Quality Improvement Program

2022 Plan Annual Update

Prepared By:

Sacramento County

Department of Health Services

Division of Public Health

Emergency Medical Services Agency

SACRAMENTO COUNTY
QUALITY IMPROVEMENT PROGRAM PLAN
2022 ANNUAL UPDATE
May 11, 2023

In accordance with State of California Code of Regulations (CCR), Title 22 – Division 9, Chapter 12, and Sacramento County EMS Agency (SCEMSA) submits this Emergency Medical Services (EMS) System Quality Improvement Program Plan Update.

Quality Improvement Program (QIP)

The QIP provides comprehensive evaluations of prehospital patient care. Participants include representatives in communications, public and private Advanced Life Support (ALS) transportation, EMS training, and hospital emergency medical care. The QIP identifies, through prehospital patient care data review, areas needing improvement, implements process improvement and training/education, and recognizes excellence in performance and delivery of care.

Description of Agency

SCEMSA is located at 9616 Micron Ave, Suite 960, Sacramento, CA and oversees the hospitals' emergency departments and prehospital emergency medical providers servicing Sacramento County. SCEMSA does not hold any Exclusive Operating Area (EOA) agreements. SCEMSA is an equal opportunity county and strives for equality and transparency within the Agency.

Sacramento County EMS System providers include:
- Twenty-five (25) approved prehospital public and private Advanced Life Support (ALS) transportation and non-transport EMS Providers and two (2) Basic Life Support (BLS) EMS Providers
- Nine(9) hospitals this includes four (4) base hospitals and 3 trauma centers:

Base Hospitals	Trauma Centers
1. Kaiser South	1. Kaiser South
2. Mercy San Juan	2. Mercy San Juan
3. Methodist	3. UC Davis
4. UC Davis	

- Forty-eight (48) Training and Continuing Education Programs consisting of Emergency Medical Responder, Emergency Medical Technician, Paramedic, Mobile Intensive Care Nurse, Continuing Education, and CCR Title 22, Division 9, Chapter 1.5 Optional Scope program that includes Naloxone administration by Law Enforcement First Responders.

2022 Overview

SCEMSA works diligently to define consistent documentation standards and improve the quality and accuracy of data reporting capabilities to meet or exceed the State of California standards. With ten (10) different electronic patient care report (ePCR) platforms in use, every provider is submitting data to the CA EMS Information System (CEMSIS) using the latest Schematron. SCEMSA monitors documentation compliance and trend improvements via quality improvement audits and documentation dashboards in system monitoring.

2022 Update

The Technical Advisory Group (TAG)

TAG is a multi-stakeholder group that advises on the QIP. In 2022, the TAG continued to focus on optimizing data collection and documentation practices to provide the highest quality data for quality improvement by providing quarterly reports and feedback to stakeholders.

TAG Developments / Focus 2021:	TAG Developments / Focus 2022:
• QIP compliance and evaluation method • APOT continuous evaluation of APOT 1, 2. • Cardiac Arrest with Return of Spontaneous Circulation (ROSC) policy change effectiveness monitored • Quarterly system overview • Quarterly Provider Dashboards of Specialty Services and 911 Responses	• Monitored Scene times for STEMI • Monitored Glucose Checks for Stroke • Stroke Numeric Values • Policy 5050 – ED to waiting room • Monitoring of Scene times for trauma with positive trauma triage criteria • Updates to documentation guidelines

Ambulance Patient Offload Times (APOT)

Sacramento County hospitals continue to experience some of the highest APOT times in the State. APOT Reports have been updated to meet the new guidelines set by the EMSA. The following APOT reports are available on SCEMSA's webpage and are updated bi-weekly:

- Ambulance Patient Offload Times (APOT) per Month for Sacramento County
- Ambulance Patient Offload Times (APOT) per Month by Hospital
- Ambulance Patient Offload Times (APOT) Previous Calendar Week per Hospital

Each report includes the APOT 90th percentile, the average and the patient count for the timeframe. In addition to making the times available, a monthly report which includes APOT 1, APOT 2 and APOT-3, is shared with stakeholders. (Figure 2). The APOT 3 metric was created by SCEMSA and is defined as total accumulated time on APOT in minutes. This measures the impact on EMS providers that takes place due to the loss of unit hours available for calls of service due to extended wait times. SCEMSA's continuous effort to reduce APOT included the implementation of new policy#5054 Assess and Refer for low Acuity Patients during the COVID-19 Outbreak. SCEMSA developed this policy which became effective on November 16, 2021. SCEMSA continues to monitor this policy and its effects on APOT.

Monthly APOT-1 per Month 2021 vs 2022

APOT 1 - 90th Percentile - 2021

Figure- *2 a*

APOT 1 - 90th Percentile - 2022
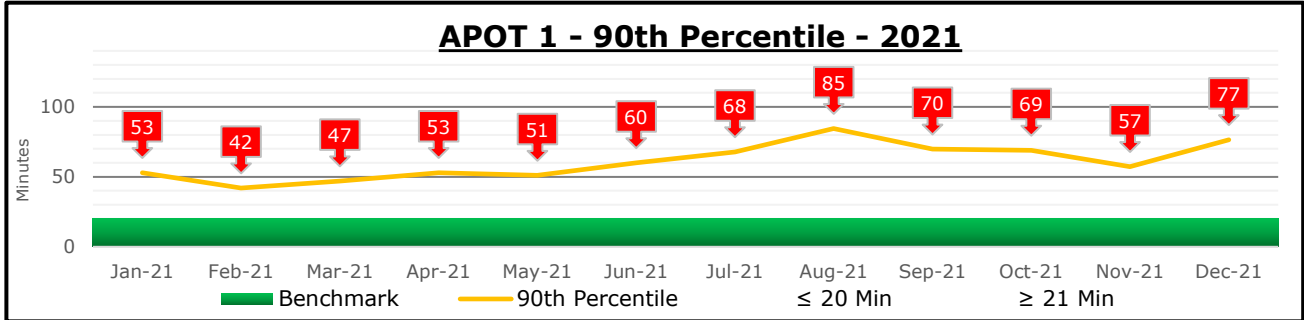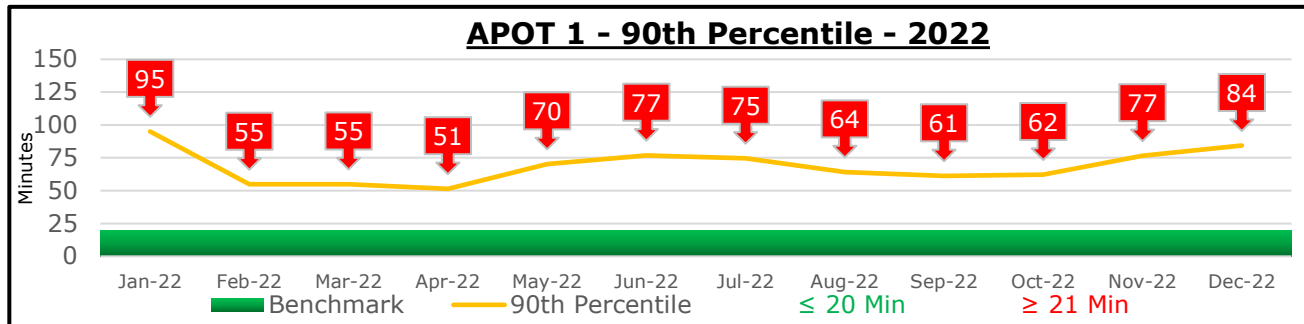
Figure- *2 b*

Excess Hours per Month 2021 vs 2022
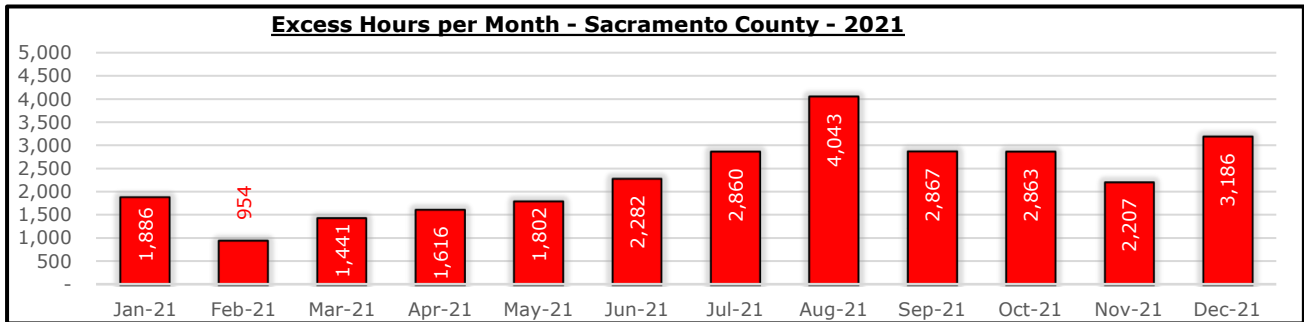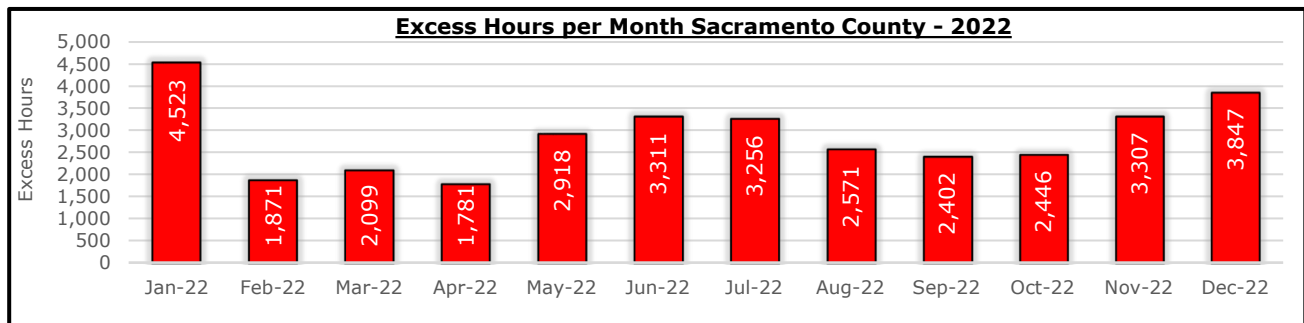
Excess Hours per Month - Sacramento County - 2021

Figure- *3a*

Excess Hours per Month Sacramento County - 2022

Figure- *3b*

Scene Times for STEMI Patients transported to area hospitals

SCEMSA works closely with provider agencies to monitor scene times for STEMI patients.

Figure- 4

Stroke Numeric Values, CPSS findings vs Hospital final Diagnosis.

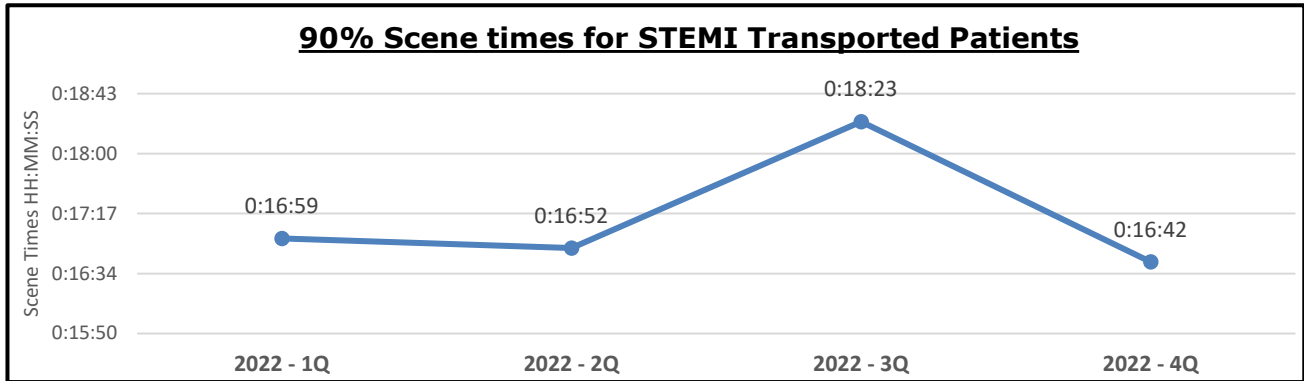SCEMSA worked with Dr. Keenan at UCD to compare stroke scales scores to LVO diagnosis. In Figure 5 we can see the EMS Cincinnati Stroke Scale and scores compared to the hospital final diagnosis of LVO Stroke.

Hospital LVO Status by EMS CPSS and Stroke Score Value 2021-4Q

CPSS Positive

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	62	9	24	95
Stroke Score - 1	104	19	30	153
Stroke Score - 2	55	15	11	81
Stroke Score - 3	15	12	4	31
Not Recorded	29	10	5	44
Grand Total	**265**	**65**	**74**	**404**

CPSS Non-Conclusive

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	18	1	17	36
Stroke Score - 1	21	2	21	44
Stroke Score - 2	1		1	2
Stroke Score - 3				
Not Recorded	24	2	19	45
Grand Total	**64**	**5**	**58**	**127**

CPSS Negative

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	40		12	52
Stroke Score - 1	4		6	10
Stroke Score - 2	2			2
Stroke Score - 3				
Not Recorded	24	2	8	34
Grand Total	**70**	**2**	**26**	**98**

CPSS Not Recorded/ Not Applicable

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	7		3	10
Stroke Score - 1	2	1	1	4
Stroke Score - 2				
Stroke Score - 3		1		1
Not Recorded	6	3	4	13
Grand Total	**15**	**5**	**8**	**28**

Hospital LVO Percentage by EMS CPSS and Stroke Score Value 2021-4Q

CPSS Positive

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Stroke Value Grand Total
Stroke Score - 0	65.26%	9.47%	25.26%	95
Stroke Score - 1	67.97%	12.42%	19.61%	153
Stroke Score - 2	67.90%	18.52%	13.58%	81
Stroke Score - 3	48.39%	38.71%	12.90%	31
Not Recorded	65.91%	22.73%	11.36%	44
Grand Total	**65.59%**	**16.09%**	**18.32%**	**404**

CPSS Non-Conclusive

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	50.00%	2.78%	47.22%	36
Stroke Score - 1	47.73%	4.55%	47.73%	44
Stroke Score - 2	50.00%	0.00%	50.00%	2
Stroke Score - 3				
Not Recorded	53.33%	4.44%	42.22%	45
Grand Total	**50.39%**	**3.94%**	**45.67%**	**127**

CPSS Negative

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	76.92%	0.00%	23.08%	52
Stroke Score - 1	40.00%	0.00%	60.00%	10
Stroke Score - 2	100.00%	0.00%	0.00%	2
Stroke Score - 3				
Not Recorded	70.59%	5.88%	23.53%	34
Grand Total	**71.43%**	**2.04%**	**26.53%**	**98**

CPSS Not Recorded/ Not Applicable

Stroke Score Value	Negative LVO	Positive LVO	Blank LVO	Grand Total
Stroke Score - 0	70.00%	0.00%	30.00%	10
Stroke Score - 1	50.00%	25.00%	25.00%	4
Stroke Score - 2				
Stroke Score - 3	0.00%	100.00%	0.00%	1
Not Recorded	46.15%	23.08%	30.77%	13
Grand Total	**53.57%**	**17.86%**	**28.57%**	**28**

Figure- 5

Core Measures:

SCEMSA evaluates the Core Measures on a quarterly basis and submits the annual report as required by the Emergency Medical Services Authority. Figure 8 below illustrates the Core Measures for Sacramento County prehospital providers. In addition to quarterly and annual evaluations, SCEMSA generates Core Measure individual reports for each provider to assist with identifying opportunities for improvement.

Measure ID #	Measure Name	Numerator Value (Subpopulation)	Denominator Value (Population)	Reported Value (%)	Notes and Comments
TRA-2	Transport of Trauma Patients to a Trauma Center	1878	2223	84%	
HYP-1	Treatment Administered for Hypoglycemia	1689	2228	76%	
STR-1	Prehospital Screening for Suspected Stroke Patients	3953	4142	95%	Suggestion: Prehospital Screening/ alerts should specify eDisposition.12 of Treated and transported. Curent specifications in this report captures any first unit on scene that transfers care to another unit and it includes any cancelled call.
PED-3	Respiratory Assessment for Pediatric Patients	549	573	96%	
RST-4	911 Requests for Services That Included a Lights and/or Sirens Response	152732	238647	64%	
RST-5	911 Requests for Services That Included a Lights and/or Sirens Transport	12433	109089	11%	For this measure specifications use eResponse.07 ground trnsport only, if ALS Ground Transport and BLS Ground transports our numbers change Num: 13,193 / Den: 128,120 resulting in 10.29%

Figure- 6

Quarterly Dashboards

SCEMSA continues to generate quarterly dashboards (Annex #3) to monitor and trend care provided for Trauma, STEMI, Stroke, and Pediatrics. Additionally, the dashboards trend call volume, call types and response times. SCEMSA shares the data with individual provider agencies along with the system totals for comparison.

Medical and Operational Advisory Committee (MAC/OAC)

The MAC/OAC includes all stakeholders and provides input on education, training, quality improvement, and data collection. The MAC/OAC conduct quarterly policy review which are effective on July 1st each year. When applicable, SCEMSA makes administrative edits as necessary with revised policy becoming effective immediately.

Accomplishments in 2022 include:
- Conducting all meetings via Zoom due to COVID-19 restrictions
- Addressing system challenges
- Policy reviews and updates
- Extended Optional Scope Policy Reviews
- Implementation of policies
- Education and training for new equipment

Policy Changes and Implementation

PD# 2007 – Trauma Hospital Data Elements	**Under Policy A.:**
	Added:
	2. EMS Patient Care Report Number (Ground/Air Ambulance) Universal Unique Identifier (UUID).
	7. Incident Location County
	8. Incident Location Zip Code
	11. ED/Hospital Arrival Date
	12. ED/Hospital Arrival Time
	13. ED Discharge/Death Date
	14. ED Discharge/Death Time
	15. ED Discharge Disposition
	16. Trauma Surgeon Arrival Date
	17. Hospital Discharge Disposition
	18. ICD-10 Injury Diagnosis Codes
	19. ICD-10 External Diagnosis Code (Mechanism of Injury)
	20AIS Diagnosis Codes
	21. Other Transportation Mode (Mode of Arrival)
	Removed:
	22. Date of Death or Discharge
	23. Time of Death or Discharge
	24. Hospital Transferred To
	25. Discharge Destination
	26. ICD-10 Diagnosis Codes
	27. AIS Diagnosis Codes
	28. AIS Body Region and AIS Severity Data
	29. ICD-10 (Mechanism of Injury) Code
	30. Mode of Arrival

PD# 2010 – Medical Advisory Committee	**Under Policy A.:** Language was changed from "The committee shall meet every other month" to "every three months". Minor grammatical edits made.
PD# 2020 – Operational Advisory Committee	**Under Policy A.:** Language was changed from "The committee shall meet every other month" to "every three months".
PD# 2060 – Hospital Services	Added: * The Sacramento Veterans Administration Medical Center (VAMC) shall receive only the following patients: • Veteran patients requesting to be transported to the VAMC. • Patients under Cardio-Pulmonary Resuscitation (CPR) when the VAMC is the time closest facility. • Patients with an unstable airway when the VAMC is the time closest facility.
PD# 2085 – Do Not Resuscitate (DNR)	**Under Purpose:** Added: Emergency Medical Technicians (EMT's). **Under Protocol:** C. Added: The statement of "is no longer valid, and treatment should be provided in accordance with appropriate program document". I. 2. Added: Durable Power of Attorney. J. Added: If possible, attach a photo of the DNR form, POLST, Living Will, or DNR Medallion to the ePCR. K. Added: Any DNR form, POLST form, Living Will, or DNR Medallion shall be transported with a patient and made available to hospital staff on arrival.

PD# 2101 – Patient Initiated Refusal of Service and/or Transport	**Under Policy:** G. Added: Patients with Physician Orders for Life Sustaining Treatment (POLST) form indicating no transport may decline transportation, as per PD# 2085 – Do Not Resuscitate (DNR). **Under Procedure:** 2. Added: Document the patient assessment was performed. 3. b. Added: Gravely disabled. 4. d. Added: (SBP < 90mmHg, resting Heart Rate > 120, or a Respiratory Rate > 20). 4 g. Added: decision making. 4 j. Added: Brief Resolved Unexplained Event (BRUE).
PD# 2200 – Medical Oversight	**Under Definitions:** Q. Added: Base Hospital Physician or a SCEMSA certified MICN. **Under Policy:** C. 1. Added: BHOs are protocol driven orders from SCEMSA policies which can only be given by currently certified MICN's or BHP. D. 1. Added: BPOs are physician orders given by a BHP outside of existing SEMSA policy/protocols, but which must be within medic Standard Operating Procedures (SOP). D. 2. Added: BPOs must be approved by a BHP but can be communicated to the medics by the MICN. **Cross Reference Added:** PD# 2525 – Prehospital Notification.
PD# 2221 – Paramedic Scope of Practice	**Under Basic Scope of Practice:** F. Added: Bi-level Positive Airway Pressure (Bi-PAP).
PD# 2223 – Paramedic Scope of Practice Utilization	**Under Policy:** Added: A. When ALS equipment is available, a California state licensed Paramedic employed by a locally designated ALS provider

PD# 2223 – Paramedic Scope of Practice Utilization (Cont.)	at the time of an incident as a Paramedic may provide the Sacramento County Emergency Medical Services Agency (SCEMSA) scope of practice (SOP), PD# 2221 and patient assessment indicates ALS interventions are indicated. **Cross Reference Added:** PD# 2221 – Paramedic Scope of Practice
PD# 2305 – EMS Patient Care Report-Completion and Distribution	**Under Title:** Added: Submission. **Under Policy:** Removed: When a patient is transported, the PCR will be delivered with the patient to the receiving hospital. I. Added: Providers are responsible for timely software updates as needed by CEMSIS to ensure continuous ePCR uploads during software upgrades. J. Added: Providers must work with SCEMSA and CEMSIS to ensure > 95% ePCR upload success.
PD# 2511 – Infectious Disease Ambulance Response Team (IDART)	**Under Example of Ambulance Patient Compartment Wrap:** Added: 1. 6 mil (1 mil = 0.0254 mm). **Under Training Requirements:** 2. Added: Bullet Points • Full process of donning and doffing PPE • Full process of setting up and removal of ambulance isolation set up. Review and exercising of decontamination of ambulance and equipment.
PD# 2524 – Extended Ambulance Patient Off-Load Times (APOT)	**Under Policy:** A. 4. Added: Limited procedures necessary to triage patients to an appropriate area within the ED or other area of the hospital. 5. Language removed.

PD# 4050 – Certification-Accreditation Review Process	**Under Procedure:** A. Added: The relevant employer and SCEMSA shall adhere to the provisions of this policy, in applicable situations, when investigating or implementing any actions for a disciplinary cause. B. Added: EMSA may fine, deny, suspend, or revoke any accreditation/license/certification or may place any accreditation/license/certification issued under the Health & Safety Code, Division 2.5, on probation upon the finding by the Director of the occurrence of any of the actions listed below in Denial or Revocation of a Certificate, C and D. C. Added: SCEMSA may deny, suspend, or revoke any Paramedic accreditation, EMT/EMR certification, or may place any Paramedic accreditation, EMT/EMR certification, issued under the Health & Safety Code, Division 2.5, on probation upon the finding by the Medical Director of the occurrence of any of the actions listed under Denial or Revocation of a Certificate, C and D. **Under Responsibilities of Relevant Employer:** Added: EMR, EMT, And Paramedics. **Under Responsibilities of Relevant Employer for EMR, EMT, and Paramedics:** C. Added: The relevant employer shall notify the Medical Director within three (3) working days after an allegation has been validated as potential for disciplinary cause. D. Added: The relevant employer shall notify the Medical Director that has jurisdiction in the county in which the alleged action occurred within three (3) business days of the occurrence **Under Jurisdiction of the Medical Director:** C. Added: EMR and Paramedic. D. Added: EMR and Paramedic Accreditation.

PD# 4050 – Certification-Accreditation Review Process (Cont.)	F. Added: EMR and Paramedic Accreditation.
	Under Temporary Suspension Order:
	A. Added: EMR, EMT or Paramedic Accreditation.
	A. 1. Removed: EMT Certificate.
	Under Certificate Holder Probation:
	B. Added: EMR/EMT and Paramedic Accreditation.
	Under Suspension of Certificate:
	Accreditation is added to title.
	A. Added: EMR/EMT certificate, or Paramedic accreditation
	D. Added: EMR, EMT or Paramedic
	Denial of Revocation of a Certificate:
	Accreditation is added to the title.
	A. Added: Accreditation.
	B. Added: Accreditation.
	C. Added: EMR and Paramedic accreditation.
	D. Added: EMR/EMT and Paramedic accreditation.
	G. Added: EMT certificate.
	Cross Reference Added:
	PD# 4055 – Criminal Background Checks.
PD# 4302 – Continuing Education Provider	**Under Protocol:**
	A.1. Added: Sacramento County Emergency Medical Services Agency
	Minor grammatical edits made.
PD# 5010 – Transfer of Care Non-Transporting Paramedic to Transporting Paramedic PD# 5010 – Transfer of Care Non-Transporting Paramedic to Transporting Paramedic (Cont.)	**Under Protocol:**
	F. Added: PD# 2305 – EMS Patient Care Report: Completion and Distribution.
	G. Added: PD# 7500 – Disaster Medical Services Plan

PD# 5052 – Trauma Destination	**Under Definitions:** A. Added: Trauma Triage Criteria
PD# 5054 – Assess and Refer for Low Acuity Patients During the Covid-19 Outbreak	**Policy Sundowned**
PD# 6000 – Trauma Care System-General Provisions	**Under Policy:** Added: N. Each designated trauma center shall be familiar with PD# 7500 – Disaster Medical Services Plan Removed: O. Mass Casualty Incident (MCI): Additional policy direction for Multi Casualty Incidents in MCI PD#7510 directs EMS responders regarding the response, organization, personnel, equipment, resources and procedures for field operations during a multiple casualty incident. The policy is intended to be utilized in combination with the California OES Region IV and MCI Plan PD# 7500. **Cross Reference Added:** PD# 7500 – Disaster Medical Services Plan
PD# 7601 – Quality Improvement Program-Technical Advisory Group (TAG)	Added: Section titled **Attendance** with bullet points: A. Committee members are expected to attend all meetings. B. If unable to attend a meeting, a member is expected to notify SCEMSA in advance, in writing, and identify a replacement from their institution or agency to fill their position for that meeting. C. Any committee member resigning their position on the committee is responsible for having their facility or agency select a replacement, and for notifying SCEMSA, in writing, of the change in advance. Under Policy: Minor grammatical edits made.
PD# 8002 – Diabetic Emergencies	Policy separated from PD# 8061 – Decreased Sensorium. **In Title:** Added: (Hypoglycemia/Hyperglycemia)

PD# 8002 – Diabetic Emergencies (Cont.)	**Under Purpose:** A. Added –To serve as a treatment standard for patients exhibiting signs and symptoms of a diabetic emergency. **Under Hypoglycemia:** Bullet Point 2. Added: Blood Glucose level ≤ 60mg/dl. Bullet Point 3. Added: History of Diabetes. **Under BLS:** 3. Added: If trauma suspected, assess for traumatic injury and/or need for Spinal Motion Restriction (SMR). **ALS:** 5. Added: Airway management as needed per PD# 8020. Bullet Point 6. Added: In the event of glucometer failure, administer 10-12.5 grams of Dextrose or 1 mg of glucagon based on clinical assessment. Bullet Point 7. Added: Cardiac monitoring. **NOTE:** Bullet Point Added: fifteen (15) minutes. **Hyperglycemia BLS:** Bullet Point 2. Added: Management. Bullet Point 3. Added: Reference to PD# 8044. **Hyperglycemia ALS:** Bullet Point 1. Added: Perform blood glucose determination, if blood glucose ≥ 350 mg/dl and no evidence of fluid overload, initiate vascular access, and administer a Normal Saline bolus of 500ml. Bullet Point 3. Added: Noninvasive Ventilations (NIV) as needed per PD# 8829. Bullet Point 4. Added: Cardiac Monitoring. Bullet Point 5. Added: Ondansetron when indicated for Nausea/Vomiting per PD# 8063. **Cross References Added:**

PD# 8002 – Diabetic Emergencies (Cont.)	PD# 8044 – Spinal Motion Restriction
	PD# 8829 – Noninvasive Ventilations
	PD# 8063 – Nausea and Vomiting
	PD# 8015 – Trauma
	PD# 8020 – Respiratory Distress: Airway Management
	PD# 8003 – Seizures
PD# 8003 – Seizures	Policy separated from PD# 8061 – Decreased Sensorium.
	Under Protocol:
	A. Added: For any Altered Level of Consciousness (ALOC), consider AEIOUTIPS with definitions.
	Under BLS:
	Added – Bullet Point 3. Assess for possible trauma per PD# 8015.
	Bullet Point 4. Added: PD# 8044 reference.
	Under ALS:
	Bullet Point 3. Added: PD# 8002 reference.
	Bullet Point 4. Added: Assess and treat the possibility of substance abuse per PD# 8004.
	5. Added: Midazolam, under first bullet, point 2 mg increments.
	Cross References Added:
	PD# 8044 – Spinal Motion Restrictions (SMR)
	PD# 8015 – Trauma
	PD# 8004 – Suspected Narcotic Overdose
PD# 8004 – Suspected Narcotic Overdose	Policy separated from PD# 8061 – Decreased Sensorium.
	Under Protocol:
	A. Added: For any Altered level of Consciousness (ALOC), consider AEIOUTIPS with definitions.
	B. Added: (Consider any of the following).
	Bullet Point 4. Added: Pinpoint pupils.

PD# 8004 – Suspected Narcotic Overdose (Cont.)	Bullet Point 5. Added: Bystander or patient history of drug use, or drug paraphernalia on site. **Under BLS:** Bullet Point 3. Added: Naloxone: 2mg Intranasal (IN), or per dosing of pre-loaded IN Naloxone device. 2mg dose may be repeated x 1 for max dose of 4 mg. Bullet Point 5. Added: If trauma is suspected, assess for traumatic injury per PD# 8015. Bullet Point 6. Added: PD# 8044 reference. **Cross References Added:** PD# 8044 – Spinal Motion Restriction (SMR) PD# 8015 – Trauma PD# 8002 – Diabetic Emergencies PD# 8003 – Seizures
PD# 8007 – Abdominal Pain	**Under Cross Reference:** Removed: PD# 8827 – 12 Lead
PD# 8020 – Respiratory Distress-Airway Management-Respiratory Failure	**NOTES** Added: Track and vent dependent patients shall undergo the same level of airway monitoring as any patient with an advanced airway.
PD# 8025 – Burns	**Under NOTE:** Added: University of CA Davis Medical Center Burn Center Removed: Cardiac arrest shall go to the closest emergency department (ED)
PD# 8028 – Environmental Emergencies	**Under Snake Bite – BLS:** Added: Bullet Point 7. Added: Degree of Envenomation and Presentation Charts.
PD# 8029 – Hazardous Materials	**Under Cross Reference:** Removed: PD# 8836 – Medication Administration: DuoDote Auto Injectors

PD# 8030 – Discomfort-Pain of Suspected Cardiac Origin	**Under Protocol – ALS :** Bullet Point 1. Added: With a priority to obtain a single good quality 12 lead ECG within 10 minutes of patient contact. Bullet Point 2. Added: Scene time for a STEMI should be ≤ 10 minutes. Bullet Point 5. Added: 12 lead • Do not treat with Nitroglycerine added. • Administer ASA 324 mg PO added. • Obtain vascular access (when possible, avoid using right wrist or hand, as this is often used for cardiac catheterization) added. • With a STEMI pre-alert notification added. 6. Added: Nitroglycerine (NTG) may be given if not contraindicated
PD# 8030 – Discomfort-Pain of Suspected Cardiac Origin (Cont.)	**NTG Contraindications Added:** • ECG is consistent with an Acute MI/STEMI • B/P is ≤ 90 systolic or drops > 30mm/HG from baseline after administration. Heart rate is ≤ 50
PD# 8031 – Non-Traumatic Cardiac Arrest	**In Title:** Added: Non-Traumatic **Under Purpose:** Added: NOTE: For traumatic arrest see PD# 8032 – Traumatic Cardiac Arrest **Under Post Resuscitation Considerations NOTE:** Added: C. 3. b. Once ROSC is obtained **Under Termination of Resuscitation Considerations:** Added: In 2. Pulseless Electrical Activity Minor grammatical edits made

PD# 8042 – Childbirth	**Sections added:** **Special Circumstance:** Added: When a midwife is present and accompanies transporting medics to the receiving center (response to a birthing center). **Definitions:** Added: A. and B. **Protocol:** Added: Sections A., and B. Added: Bullet Points 1., 2., and 3. under B. **Cross Reference:** • Added: PD# 2039 – Physician and/or Registered Nurse at the Scene
PD# 8061 – Decreased Sensorium (Adult)	**Sundown of Policy** – The policy was separated into 3 policies.
PD# 8062 – Behavioral Crisis-Restraint	**Under Protocol – BLS:** 1. Added: Ensure EMS provider safety. Request law enforcement as needed to ensure scene safety is maintained at all times. a. Added: If law enforcement response is requested but does not respond, or response is delayed: • Prehospital personnel will proceed with the assessment, treatment and transportation as noted below to the extent possible while maintaining scene and personnel safety. • If it is unsafe to approach the patient, exit the scene and stage at a safe location. • Contact the on duty supervisor to respond to the scene. • Contact base hospital to discuss and consult about the situation and possible need for law enforcement evaluation for a 5150 application. • Prehospital personnel will not perform any of the items noted below in #8 which are designated as the responsibility of law enforcement. • Delayed or non-response by law enforcement after a request for assistance is made shall be documented in ePCRs.

PD# 8062 – Behavioral Crisis-Restraint (Cont.)	2. Added: If the scene has been determined safe, protect the patient from further injury.
	5. Added: If possible, perform a Blood Glucose check.
	6. Added: with a calm and reassuring approach and manner prior to involuntary restraint of the patient. Before restraining any patient, prehospital personnel must ensure there are sufficient properly trained personnel available to physically restrain the patient safely.
	7. Added: Pre-hospital personnel will not perform any of the items noted below. These actions are the responsibility of law enforcement. • Law enforcement personnel are responsible for the capture, detention, and restraint of assaultive or potentially assaultive patients. • Law enforcement agencies retain primary responsibility for safe transport of patients under arrest. • Handcuffs may only be applied by law enforcement personnel. Handcuffs should be replaced with leather or cloth restraints prior to transport. Patients under arrest, if handcuffed, must always be accompanied in the ambulance the law enforcement personnel. • Prehospital personnel and law enforcement officers should mutually agree on the need for law enforcement assistance during transport of patients on a psychiatric detention. • All restrained patients will be placed in a sitting, supine, Semi-fowlers or fowlers position.
	Added – 9. Assessment of the patient's mental status, cardiovascular and respiratory status shall be made every 15 minutes.
	Under Note:
	Added: Pre-notification to the ED is required if the patient is chemically or physically restrained.

PD# 8062 – Behavioral Crisis-Restraint (Cont.)	**Under Protocol ALS:** Added: Respiratory. • Supplemental O_2 as necessary to maintain $SpO_2 \geq 94\%$. Use lowest concentration and flow rate of O_2 as possible. **Under Precautions:** C. Added: Hogtie restraints are prohibited is. D. Added: Sandwiching the patient between backboards is prohibited. F. Added: Prehospital personnel should not physically inhibit a patient's attempt to leave the ambulance. However, every effort shall be made to release the patient into a safe environment. If a patient does leave the ambulance, prehospital personnel are to remain on scene, or at a safe staging location, until law enforcement arrives, or until law enforcement indicates that they will not respond to the incident. Any decision by law enforcement for non-response shall be documented clearly with time and date on ePCR is. G. Added: Prehospital personnel will notify hospital staff if the patient leaves while on hospital grounds. **Under Notes:** A. Added: Avoid using benzodiazepines for patients with alcohol intoxication. B. Added: Consider all possible medical/trauma causes for behavior crisis's (e.g. hypoglycemia, overdose, substance abuse, hypoxia, seizure, head injury, etc.) C. Added: Do not irritate the patient with a prolonged exam. Be thorough but quick. D. Added – Do not overlook the possibility of associated domestic violence or child abuse. **Cross References Added:** PD# 2032 – Controlled Substances PD# 8002 – Diabetic Emergencies PD# 8004 – Suspected Narcotic Overdose PD# 2525 – Prehospital Notification

PD# 8065 - Hemorrhage	**Under Approved Tourniquet Devices:**
	Added: SAM Extremity Tourniquet (SAM-XT)
	Added: Tactical Mechanical Tourniquet (TMT)
	Removed: Mechanical Advantage Tourniquet™
	Removed: Emergency and Military Tourniquet™
PD# 9005 – Pediatric Decreased Sensorium	**Sundown of Policy** – The policy was separated into 3 policies.
PD# 9007 – Pediatric Diabetic Emergencies	Policy separated from PD# 9005 – Pediatric Decreased Sensorium.
	Under Purpose:
	A. Added: To establish treatment standard for patients exhibiting signs and symptoms of a diabetic emergency.
	Under Hypoglycemia – BLS:
	3. Added: If trauma suspected, assess for traumatic injury and/or need to Spinal Motion Restriction (SMR) per PD# 8044.
	4. Added: If patient is seizing, protect the patient from further injury
	5. Added: If Blood Glucose is ≤ 60 mg/dl.
	Under Hypoglycemia – ALS:
	1. Added: Titrate to an appropriate Systolic Blood Pressure for patient's age.
	3. Added: Patient doesn't tolerate oral glucose.
	6. Added: Airway management as needed per PD# 8020.
PD# 9010 – Pediatric Overdose and/or Poison Ingestion	**Sundown of Policy**
PD# 9011 – Pediatric Overdose	**New Policy Created.**
PD# 9017 – Pediatric-Trauma	Minor grammatical edits with no change to the policy.
PD# 9021 – Pediatric Behavioral Crisis-Restraint	New policy created.

Paramedic Skill Verification Sheet	Under Skills Verification:
	8. Removed: DuoDote Auto Injectors PD# 8836.
	8. Added: Nerve Agent Exposure PD# 8027.

Administration of Naloxone

SCEMSA monitors the administration of Naloxone. Monitoring includes:
- Ensuring law enforcement agencies train all officers in proper handling of Naloxone.
- Collecting documentation and reports of incidents requiring Naloxone administration
- Tracking patient care report data to ensure proper documentation from EMS provider.
- Providing feedback and continuous support to law enforcement

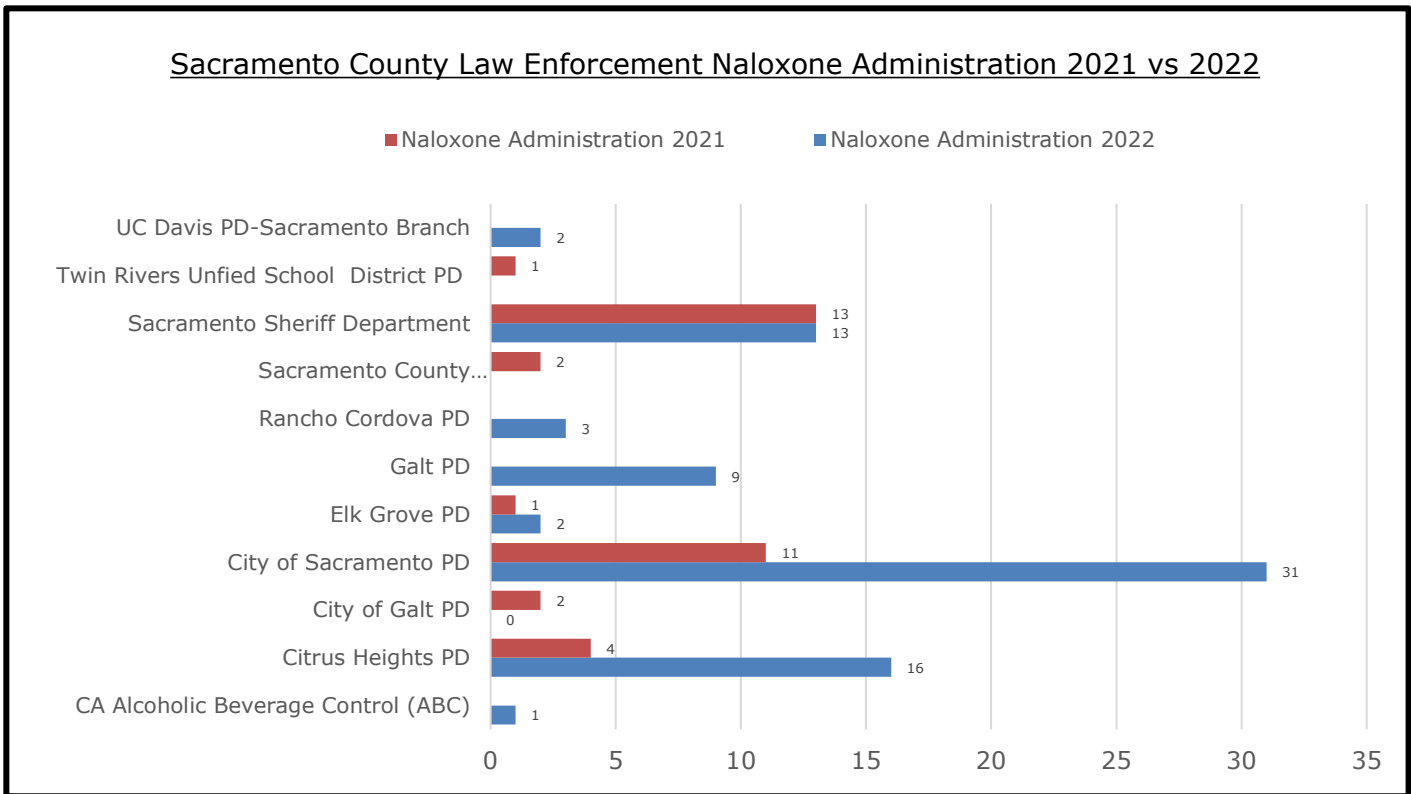Figure 7 compares the years 2021 to 2022 incidents in which law enforcement administered Naloxone.

Figure- 7

Figure 8 illustrates year 2021 Narcan use by EMS ambulance providers per month in Sacramento County compared to 2022. No significant change is seen in the comparison.
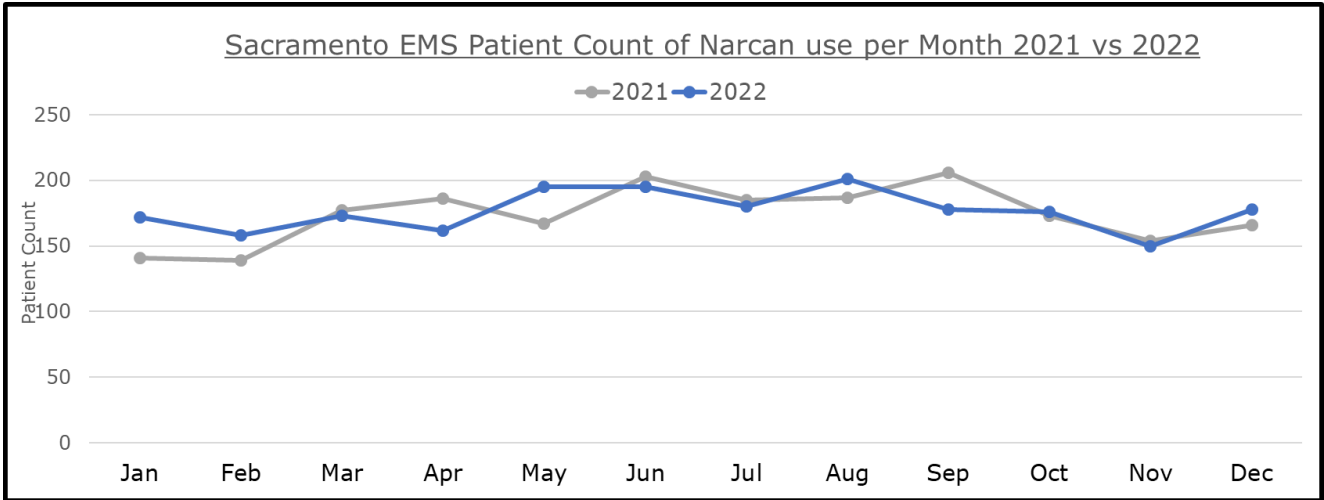

Figure- 8

Documentation Guideline

In anticipation to the implementation of NEMSIS 3.5 SCEMSA updated the documentation guidelines (ANNEX 2) to reflect the changes that will become effective September 2032. CEMSIS reports are currently being updated to reflect these changes.

2023 Plan

SCEMSA works on improving reporting capabilities and provider accountability to meet or exceed the State of California standards while continuing to build relationships with EMS providers and hospitals throughout the region. Areas of focus include:
- Monitoring APOT times
- Education
- Training
- Documentation Practices
- Monitoring of Core Measures performance indicators,
- Feedback to stakeholders.

SCEMSA will continue to collaborate with stakeholders to identify and address system needs. As well, continue to work in identifying solutions to assist in reducing APOT times in the region.