of "worst headache of their life." c. Unexplained new altered level of consciousness: [Glasgow Coma Scale (GCS) <12] without response to glucose, Glucagon, or Naloxone. d. Head injuries with GCS < 14, any	

head injury on anticoagulants, or any	
penetrating head injury.	
2. Cath Lab unavailable: Prehospital	
personnel will transport a patient to	
the next most appropriate facility if	
the patient has any of the following	
signs or symptoms:	
a. ECG indicating acute STEMI.	
E. Trauma Diversion- Trauma centers	
that cannot provide critical trauma	
services due to equipment failure or	
staffing or operating room availability	
may request temporary trauma	
diversion.	
a. The trauma services medical	
director or designee shall determine	
-	
when the facility is unable to care for	
additional trauma patients.	
b. Prehospital personnel will	
transport all critical trauma patients	
to the next most appropriate facility.	
Language added under Definitions	
C.:	
1. The trauma services medical	
director or designee shall determine	
when the facility is unable to care for	
additional trauma patients.	
2. Prehospital personnel will	
transport all critical trauma patients	
to the next most appropriate facility.	
D. STEMI Diversion – STEMI	
receiving centers may divert	
suspected STEMI patients under one	
of the following circumstances:	
1. Critical diagnostic/treatment	
equipment failure or scheduled	
maintenance.	
2. The STEMI services medical	
director/designee determines their	
hospital is unable to care for	
additional STEMI patients.	
E. Stroke Diversion - Stroke receiving	
centers may divert suspected stroke	
patients under one or more of the	
following circumstances:	
1. There is no CT capability at the	
intended receiving facility.	
2. The intended receiving facility is	

PD# 8001 – Allergic Reaction/Anaphylaxis	experiencing an unusually high number of stroke patients and is at capacity to provide timely and optimal care. Approved with edits Language Removed Under BLS: 2. Secure Airway 5. Use the lowest concentration and flow rate of 02 as possible. Language Added Under BLS Allergic Reaction: 1. Assess C-A-B 4. Position of comfort, reduce	The new language added regarding Bradykinin Mediated Angioedema and Histamine Induced Angioedema has not been an accepted change and is removed. Julie Carrington would like it to be recognized that this policy is being pulled out of turn, and updates to this policy only went into effect on
	 4. Position of connort, reduce anxiety 5. SPO2 with supplemental 02 as necessary to maintain SPO2 ≥ 94% 6. Suction as Needed Language Removed Under ALS: NOTE: Epinephrine should be used cautiously in patients > 35 years old or with a history of CAD or HTN. 	May 1, 2023. Dr. Kann responds by stating that TXA for the treatment of Bradykinin Mediated Angioedema can reduce the time of a hospital stay, helping to reduce APOT times. If there is a "Best Practice," we should incorporate it and not wait a year to implement it. Julie states her challenge is getting her medics to go through the process of pulling, mixing, and administering it. She is still working on getting them on board to do this. She agrees Best Practices are wonderful, and we must move that way. She is asking for consistency due to the challenge of bringing these back out of order and updating them again when it was just done. She asks if there is a compelling reason to bring this out of turn unless we see a lot of Bradykinin Angioedema. Dr. Rose asks if there is evidence that shows administering TXA 20 minutes prior to arrival at the ED makes a significant difference. He states that Bradykinin Angioedema and Histamine induced Angioedema is difficult for him to dx sometimes. He has never seen the data that changes the outcome if TXA is administered by the medics prior to

		arriving at the ED. It adds one more task for the medics and what I really want is for them to get them to the hospital quickly and does it really make giving it in the field decrease wall times. Dr. Kann does not have that data. Dr. Rose also states that currently, in the protocol, the dose for Epi states "use with caution greater than 35 years", but the current allergy society states there are no contraindications for the use of Epi in acute Anaphylaxis or impending airway issues. Dr. Mackey states that Bradykinin and Histamine induced Angioedema are not broken down and trained on in Paramedic schools, causing a heavy lift to educate Paramedics in the field. He would also like to wait for a bigger study to be released to support this change. Dr. Kann made the decision to remove the new edits regarding Bradykinin and Histamine induced Angioedema.
PD# 8020 – Respiratory Distress-Airway Management- Respiratory Failure	Approved with edits New language regrading nebulized TXA removed.	Proposed language regarding treatment of Hemoptysis with nebulized TXA is not accepted in this policy. It will be added for oral bleeding/Epistaxis with base contact to the Hemorrhage protocol.
PD# 8025 – Burns	Approved with edits Language removed under BLS: ABC's/Routine Medical Care: Stop the burning process. Administer supplemental O_2 as necessary to maintain $SpO_2 \ge 94\%$. Be prepared to support ventilation with appropriate airway adjuncts. Check for associated injuries and apply dry sterile dressings to burned areas. Inhalation Injury: Assess for: a. Burns around face and neck.	

	 b. Singed nasal hairs. c. Soot around nose and mouth. d. Chemical inhalation. 6. Remove the source of the burn. Wash with copious amounts of water. 7. Electrical burns are potentially severe injuries not apparently visible from the surface wound that require further treatment in the hospital. 10. Transport. Language added under BLS: 2. Perform ABCs. 3. Asses for inhalation injury (singed nasal hairs, hoarse voice or stridor, oral or facial burns) and administer supplemental O2 as necessary to maintain SpO2 ≥ 94%. Be prepared to support ventilation with appropriate airway adjuncts. 4. Estimate the size of the burn (see below). 5. For burns < 30% TBSA AND no inhalation injury, stop the burning process by applying COOL RUNNING WATER (CRW) over the burn. The goal is cumulative (bystander and first responder) application of CRW for 20 minutes. 8. Avoid hypothermia by isolating and cooling only the burned area. Keep unaffected body parts warm by covering them as much as possible and use the heater in the passenger compartment. 	Dr. Naik states the dispatch is also giving these instructions. If you want more information you can go to: https://www.20crw.org/
	9. After cooling the burn, apply a covering to the burn (dry non-stick gauze, loose plastic wrap, etc.	
PD# 8026 – Respiratory Distress	Approved with edits Language Removed: Definitions: A. Mild Distress - The patient is able to speak full sentences; the patient may have an elevated pulse and blood pressure; the patient may be	

	-
diaphoretic and weak; mental status	
is unaffected; no cyanosis is present.	
B. Moderate Distress - The patient is	
able to speak a few words; the	
patient may have an elevated pulse	
and blood pressure; the patient may	
be diaphoretic and weak; mental	
status is unaffected; mild cyanosis of	
lips and digits may be present.	
C. Severe Distress - The patient is	
unable to speak; the patient may	
have decreased/elevated pulse	
and/or decreased/elevated blood	
pressure; mental status is altered;	
more central and profound cyanosis	
is present.	
Under Caveats Language Removed:	
A. Patients may have several disease	
processes together, producing	
shortness of breath. Wheezing may	
occur in diseases other than asthma,	
and peripheral edema may occur in	
settings other than congestive heart	
failure (CHF). Assessment should	
usually yield a single treatment plan.	
Commit yourself to a single	
assessment - you may modify this	
assessment based on response to	
therapy and as additional information	
becomes available, modify the	
treatment plan.	
B. Patients may have diseases	
producing shortness of breath that	
cannot be relieved with any	
prehospital treatments. Some	
patients will present to the	
prehospital personnel so far in	
respiratory failure that	
maintenance/establishment of an	
airway together with expeditious	
transport are the only treatments	
possible.	
B. Hemoptysis (common causes):	
1. Malignancy	
2. Bronchiectasis	
3. Infection:	
a. Lung abscess	
 b. Necrotizing pneumonia 	L

	c. Fungal infection	
	d. Tuberculosis	
	e. Septic pulmonary embolism	
	f. Vasculitis	
	g. Iatrogenic causes:	
	Tracheoinnominate fistula	
	Post-biopsy	
	Bronchoscopic procedure	
	D. Continuous Positive Airway	
	Pressure (CPAP) and Bi-PAP are	
	highly effective at improving	
	respiratory distress and should be	
	attempted if available in all patients	
	with moderate and severe respiratory	
	distress. In general, one provider	
	should monitor and manipulate CPAP	
	leaving the primary provider to focus	
	on the overall condition of the	
	patient.	
	Language Added:	
	Policy BLS:	
	1. Assess C-A-B.	
	3. Position of comfort, reduce	
	anxiety.	
	4. SpO2 with supplemental O2 as	
	needed.	
	5. Suction as needed.	
	6. CPAP for severe dyspnea.	
	7. Airway adjuncts as needed.	
	Language Added:	
	Policy ALS:	
	1. Cardiac monitoring and ETCO2	
	measurement as available.	
	2. Vascular access, but do not delay	
	airway management.	
	3. Consider intubation for significant	
	hypoxia, dyspnea, or impending	
	airway loss.	
PD# 8065 – Hemorrhage	Approved with edits	
	Language added under Notes:	Treatment with TXA for
	F. Epistaxis	Epistaxis/oral bleeding will be
	Language added:	added with base consult. Also, other
	Epistaxis BLS:	September edits to this policy will
	1. Assess C-A-B.	be reviewed and brought back to
	2. Secure airway.	December MAC/OAC for approval.
	3. Position of Comfort, reduce anxiety.	,
	4. Suction as needed.	

	 Apply ice and direct pressure across the bridge of the nose. SpO2 with supplemental O₂ as needed. ALS: Cardiac monitoring and ETCO2 measurement as available. Vascular access, but do not delay airway management for suspected posterior hemorrhage. Consider Prepare for intubation for significant hypoxia, dyspnea, or impending airway loss. For stable patients, encourage vigorous nose blowing to remove clotted blood. Soak 500 mg of TXA on a cotton pledget and insert into the bleeding nostril. Under ALS treatment flow chart: TXA IV/IO dose changed from 1g to 2g Flow chart for ALS Epistaxis added. Flow chart for ALS For Traumatic Hemorrhage changed to clearly identify For Traumatic Hemorrhage. 	
PD# 8067 – Sepsis/Septic Shock	Approved with edits Language added under ALS: 3. PRESSURE BAG ALL SALINE BOLUSES	The discussion was brought up regarding paramedics carrying LR for Sepsis. It was decided that it would be left as NS bolus. It will be addressed if there is an NS shortage.
PD# 8837 – Pediatric Airway Management	 Approved with edits Language added under Procedure/ALS: E. 6. Inadequate oxygenation and ventilation with an iGel device on the 4th attempt will constitute a failed airway and trigger diversion and a FAILED AIRWAY PRE-ALERT to the closest ED for airway management. 	Shortage.
PD# 9004 – Pediatric Burns	Approved with edits Language removed under BLS: 1. ABC's/Routine Medical Care: a. Stop the burning process. Remove the patient from the source of the burn. Remove burning or smoldering clothing and remove	

jewelry. Administer supplemental	
O2 as necessary to maintain SpO2 \geq	
94%. Be prepared to support	
ventilation with appropriate airway	
adjuncts. Check for associated	
injuries and apply dry sterile	
dressings to burned areas.	
2. Inhalation Injury: Assess for:	
a. Burns around face and neck.	
b. Singed nasal hairs.	
c. Soot around nose and mouth.	
d. Chemical inhalation.	
3. Caustic and Chemical Burns: Wear	
protective clothing and gloves and	
consider the presence of hazardous	
materials. Remove the source of the	
burn. Remove all clothing. Wash with	
copious amounts of water. Do not	
scrub.	
4. Electrical Burns: Electrical burns	
are potentially severe injuries not	
apparently visible from the surface	
wound that require further treatment	
in the hospital. Check for and dress	
all entrance and exit wounds.	
5. Transport: Any patient with the	
following shall be transported to	
UCDMC Burn Center:	
a. Partial thickness > 9% of the body	
surface.	
b. Any electrical or chemical burn.	
c. Evidence of possible inhalation	
injury.	
d. Any burn to face, hands, feet,	
genitalia, perineum or major joints.	
6. Transport.	
Language added under BLS:	
1. Remove the patient from the	
source of the burn, then remove	
burning or smoldering clothing and	
remove jewelry	
2. Perform ABCs	
3. Assess for inhalation injury (singed	
nasal hairs, hoarse voice or stridor,	
oral or facial burns) and administer	
supplemental O2 as necessary to	
maintain SpO2 \geq 94%. Be prepared	
to support ventilation with	
• •	

	 appropriate airway adjuncts. 4. Estimate the size of the burn (see below) 5. Stop the burning process by applying cool running water over the burn. The goal is cumulative (bystander and first responder) application of cool running water for 20 minutes. 6. Caustic and Chemical Burns: Wear protective clothing and gloves and consider the presence of hazardous materials. Remove the patient's clothing. Apply cool running water over the burn for 20 minutes. Do not scrub. 7. Electrical Burns: Check for and dress all entrance and exit wounds. 8. Avoid hypothermia by isolating and cooling only the burned area. Keep unaffected body parts warm by covering them as much as possible, and use the heater in the passenger compartment. 9. After cooling the burn, apply a covering to the burn (dry non-stick gauze, loose plastic wrap, etc.). 	
PD# 2530 – Trauma Center Designation – NEW POLICY	Approved with no edits or comments.	
Scheduled Policy Updates		
PD# 2010 – Medical Advisory Committee	Approved with no edits or comments.	
PD# 2020 – Operational Advisory Committee	Approved with no edits or comments.	
PD# 2500 – EMS Aircraft Designation Requirements	Approved with no edits or comments.	
PD# 2510 – Designation Requirements for Ground- Based Advanced Life Support (ALS) Service Providers	Approved with no edits or comments.	
	l	

PD# 2520 – Hospital Emergency Service Downgrade or Closure Impact Evaluation Report	Approved with no edits or comments.	
PD# 4003 – Emergency Medical Services Liaison Officer (ELO)	Approved with no edits or comments.	
PD# 4050 - Certification Accreditation Review Process	 Approved with edits. Language removed: Definitions: A. Certificate or License: A specific document issued to an individual denoting competence in the named area of prehospital service. B. EMT: A person who is trained in all facets of basic life support according to the California Code of Regulations, Title 22, Division 9, Chapter 2, and who has a valid certificate issued by SCEMSA or other Local Emergency Medical Services Agency (LEMSA). C. EMR: A person who is trained to provide immediate lifesaving care to critical patients under the medical oversight of SCEMSA and has a valid and current certificate issued by SCEMSA. D. Paramedic: An individual whose scope of practice to provide advanced life support according to California Code of Regulations, Title 22, Division 9, Chapter 4 and has a valid license issued by SCEMSA. E. MICN: A registered nurse who is functioning pursuant to Section 2725 of the Business and Professions Code and who has been authorized by the medical director of SCEMSA as qualified to provide prehospital 	

PD# 8032 – Traumatic Cardiac Arrest	Approved with Edits Language removed under Protocol E.: Epinephrine will not correct arrest	
PD# 4303 – EMR Program Requirements and Approval	Approved with no edits or comments.	
PD# 4302 – Continuing Education Provider	 Approved with Edits Language added under Protocol: SCEMSA shall approve or disapprove the request for a CE course within sixty (60) calendar days of receipt of the completed request. a. Submit a course summary FORM for each CE course being offered prior to teaching. 	
PD# 4055 – Criminal Background Checks	Approved with no edits or comments.	
	instructions to prehospital emergency medical care personnel within Sacramento County according to standardized procedures developed by SCEMSA consistent with statewide guidelines established by EMSA. F. Medical Director: The Medical Director of SCEMSA G. Relevant Employer: Those ambulance services permitted by the Department of the California Highway Patrol or a public safety agency that the certificate holder works for or was working for at the time of the incident under review, as an EMT, EMR or Paramedic either as a paid employee or a volunteer. Language added under Procedure: B. The California Emergency Medical Services Authority. C. Sacramento County Emergency Medical Services Agency. Language added under Due Process: C. within twenty-one (21) days Grammatical changes also made to protocol.	
	advanced life support or to issue	

caused by a tension pneumothorax,	
cardiac tamponade, or hemorrhagic	
shock.	
Language added under BLS 2.:	
Apply tourniquets as	
necessary.	
Language removed under BLS 4.:	
Chest compressions should be	
performed, when possible, without	
delaying transport or other	
treatments.	
Language added under BLS 4.:	
Chest compressions/high-quality CPR	
for any rhythm other than Wide	
Complex $PEA < 40$ bpm or Asystole.	
Language added under BLS:	
5. The use of a Mechanical CPR	
Device should be omitted if it will	
cause a delay in transport.	
6. Expedite transport to the closest	
Trauma Center.	
Language Removed under ALS:	
1. Optimize Oxygenation/Ventilation	
 Advanced airway as needed per 	
policy.	
 Advanced airway placement shall 	
be confirmed with an ETCO2	
detection device or waveform	
Capnography.	
2. Correct potential obstructive shock	
- Maintain high Index of suspicion for	
tension pneumothorax, Bilateral	
needle thoracostomy per PD# 8015 – Trauma	
3. Treat potential exsanguinationObtain two (2) large-bore IV or IO	
access.1 Liter normal saline bolus	
simultaneously via each IV/IO.	
• Utilize a pressure bag for rapid fluid administration.	
Reassess lung sounds after each Liter	
Liter.	
• Repeat IV fluid during arrest until	
SBP>90 or a maximum of 4 liters is	
administered.	
4. Treat Cardiovascular Collapse	
High-quality CPR.	

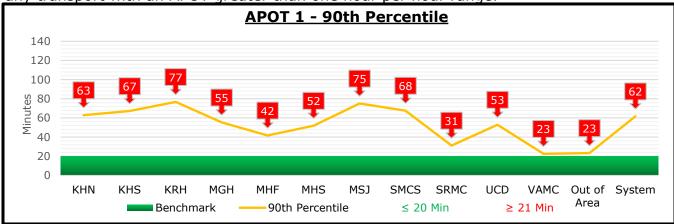
	 ECG monitoring and appropriate defibrillation per PD# 8031 - Non- Traumatic Cardiac Arrest. Language added under ALS: 1. Continue transport with BLS airway if adequate ventilation/chest rise is achieved. Advanced airway as needed per policy. 2. Correct potential obstructive shock - maintain a high index of suspicion for tension pneumothorax. Bilateral needle thoracostomy per PD# 8015 - Trauma. 3. Obtain large-bore IV or IO access. Give 1 liter of Normal Saline bolus by pressure bag infusion. 4. Cardiac monitoring - defibrillate shockable rhythms. 	
PD# 9006 – Pediatric Medical Cardiac Arrest	Approved with no edits or comments.	
PD# 9007 – Pediatric Diabetic Emergencies	 Approved with Edits Language removed under BLS: 5. Bullet point: 50% Dextrose (no longer option for oral administration) Language removed under ALS: 3. Bullet points: Dextrose 0.5 gm/kg IV/IO up to 12.5 gm. 14 plus years old: D50, 50 ml preload – full adult dose. 5. Bullet points: Dextrose 0.5 gm/kg IO as per dosages above. 0.5 gm/kg for a maximum dose of 1 gm/kg. Bullet point In the event of a glucometer failure, administer 0.5 gm/kg for a maximum dose of 1 gm/kg of Dextrose based on age above or 0.5 mg of Glucagon IM based on clinical assessment. Language added under ALS: 	D10 is the best practice for pediatric patients. It is also a safety factor for children. D50 and D25 have been kept in policy due to shortages on D10. D10 can be given to all patients if they choose not to carry D50 or D25.

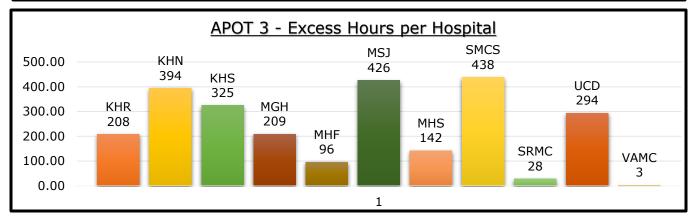
	 3. Bullet points Under 2 years old: D10, 5 ml/kg. 2-14 years old: D25, 2 ml/kg or D50 1 ml/kg. NOTE: if blood glucose remains < 60 mg/dl a repeat dose may be given. 	
PD# 9008 – Pediatric Seizures	Approved with Edits – Grammatical Only, no change to the protocol.	
PD# 9009 – Pediatric Neonatal Resuscitation	Approved with no edits or comments.	
PD# 9011 – Pediatric Overdose	Approved with no edits or comments.	
PD# 9021 – Pediatric Behavioral Crisis-Restraint	 Approved with Edits Language Added/Removed Under BLS: 1. a. Bullet Points: Contact the chain of command to respond to the scene. Contact the base hospital to discuss and consult about the situation if needed. and possible need for law enforcement evaluation for a 5150 application. Bullet Points: Law enforcement personnel are responsible for the Capture, detention, and restraint of assaultive or potentially assaultive patients. Law enforcement agencies Retain primary responsibility for the safe transport of patients under arrest. Language removed under Precautions: Patients under arrest or on psychiatric detention shall be searched thoroughly by law enforcement for weapons and contraband prior to placement in the ambulance. 	

Roundtable	Julie Carrington: If scientific studies will be used in the future to determine changes to protocols, please include a link to those studies in the agenda. An unknown speaker would like policy 5100 to be reviewed at the December MAC/OAC meeting. He is looking to have SCEMSA adopt ALS being able to use transport vents, blood, and other medications. Dr. Kann agrees that this will be placed on the December agenda.	

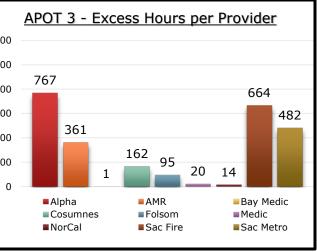
APOT 1 PER HOSPITAL & APOT 3 PER HOSPITAL & PROVIDER AGENCY FOR AUGUST - 2023

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.





Excess Hours per Hour Range by Hospital (Over 1 Hour)						APO	
Hour Range	1-2	2-3	3-4	4-5	5+	1200	
KHR	102	11	1			1200	
KHN	136	34	4			1000	
KHS	143	29	4			800	76
MGH	73	11				600	
MHF	23	3	1		2	600	
MSJ	184	33	10	3	1	400	-
MHS	38	7				200	-
SMCS	197	12	1			0	
SRMC	6					Ű	
UCD	61	23	17	7	7		- 1
VAMC							

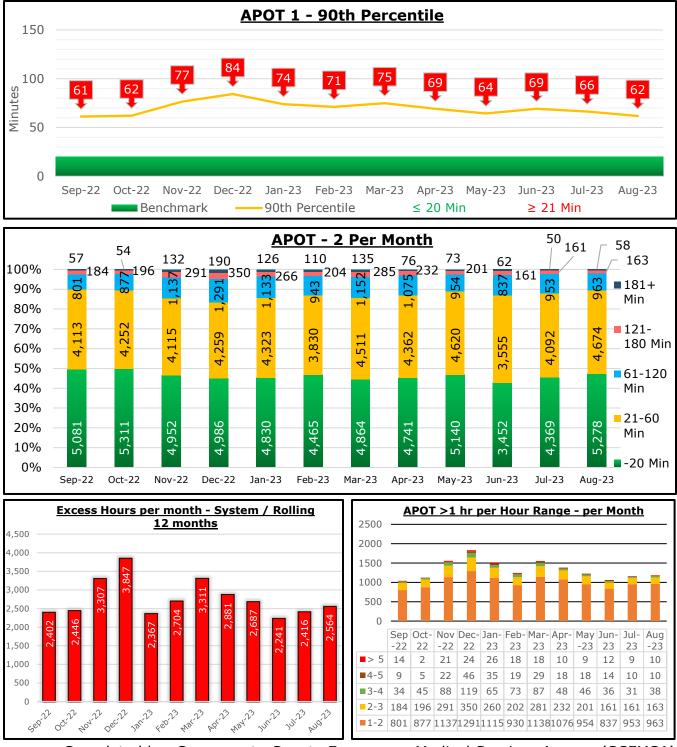


APOT Estimated Cost Table - August 2023

				Ke	/ Red Highest	
Hospital Names	Excess Hours	APOT - 1 in Minutes	Percentage within 20 min	EMS Field to ED Patient count	Average Cost of Excess Hours to EMS Strike Team Rate \$210.74hr	Average Cost per 10 patients
KHR	208.47	1:16:44	33.80%	648	\$43,933.64	\$677.99
KHN	394.13	1:02:55	39.67%	1573	\$83,059.38	\$528.03
KHS	324.63	1:07:11	60.65%	1517	\$68,412.03	\$450.97
MGH	208.65	0:55:19	36.01%	933	\$43,970.66	\$471.28
MHF	95.91	0:41:42	54.27%	597	\$20,212.99	\$338.58
MSJ	425.93	1:15:04	47.06%	1513	\$89,760.98	\$593.26
MHS	142.06	0:51:50	31.34%	787	\$29,937.06	\$380.39
SMCS	438.25	1:07:36	27.82%	1492	\$92,357.47	\$619.02
SRMC	28.03	0:31:08	66.28%	516	\$5,907.39	\$114.48
UCD	293.96	0:52:57	64.60%	1305	\$61,948.39	\$474.70
VAMC	2.63	0:22:31	86.81%	182	\$554.56	\$30.47
Out of Area	1.45	0:23:22	83.56%	73	\$305.57	\$41.86
System	2564	1:01:42	47.40%	11,136	\$540,360.12	\$485.24

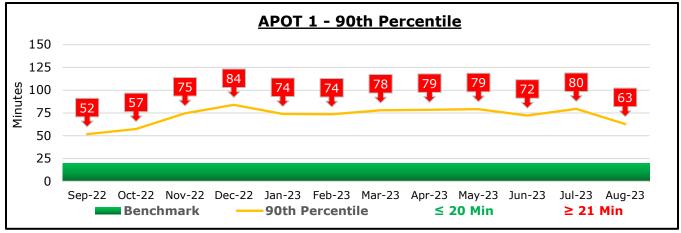
APOT 1, 2 & 3 - ROLLING 12 MONTHS / SYSTEM

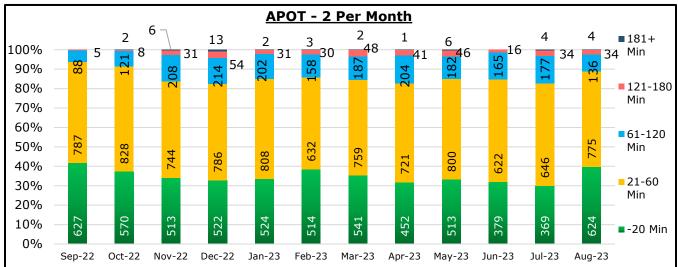
APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.

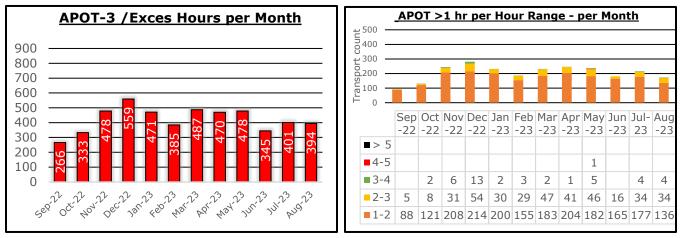


APOT 1, 2 & 3 - ROLLING 12 MONTHS / KAISER NORTH (KHN)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.

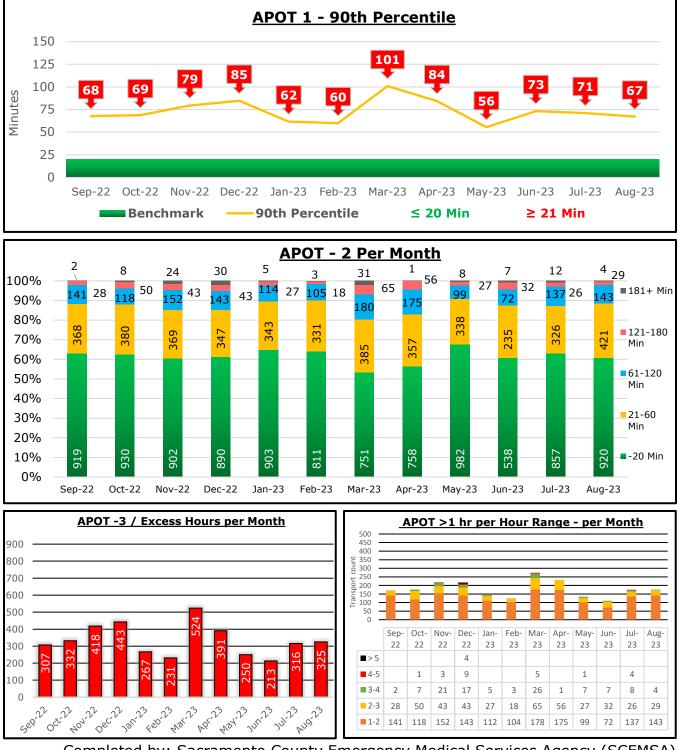






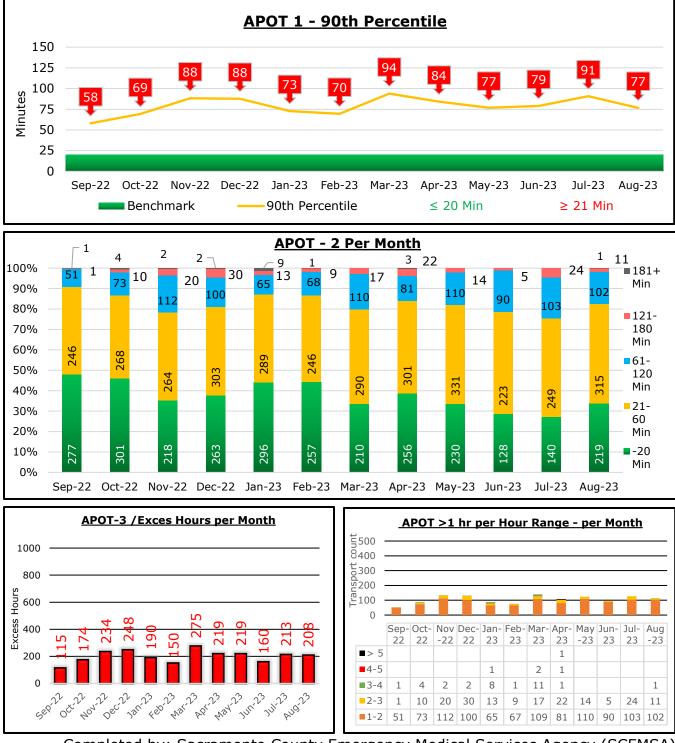
APOT 1, 2 & 3 - ROLLING 12 MONTHS / KAISER SOUTH (KHS)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.



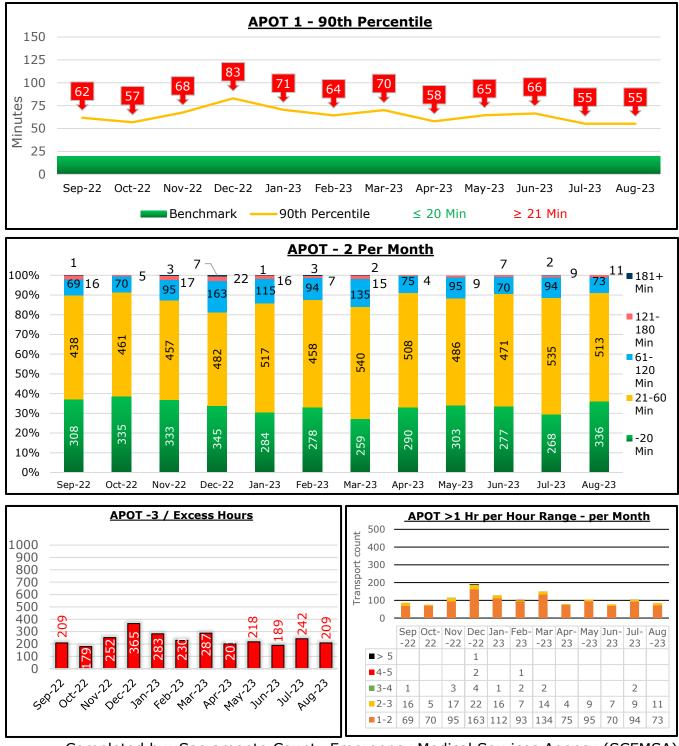
APOT 1, 2 & 3 - ROLLING 12 MONTHS / KAISER ROSEVILLE (KHR)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.



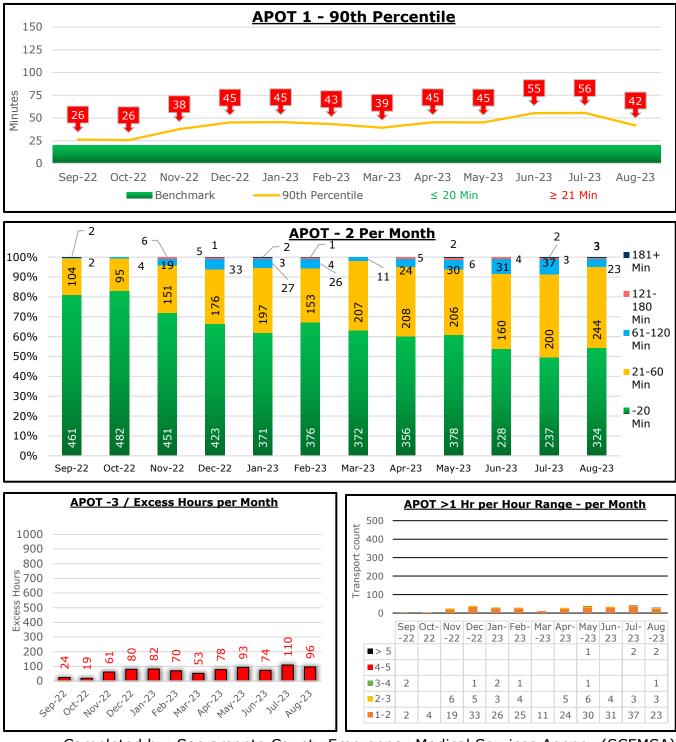
APOT 1, 2 & 3 - ROLLING 12 MONTHS / MERCY GENERAL (MGH)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.

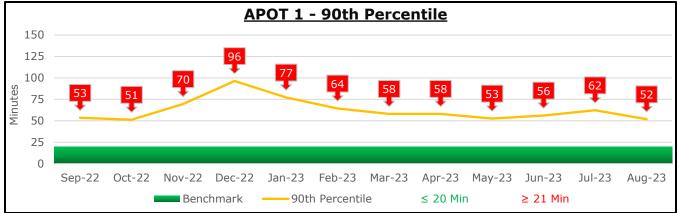


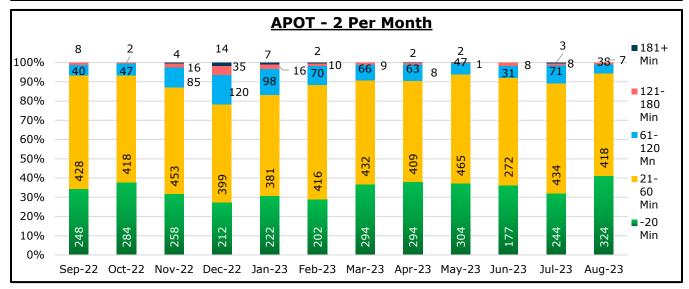
APOT 1, 2 & 3 - ROLLING 12 MONTHS / MERCY OF FOLSOM (MHF)

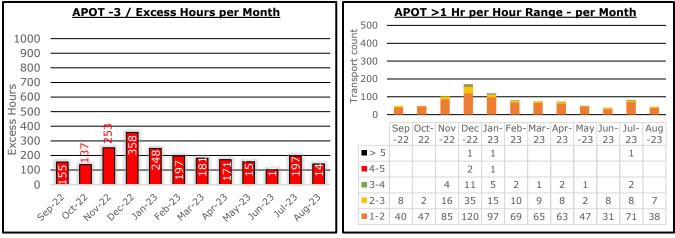
APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.



APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.

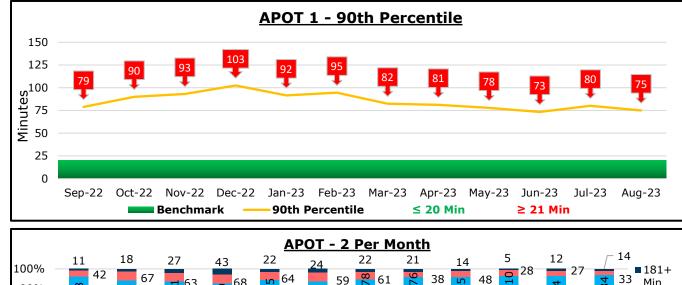


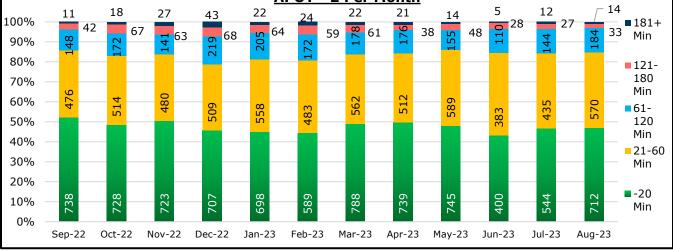


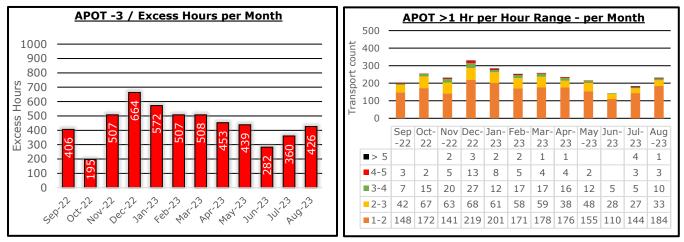


APOT 1, 2 & 3 - ROLLING 12 MONTHS / MERCY SAN JUAN (MSJ)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.

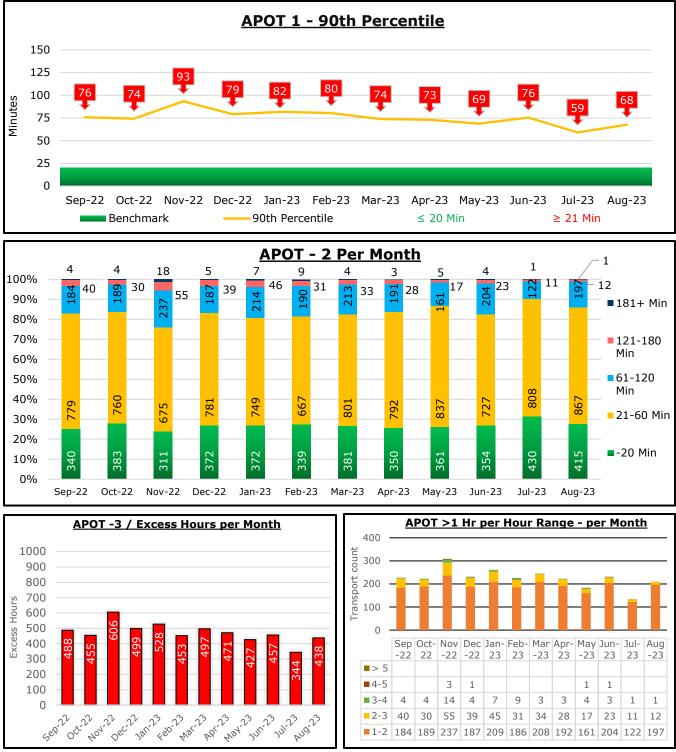






APOT 1, 2 & 3 - ROLLING 12 MONTHS / SUTTER SACRAMENTO (SMCS)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.



APOT 1, 2 & 3 - ROLLING 12 MONTHS / SUTTER ROSEVILLE (SRMC)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. APOT-2 is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours. APOT >1 hour represents any transport with an APOT greater than one hour per hour range.



Hol 600

й

500 cess

400

300

200

100 0 B

.v

octil

35

MONJY Decili 4

121-23

4eb-23

Mar-23

Completed by: Sacramento County Emergency Medical Services Agency (SCEMSA) Updated: 9.12.2023.

0

> 5

4-5

3-4

2-3

1-2 7 6 11 7 11 2 6 2 8 5 3 6

20 31 34 34 28 28

May-23

JUN-23 741-23

A91-23

5

AUG

-22 22

1

2

Sep Oct- Nov Dec Jan- Feb- Mar Apr- May Jun- Jul- Aug

-22 -22 23 23 -23 23 -23 23

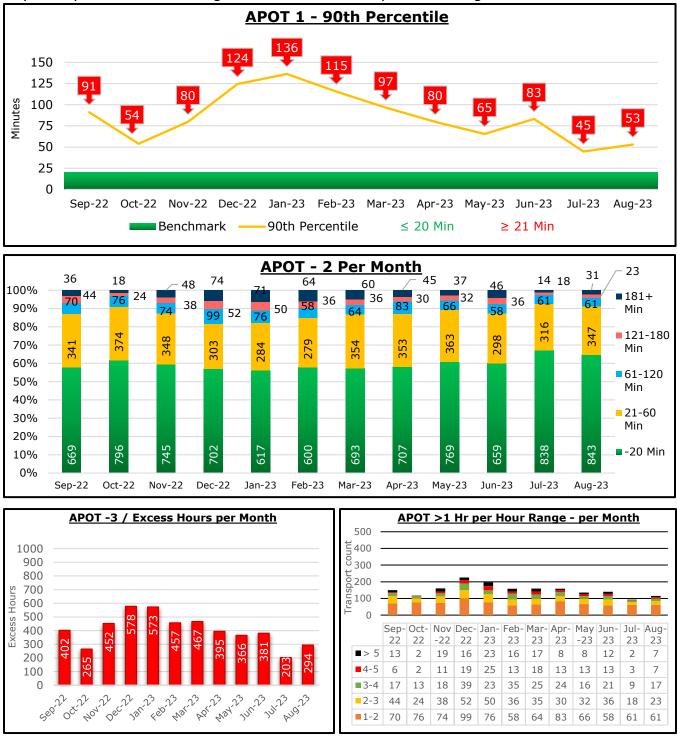
1

23 -23

1

APOT 1, 2 & 3 - ROLLING 12 MONTHS / UC DAVIS (UCDMC)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.



APOT 1, 2 & 3 - ROLLING 12 MONTHS / SACRAMENTO VA (VAMC)

APOT-1 represents the time (in minutes) under which 90% of patients have their care transferred from EMS to hospital staff. **APOT-2** is the percentage of patients whose care is transferred from EMS to hospital staff by designated time frames (see graph key for time ranges). **APOT-3** represents the excess time (in hours) over 20 minutes (Min.) aggregate of patient transferred from EMS to hospital per month. Illustrated is the System Total Excess hours per month. *Example: if APOT in minutes is 184 minutes then 184-20 (APOT benchmark) = 164 minutes. Then 164/60 = 2.73 hours.* APOT >1 hour represents any transport with an APOT greater than one hour per hour range.

