

EMERGENCY MEDICAL SERVICES AUTHORITY

11120 INTERNATIONAL DR., SUITE 200
RANCHO CORDOVA, CA 95670
(916) 322-4336 FAX (916) 324-2875



February 12, 2025

Ryan Rosander, EMS Director
San Luis Obispo County Emergency Medical Services Agency
2995 McMillan Ave., Suite 178
San Luis Obispo, CA 93401

Dear Ryan Rosander,

This letter is in response to San Luis Obispo Emergency Medical Service (EMS) Agency's 2023 EMS, Trauma, St-Elevation Myocardial Infarction (STEMI), and Quality Improvement (QI) plan submissions to Emergency Medical Service Authority (EMSA) on August 23, 2024.

EMSA has reviewed the EMS plan based on compliance with statutes, regulations, and case law. It has been determined that the plan meets all EMS system components identified in Health and Safety Code (HSC) § 1797.103 and is approved for implementation pursuant to HSC § 1797.105(b). Based on the transportation documentation provided, please find the enclosed EMS area/subarea status, compiled by EMSA.

EMSA has also reviewed the Trauma, STEMI, and QI plans based on compliance with Chapters 7, 7.1, and 12 of the California Code of Regulations, Title 22, Division 9, and has been approved for implementation.

Per HSC § 1797.254, local EMS agencies must annually submit EMS plans to EMSA. Your 2024 EMS plan is now due. Concurrently with the EMS plan, please submit an annual Trauma, STEMI, and QI plan. Your 2025 EMS plan will be due on February 12, 2026.

If you have any questions regarding the EMS plan review, please contact Roxanna Delao, EMS Plans Coordinator, at (916) 903-3260 or roxanna.delao@emsa.ca.gov.

Sincerely,

Angela Wise

Angela Wise, Branch Chief
EMS Quality and Planning
On behalf of,
Elizabeth Basnett, Director
State of California
Emergency Medical Services Authority

Enclosure:
AW: rd



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT

Nicolas Drews *Health Agency Director*

Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

Executive Summary - 2023 EMS Plan
January 1, 2023 – December 31, 2023

California Health and Safety Code Section 1797.254 mandates the Local Emergency Medical Services Agency (EMS Agency) to submit an annual Plan to the EMS Authority. This EMS Plan is not just a framework for the planning, implementing, and evaluating EMS in San Luis Obispo County but also a strategic tool that identifies and addresses anticipated future needs, ensuring the EMS system is prepared for upcoming challenges. It comprehensively covers the local status of eight minimum standards, subsets, and recommended goals of the EMS Authority.

The County of San Luis Obispo Public Health Department's EMS Division includes the EMS Agency and the Public Health Emergency Preparedness program.

The County of San Luis Obispo EMS Agency submits this EMS Plan to the State EMS Authority. The plan, a framework for all local participating agencies and advisory committees, ensures ongoing review and updates, keeping all stakeholders informed about the system's progress. It will be reviewed annually, and a summary will identify progress or status on long-range plans.

While this planning document is a framework, all system partners, advisory committee members, and the public must understand that an EMS system is not static but inherently dynamic. The influence of the healthcare industry, funding, community expectations, standards of care, and clinically based prehospital medicine will continually shape how EMS services are provided. It's also crucial to consider the aging population in San Luis Obispo County and the potential future impact on the EMS system.

Listed below are items of interest related to specific components of this plan, covering the reporting period of the calendar year of 2023, the period since the last annual update:

Standard 1: System Organization and Management

The EMS system in San Luis Obispo County is dynamic. System stakeholders and community representatives support the EMS Agency staff through engagement on the Emergency Medical Care Committee and subcommittees including Operations, Quality Improvement, Clinical Advisory, Trauma Advisory, and STEMI. Through this level of engagement, EMS Agency staff has continued to review and revise policies and procedures, perform QI and data review, process certification, authorization, and accreditation of EMS personnel, and participate in disaster planning and drills.

Standard 2: Staffing and Training

Fourteen fire departments (one industrial, two state institutional) provide a mix of Advanced Life Support (ALS) and Basic Life Support (BLS) services, and with two ALS ground transport providers, two ALS air ambulances, and one ALS air rescue provides pre-hospital care

Emergency Medical Services

2995 McMillan Ave Suite 178 | San Luis Obispo, CA 93401 | (P) 805-781-2519

www.slocounty.ca.gov/ems

throughout the 3,299 square miles of San Luis Obispo County, serving a population of approximately 282,424. One community college offers paramedic and EMT training programs (along with nursing). The EMS Agency certification, authorization, and accreditation policies describe standards and scope requirements for EMTs, Paramedics, Mobile Intensive Care Nurses, and Base Hospital Physicians. The EMS Agency is engaged in continuing education for these personnel and coordinates MICN refresher and annual protocol updates for paramedic reaccreditation. The Base Hospitals are crucial in providing CE opportunities and conducting QA/QI reviews for field personnel and MICN staff, contributing to their professional development.

The EMS Agency has successfully implemented a mobile app, which EMTs, paramedics, and MICNs have widely adopted. This technology provides real-time access to policies, procedures, and protocols, enhancing the efficiency of the EMS system. The app also enables instant push notifications to all personnel, ensuring they are promptly informed about training opportunities, policy updates, or disaster communications.

Standard 3: Communication

The San Luis Obispo County EMS system uses a single ordering point (MEDCOM) to dispatch all ground ambulances. MEDCOM directly communicates with landline and CAD-to-CAD integration with 4 public safety agencies dispatching fire equipment to medical emergencies. The CAD-to-CAD connection ensures that ambulance and fire are dispatched nearly simultaneously to requests for medical emergencies. The SLO County EMS Agency approves this program and is in compliance with 1797.223 and 1798.8 of CCR 100170.

The Cal Fire SLU ECC dispatches Air Ambulance and ALS Air Rescue to ensure continuity of communication between air resources and ground contacts for both scene safety and safety of air operations.

All EMS transport services, including public, private, and air use standard hospital communication frequencies and capabilities in accordance with local policy and procedures and CCR 100306.

Standard 4: Response and Transportation

County of San Luis Obispo code section 6.60 and associated policies define ambulance operations in the service area. All counties' cities, districts, and unincorporated areas receive 9-1-1 emergency medical services provided by fire departments, ALS ground transport providers, or rotary aircraft as needed. Four zones exist as grandfathered Exclusive Operating Areas (EOAs); however, the California EMS Authority has advised SLOEMSA that they do not recognize one of the zones (South) to meet EOA criteria.

Standard 5: Facilities and Critical Care

Four hospitals are in San Luis Obispo County. All four are designated base hospitals. Two hospitals have specialty center designations: a Level III Trauma Center and a STEMI Receiving Center. All four hospitals have expressed interest in Stroke designation and EMS Agency staff remains involved in this developing opportunity.

Standard 6: Data Collection and System Evaluation

At the end of 2022, the EMS Agency was able to leverage additional grant funds to acquire its own cloud-based Image Trend repository. This significant milestone ensures that all providers are on the same reporting platform, a technological leap that will significantly benefit our operations. In 2023, all providers in San Luis County will be seamlessly integrated into the Image Trend platform. The successful transition of 90% of all county providers to the EMS Agency's Image Trend Platform at the beginning of 2023 has allowed us to develop streamlined processes for reporting. This facilitates our operations and enables us to meet our mandate to plan, evaluate, and implement a local EMS system.

Additionally, the EMS Agency has access to the trauma registry (Trauma One) utilized by the Level III Trauma Center and the National Cardiac Data Registry (NCDR) reporting system used by our STEMI Center. Moreover, in 2018, the EMS Agency began reporting data to the Cardiac Arrest Registry to Enhance Survival (CARES). It's important to note that the EMS Agency fully complies with H&S Code 1797.228, demonstrating our unwavering commitment to regulatory standards.

Standard 7: Public Information and Education

With the evolution of the electronic patient care reporting system, the EMS Agency has been able to share data with both Public Health partners and specialty care centers to help guide them in their targeted outreach and harm reduction programs. Additionally, the EMS Agency has been able to extend this data collection and sharing of data with Drug and Alcohol partners in their efforts to reduce opiate overdoses. Last, the EMS Agency has worked with local Stop the Bleed programs in sharing opportunities to educate the community on ways to reduce deaths in traumatic situations.

Standard 8: Disaster Medical Response

In July 2019, the SLO County Medical Health Operational Area Coordinator (MHOAC) SOP was updated (original publish date July 2011). The SOP identifies both the Local Health Officer and the Local Emergency Medical Services Administrator, or their designee, can function as the MHOAC. At the time, the Health Officer (Dr. Penny Borenstein) and EMS Administrator (Ryan Rosander) agreed that the primary MHOAC is the EMS Administrator.

The EMS Administrator oversees the day-to-day operations of the local EMS Agency and EMS system, as well as the Public Health Emergency Preparedness (PHEP) program. The PHEP organizational structure includes the Hospital Preparedness Program (HPP).

The EMS Administrator accomplishes the responsibility of the MHOAC, as identified in HSC 1797.153, through a series of regularly updated plans, SOPs, exercises, real events, and meetings such as the local HPP workgroup.

Additionally, the MHOAC participates in quarterly meetings with the local Office of Emergency Services operational area coordinators as well as the quarterly community-wide all hazard disaster community.

The MHOAC, through the MHOAC SOP, has identified team leads for the 17 functions of the MHOAC Program, as listed in HSC 1797.153, including Public Information, Environmental Health, LEMSA, and Section Leads such as Logistics and Plans.

Submitted by:

A handwritten signature in black ink, consisting of stylized, overlapping letters that appear to be 'RR'.

Ryan Rosander
EMS Director
County of San Luis Obispo Emergency Medical Services Agency



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT

Nicolas Drews *Health Agency Director*

Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

August 23rd, 2024

California EMS Authority
Attention: Tom McGinnis, State Trauma System
11120 International Drive, 2nd Floor
Rancho Cordova, CA 95670

Regarding: County of San Luis Obispo Trauma Plan Update – Calendar Year 2023

Good afternoon Mr. McGinnis,

In March 2012, the County of San Luis Obispo designated Sierra Vista Regional Medical Center as a Level III Trauma Center. The County of San Luis Obispo's trauma program has not had significant changes to its primary system design during the calendar year 2023. However, the system has continued to maintain excellence in the delivery of patient care thanks to ongoing quality improvement, and performance improvement (PI) initiatives undertaken by system-stake holders.

The attached Trauma Update Report for calendar year 2023 includes a trauma system overview, system changes, the goals and objectives, and the trauma program performance improvement projects and measures.

Please contact me with any questions or if you desire additional information.

Ryan Rosander
EMS Director
SLOEMSA
County of San Luis Obispo, Public Health Department
805.788.2512
rrosander@co.slo.ca.us

Attachments:
TAG membership list
2023 Trauma Program Indicators

Emergency Medical Services

2995 McMillan Ave, Ste. 178 | San Luis Obispo, CA 93401 | (P) 805-788-2519

<https://www.slocounty.ca.gov/>



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT

Nicolas Drews *Health Agency Director*

Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

Trauma Plan Update
January 1, 2023 – December 31, 2023

The County of San Luis Obispo (SLO) EMS Agency Trauma Care System Plan was developed in compliance with Section 1798.160, et seq., Health and Safety Code and originally approved by the California EMS Authority in March 2010. The following report is a system update for the 2023 calendar year.

System Overview

The County of SLO's trauma program functions with a single in-county Level III trauma center, Sierra Vista Regional Medical Center: and, in collaboration with Marian Regional Medical Center (MRMC) a Level II trauma center in neighboring Santa Barbara County. Due to the proximity of MRMC to the County of SLO, an MOU was developed memorializing the acceptance of trauma patients, as defined by local trauma triage and destination policy, across county lines. This MOU was included in The County of SLO's 2014-2015 Trauma Plan Update submitted to the EMS Authority. The County of SLO's trauma program also continues to work cooperatively with the neighboring counties of Ventura, Fresno, Monterey, and Santa Barbara's other more, distant trauma center.

The County of SLO's EMS Agency utilizes Trauma One and Image Trend data programs to identify and monitor trauma patients, which is both NEMSIS/CEMSIS compliant. All agencies within the County of SLO utilize Image Trend.

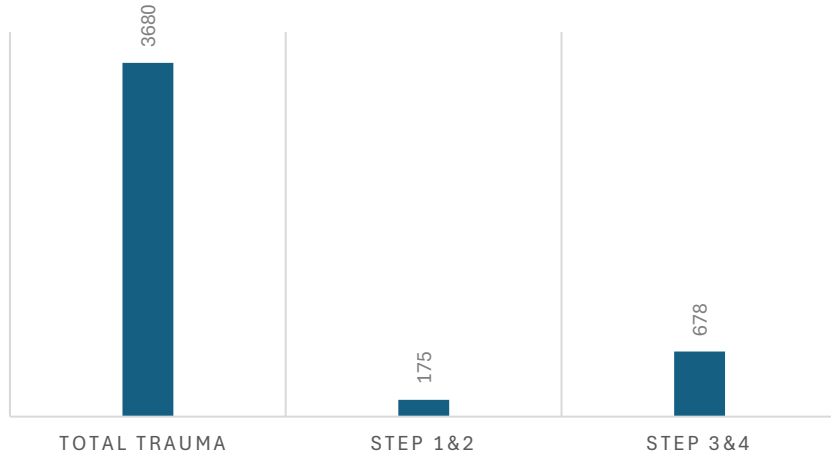
During the calendar year 2023 the system had a total of 3680 EMS responses for trauma patients with 853 meeting trauma triage criteria. The trauma centers received 95% of trauma patients meeting Step 1 or 2. The SLO EMS trauma policies require a trauma center consultation to determine destination of patients meeting Step 3 and 4 criteria. The trauma centers received 78% of those patients that were consulted on. Emergency Department outcomes for patients meeting Step 3 or 4 are reviewed for potential under/over-triage through the Performance Improvement (PI) program in the Trauma Advisory Group (TAG) and at the regional Tri-Counties (SLO, Santa Barbara and Ventura Counties) Trauma Audit Committee.

Emergency Medical Services

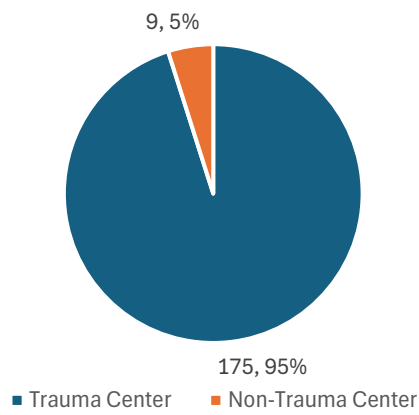
2995 McMillan Ave, Ste. 178 | San Luis Obispo, CA 93401 | (P) 805-788-2519

<https://www.slocounty.ca.gov/>

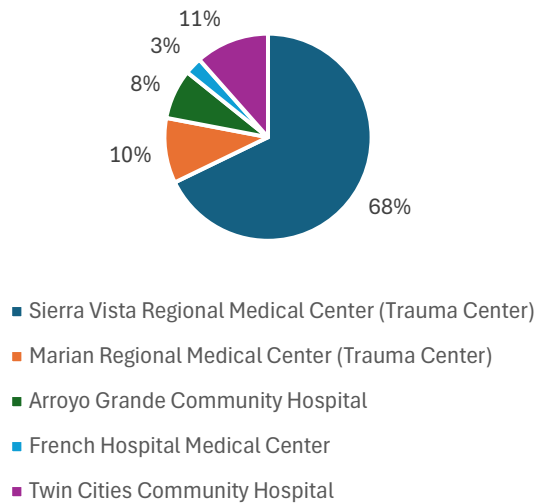
TOTAL TRAUMA VOLUME CALENDAR YEAR 2023



Distribution of Trauma Alerts (Steps 1 and 2) Calendar Year 2023



Distribution of Trauma Consults (Steps 3 and 4) Calendar Year 2023



Changes in the Trauma System

There were no “significant changes” (as defined in the Trauma System Plan Revision and Annual Trauma System Status Report Guidelines) to the trauma system plan previously approved by the EMS Authority.

Number and Designation Level of Trauma Centers

- Sierra Vista Regional Medical Center, San Luis Obispo – Level III Trauma Center
- Marian Regional Medical Center, Santa Maria (Santa Barbara County, participates as cooperative partner with MOU on file) – Level II Trauma Center

Trauma System Goals and Objectives for 2023

- Continued review of past PI program indicators with Trauma Advisory Group (TAG)
- Coordinate and participate in training and drills with system EMS provider agencies and trauma centers.
- Continue participation in the Tri-County peer review programs.
- Align SLO County’s trauma steps more closely with the American College of Surgeons (ACS) guidelines.

System Performance Improvement

System PI Projects in 2023:

- Reviewed trauma PI indicators with Trauma Advisory Group - attached
- Participation in the Tri-County PI and peer review program
- Continued a feedback report providing patient outcomes from both the trauma center and non-trauma centers to the EMS provider PI Coordinators
- Participate in EMS Authority Core Measures project

Progress on Addressing EMS Authority Trauma System Plan Comments

The EMS Authority approved the last Trauma System Status Report without any recommendations, required actions, or comments requiring action.

Other system Issues

No other issues at this time.

Submitted by:

Ryan Rosander

EMS Director

SLOEMSA

County of San Luis Obispo, Public Health Department

805.788.2512

rrosander@co.slo.ca.us

Attachments:

 TAG membership list

 2023 Trauma Program Indicators

TRAUMA ADVISORY GROUP MEMBERSHIP
[2023]

REPRESENTATIVE POSITION	NUMBER OF REPRESENTATIVES	NAME
EMCC Representative	1	Bob Neumann - Chair
Trauma Program Physician Director	1each	Eric Salinger, M.D. Lars Ola Sjöholm M.D.
Trauma Nurse Program Manager	1each	Deanna Porter, R.N. Lisa Abeloe R.N.
Trauma Center ED Physician Director	1each	Gary Lucchesi, M.D. Terrance McGovern M.D.
Non-Trauma Center ED Physician Director (or Representative)	1 each hospital	AGCH – Stefan Tiege M.D. FHMC – Rachael May, M.D. TCCH – Kathryn Haran , M.D.
ED Nursing Director (or Representative)	1 each hospital	AGCH – Shauna Zoric, R.N. FHMC – Natasha Lukasiewich, R.N. TCCH – Holly Cole, R.N. SVRMC – Diane Burke, R.N. MRMC – Tauny Sexton R.N.
Transport Provider	1 from each provider	CCHD – Timothy Nurge SLAS – Nate Otter
Air Transport	1 from each provider	CHP – Doug Weeda CALSTAR – Aaron Hartney Mercy Air- Lisa Epps
Public Provider	1	Dan McCrain
Med-Com	1	Jennifer Mebane
Non-Voting Members – other invitees to assist in the medical audit review, i.e. MMC Trauma Representative, Coroner, Orthopedist, Pediatrician	As needed	EMS Agency Staff

2023 Trauma Program Indicators

EMS System Volume Report – EMS Agency

1. Prehospital Trauma Patients: Alerts and Trauma Consultation
2. Destination of Trauma Consultations

Prehospital Performance Review – EMS Agency

1. PCR records missing 24 hours after patient delivery to the TC
Goal – 0% missing
2. Transports with > 30 min scene to hospital by ground
 - a. Measure: review for possible indication of air transportation by time and need criteria set forth in Policy 119
3. Trauma Alerts (step 1 or 2) with > 10 on scene time requiring extrication
 - a. Measured from EMS transporting agency patient contact to start of transport
 - b. Goal - < 90%
4. Alerts (step 1 or 2) with > 20 minute from dispatch to scene of EMS personnel
 - a. Includes arrival of EMS first responder
 - b. Goal - 0%

EMS Hospital System Review – EMS Agency

1. Over Triage Rate
 - a. Number/percent of Trauma Alert (Step 1 or 2) with an ISS <15
 - b. Goal – 30-50%
2. Under Triage Rate
 - a. Number/percent of Trauma Alert (Step 1 or 2) with an ISS >15
 - b. Goal - < 5%
3. Non-Trauma Center Patient Outcome Information
 - a. Admit to Med Surg
 - b. Admit to OR
 - c. Admit to ICU
 - d. Admit to DOU
 - e. Died
 - f. Discharged
 - g. Transferred

Focused Trauma Audit Filters for Quarterly TAG Report from TC

1. Presence of the trauma surgeon in the ED within 30 minutes of notification
 - a. % that no times documented
 - b. Meet 30 minutes or less 90% of the time
 - c. Documentation occurs 100% of the time

2. Lack of definitive airway management for patients leaving the ED with GCS 8 or less
 - a. % there was no documentation of airway
 - b. Goal - 0 %
3. Delay to OR, Laparotomy
 - a. Patients with abdominal injuries and hypotension (< 90 mmHg) after initial fluid resuscitation who do not undergo laparotomy within 1 hour of ED or TC arrival
4. Delay to OR, Craniotomy
 - a. Patients with epidural or subdural brain hematoma receiving craniotomy > 4 hours after ED or TC arrival – excludes those performed for ICP monitoring
5. Delay in OR, Open or Long Bone Fracture
 - b. Interval of greater than 8 hours between ED or TC arrival and the initiation of debridement of an open fracture – excluded low velocity GSW
6. Initial Surgical Intervention > 24 hours
 - a. Initial abdominal, thoracic, vascular or cranial surgery performed > 24 hours after arrival to ED or TC (excludes patients identified in 3,4 or 5)
7. Unexpected return to OR
 - a. Unexpected return to OR after initial surgery
8. Unexpected readmission
 - a. Readmission to hospital for complications related to prior trauma admission
9. Referring Facility Complication
 - a. Complications to be identified by TC Medical Director

Additional Quarterly TAG Report from the TC

1. Volume
 - a. Age
 - b. ISS
 - c. MOI
2. Trauma Alert Patient Outcomes
 - a. Disposition
 - i. Died
 - ii. Admitted without surgery
 - iii. Admitted with surgery
 - iv. Transferred
 - v. Discharged home
 - vi. Discharged to Rehabilitation or SNF
 - b. Median Length of Stay in ED
 - i. Age
 - ii. ISS
 - iii. Response Level – Tier 1 and Tier 2

**STEMI Plan prepared for the
California Emergency Medical Services Authority
2023**

Plan prepared by:

County of San Luis Obispo
Department of Public Health
Emergency Medical Services Agency
2995 McMillan Ave, Ste. 178
San Luis Obispo, CA 93401
(805) 788-2519

Plan reviewed and edited by:

William Mulkerin, MD, Medical Director
Penny Borenstein, MD, Acting EMS Director
Ryan Rosander, EMS Coordinator
Rachel Oakley, EMS Coordinator
Alyssa Vardas, Administrative Assistant

Table of Contents

STEMI Critical Care System	2
STEMI Continuum of Care	2
Goals Within the Continuum of Care	3
Three Areas of Collaboration: A Team Approach	4
Stakeholders	5
San Luis Obispo County EMS Agency	5
San Luis Obispo County STEMI Receiving Center and other Receiving Hospitals	6
San Luis Obispo County Pre-Hospital Providers	7
The ACS/STEMI Patient	7
Destination	7
Communication	8
STEMI Patient Volume	8
Inter-Facility Transfers	9
Data Collection	9
STEMI Quality Improvement	9
STEMI Care Committee	10
Education and Outreach	10
Attachments:	
1. Policy #100 QI Policy	
2. Policy #121 EMS Base Station Report	
3. Policy #152 STEMI Triage and Destination	
4. Policy #400 STEMI Receiving Center Designation	
5. Protocol #640 Adult Chest Pain/Acute Coronary Syndrome	
6. Procedure #707 12-Lead ECG	

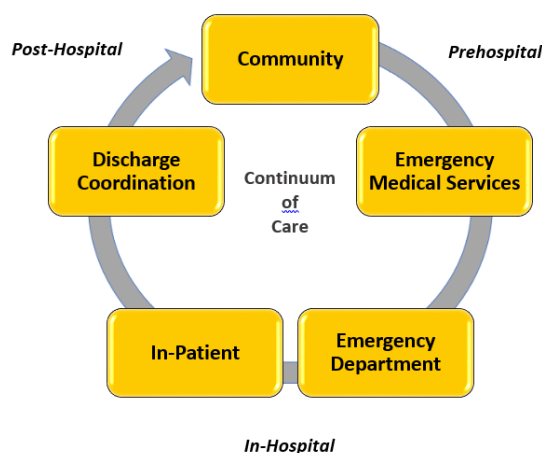
STEMI Critical Care System

Heart disease is the leading cause of death and long-term disability in the U.S. Every year in the U.S. approximately 805,000 people have a heart attack. Of these, 605,000 are first time events and 200,000 are subsequent events¹. Approximately 695,000 people die from heart disease each year. Coronary Heart Disease (CHD) is the most common cause with approximately 375,000 deaths each year². In 2021 in California, there were 62,797 deaths from all heart disease, a population rate of 141.9/100,000³. Heart attack, also known as Myocardial Infarction (MI), is a life-changing event that places heavy burden on patients, family, and caregivers, physically, emotionally, and financially. When a patient suffers an MI, particularly an ST Elevation MI (STEMI), timely intervention is critical to reduce mortality, morbidity, and disability as well as improve survival quality of life.

In July 2019, the California Emergency Medical Services Authority (EMSA) implemented new regulations, 3, CCR Title 22 7.1, outlining local EMS Agency's requirements for a STEMI Critical Care System. The broad objective for a California STEMI Critical Care System is to improve the care of patients suffering from a life-threatening acute heart attack. The new regulations are designed to provide a consistent application of standardized care throughout the state.

In 2010, San Luis Obispo County EMS Agency (SLOEMSA) developed and implemented a STEMI Critical Care System. The SLO County STEMI system links prehospital and hospital care to deliver treatment to STEMI patients who potentially require immediate medical or surgical intervention.

STEMI Continuum of Care



Rapid coronary artery reperfusion is the foundation of treatment for acute ST-Elevation myocardial infarction (STEMI) to improve survival. Despite two decades of evidence and seven years since best

¹ <https://www.cdc.gov/heartdisease/facts.htm>

² <https://www.cdc.gov/heartdisease/facts.htm>

³ <https://www.heart.org/-/media/files/about-us/policy-research/fact-sheets/quality-systems-of-care/quality-systems-of-care-california.pdf?la>

practice guidelines were introduced, 30-50% of patients fail to have these guidelines applied to their care. Considering the number of Percutaneous Coronary Intervention (PCI)-capable hospitals increased by almost 50%, and that 90% of Americans live within 60 minutes of a PCI-capable facility, inadequate access cannot entirely explain these systematic failures. The challenge lies within a highly fragmented healthcare system comprising approximately 4,750 acute care hospitals and more than 15,000 emergency medical services (EMS) agencies in the United States. The challenge is further exacerbated by structural barriers that hinder coordination between EMS providers and hospitals. Such fragmentation has hindered the development of coordinated treatment plans along and throughout the continuum of care⁴.

Improved adherence to the American College of Cardiology and American Heart Association (ACC/AHA) heart failure guidelines translates to improved clinical outcomes in real world heart failure patients. Data shows that with each 10% improvement in ACC/AHA guideline-recommended care there was an associated 13% lower odds of 24-month mortality⁵. STEMI systems of care improve care and support for cardiac patients throughout their health care journey from prehospital care to in-hospital care through post-hospital care. This collaboration and standardization across the continuum of care is paramount to improve outcomes.

The continuum of care is important to caregivers and patients alike. It leads to an improvement of patient satisfaction levels, reduces costs, and improves health. Keeping up the continuum of care is especially important for patient populations such as those who are more dependent on healthcare services. These patient populations include the elderly, those suffering from complex medical conditions, mentally vulnerable patients and patients with chronic diseases. This suggests that continuum of care is particularly beneficial to the cardiac patient population, including STEMI, and that STEMI systems of care depend on robust collaboration to ensure that the continuum of care is optimally exercised.

Goals Within the Continuum of Care

The San Luis Obispo STEMI continuum of care can be broken down and evaluated at three levels:

1. **Prehospital**

Includes the community and Emergency Medical Services which provides rapid identification and transport of suspected STEMI patients to the most appropriate facility.

2. **In-Hospital**

Includes the Emergency Department and In-Patient admissions of the hospital which provides optimum cardiac treatment for every STEMI.

⁴ <https://ahajournals.org/doi/full/10.1161/circulationaha.115.019474>

⁵ https://www.ehdc.org/sites/default/files/resources/files/transitions%20of%20care_Pina_10.17.17.pdf

3. **Post-Hospital**

Includes the discharge coordination of patients as well as community efforts to ensure resources are available and accessible to patients. The goal is to improve post-discharge care while providing education and facilitation of home support systems.

Within each level of the continuum of care, there are identified goals designed to build safety into the STEMI system of care, ensuring that patients receive the safest and most reliable care across the continuum.

1. **Prehospital**

Primary Prevention
 Early Identification and Rapid Response
 Treatment and Transport
 Education and Outreach
 Performance Improvement
 Data Management

2. **In-Hospital**

Hospital Services
 Hospital Personnel
 Clinical Capabilities
 Education and Outreach
 Performance Improvement
 Data Management

3. **Post-Hospital**

Post Discharge Care
 Secondary and Tertiary Prevention
 Resources and Referrals
 Education and Outreach
 Performance Improvement
 Data management

At each step in the system of care, it is important to also include education and outreach, performance improvement, and data management.

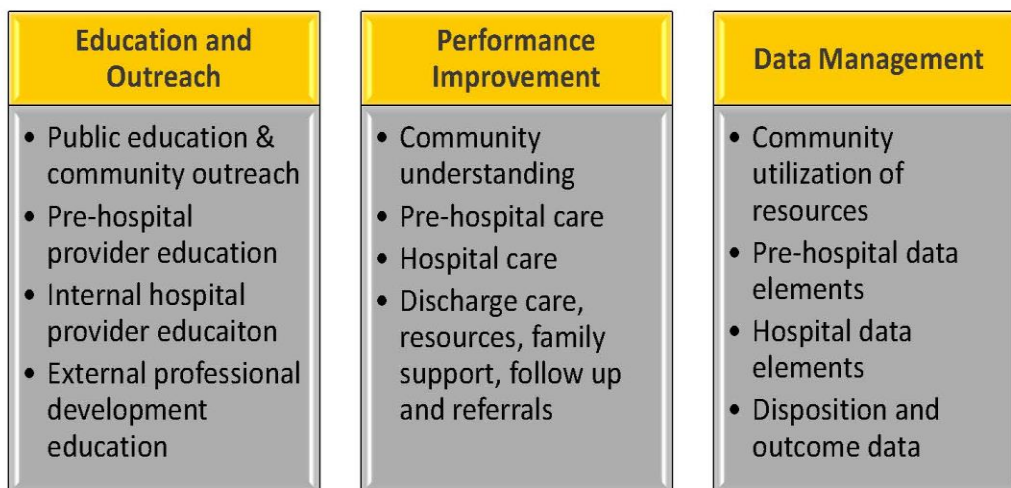
Three Areas of Collaboration: A Team Approach

Recognizing that patient outcomes are greatly dependent on the quality of care within each level of care on the continuum, it is critical for San Luis Obispo County providers to work in a collaborative team approach wherever possible. Common themes span across the Prehospital, In-Hospital and Post-Hospital levels that identify opportunities to maximize SLOEMSA's team approach to care of the cardiac patient.

- Community education where EMS and other healthcare professionals promote and support an integrated system of care. Interprofessional and interdisciplinary education systems

prepare care providers to work collaboratively together as a team. When combined with community education and outreach efforts, the patients have an active role in their personal health and well-being.

- Performance Improvement invariably involves work across multiple systems and disciplines within a practice. Within the healthcare practice continuum, this is particularly applicable as patients have various formal and informal care providers throughout their course of illness and into their discharge disposition.
- Good data can help identify, verify and proactively address issues, measure progress and capitalize on opportunities. When data is gathered, tracked, and analyzed in a credible way over time, it becomes possible to measure progress and success. Policies, procedures, services, and interventions can then be evaluated, modified, and improved.



A team approach from a truly integrated healthcare system will go beyond education, outreach, performance improvement and data management/sharing. SLOEMSA's aim is to create a seamless system which requires EMS professionals and community partners to commit to the same shared objectives and find ways to achieve them together. This team approach from a people-centered EMS system takes advantages of the strengths and resources brought by each organization and provider to protect the health and wellness of individuals and communities.

Stakeholders

San Luis Obispo County EMS Agency (SLOEMSA)

San Luis Obispo (SLO) County is located along California's central coast, about halfway between Los Angeles and San Francisco. Encompassing an area of 3,616 sq. miles, SLO County has a mix of urban communities and large sparsely populated rural areas. The County's population of 282,424 (2020) is concentrated along the U.S. Hwy 101 and California State Hwy 1 corridors including the cities of Grover Beach, Arroyo Grande, Pismo Beach, San Luis Obispo, Morro Bay, Atascadero, and Paso Robles, as well as other communities such as Nipomo, Los Osos, and Cambria. In addition to permanent residents, SLO County has an increasing number of visitors drawn to the County's numerous outdoor

and cultural activities⁶. As a result of the population concentration, most of the County's emergency services, including advanced life support (ALS) fire and ambulance, are located primarily in the communities listed above. The rural, less populated areas are covered by Cal Fire resources containing mostly basic life support (BLS) personnel equipped with automatic external defibrillators. This utilization of resources ensures everyone in SLO County receives timely emergency response when needed.

SLOEMSA is comprised of an EMS Administrator, EMS Medical Director (part-time contracted), three (3) EMS Coordinators, and one (1) Administrative Assistant. Although one EMS Coordinator is designated as the STEMI staff liaison, all staff members have input in the STEMI Critical Care System. We work closely with stakeholders, including representatives from the designated STEMI Receiving Center, (SRC), other County receiving hospitals, and public and private EMS provider agencies. It is through the work that is managed collectively as a group that the STEMI System of Care exhibits optimal performance.

San Luis Obispo County STEMI Receiving Center

SLO County has a total of five prehospital receiving hospitals. Four of these hospitals are within SLO County and one hospital is physically located just outside of SLO County in Santa Barbara County (Santa Maria). One hospital in SLO County, French Hospital Medical Center (FHMC), is a SLOEMSA designated STEMI Receiving Center. Marian Regional Medical Center (MRMC) in Santa Maria is designated as a STEMI Receiving Center by the Santa Barbara County EMS Agency. STEMI patients in the southern part of SLO County may be transported to MRMC as the closest STEMI Receiving Center.

The California State Regulations define a STEMI Receiving Center (SRC) as a "licensed general acute care facility that meets the minimum hospital STEMI care requirements pursuant to Section 100270.124 and is able to perform Percutaneous Coronary Intervention (PCI)."

SLOEMSA has a written agreement with FHMC designating it as a STEMI receiving center. To be considered for STEMI receiving center designation, FHMC must hold current Chest Pain Certification by The Joint Commission and complete a SLOEMSA STEMI Center Designation Application packet. The application packet contains an evaluation tool that SLOEMSA uses to ensure the facility meets the requirements to receive STEMI Center Designation. STEMI Centers must also maintain compliance with SLOEMSA designation criteria outlined in Policy #400, *STEMI Receiving Center Designation*.

SLO County Pre-hospital Providers

The County of San Luis Obispo is comprised of a mix of public and private EMS Advanced Life Support (ALS) providers and Basic Life Support (BLS) First Responders. A combination of ground, air and specialty Critical Care Transport (CCT) are all offered within the county. The community can access emergency transport services via public providers through the 9-1-1 system.

Once on scene, the first responder and ambulance transport crews coordinate their efforts to rapidly identify, treat and transport STEMI patients to an SRC. A critical component in the continuum of care is the transfer of 12-Lead ECG findings. Providers electronically transmit 12-Lead ECGs to the receiving

⁶ http://www.sloevc.org/files/SLO%20County%20Tourism%20Report_2008%20%28v_2%29.pdf

hospital and when needed, prehospital providers can contact the SRC for medical direction or consultation. Field crews notify the SRC of the incoming patient with a “STEMI Alert” radio report in order to allow hospital staff to prepare for expeditious triage and treatment upon patient arrival. Prehospital providers work closely with the SRC staff to ensure that all pertinent information is relayed for a seamless transition within the continuum of care.

SLOEMSA has a policy in place to describe the process in which 12-Lead ECG transmission takes place. Policy document #152 *STEMI Triage and Destination* serves as an advanced life support skill guideline for obtaining, utilizing, and transmitting 12-Lead ECG’s and determining patient destination with suspected STEMI patients.

The ACS /STEMI Patient

SLOEMSA believes that rapid identification, treatment and transport of STEMI patients by emergency medical personnel is a valuable part of optimal care for the victims of cardiac emergencies. Morbidity and mortality rates in STEMI patients have been shown to be directly related to the degree of myocardial damage sustained as a result of vessel occlusion⁷. An important determinant of outcomes for the STEMI patient is timely reperfusion of the coronary arteries. Reperfusion of the affected artery can salvage myocardium that would otherwise become necrotic⁸.

A STEMI diagnosis is based on electrocardiographic changes that show evidence of evolving myocardial injury, as well as the presentation of the patient. When there are electrocardiographic changes and the patient presents with pain or symptoms of suspected cardiac origin, the patient goes directly to the cardiac catheterization laboratory for a possible reperfusion treatment. Therefore, STEMI patients benefit the most from rapid coronary reperfusion therapy⁹.

It is imperative that field personnel are well trained and STEMI receiving centers are well prepared for the patient that presents with STEMI. SLOEMSA has several policies in place to assist field providers in the rapid identification of a patient who may be suffering a STEMI. Policy #640 *Adult Cardiac Chest Pain/Acute Coronary Syndrome*; describes signs, symptoms and treatment of chest pain of suspected cardiac origin including possible STEMI patients; Procedure #707 *12-Lead ECG* outlines the indications, documentation and contact guidelines for possible STEMI patients; Policy #152 *STEMI Triage and Destination* is a guideline for EMS personnel to identify and transport patients with acute STEMI who could benefit from the rapid response and specialized services of an SRC.

Destination

In STEMI systems of care, STEMI patients should be transported to the closest, most appropriate facility staffed and equipped to perform immediate percutaneous coronary intervention (PCI) to facilitate reperfusion. STEMI destination policies that allow emergency medical services to bypass non-percutaneous coronary intervention-capable facilities are associated with significantly faster treatment times for patients with ST-Elevation MI. Time to treatment in STEMI is a critical determinant of patient outcomes. Reducing delays relies on a robust emergency medical system that can transport

⁷ <https://www.ahajournals.org/doi/10.1161/JAHA.118.008096>

⁸ <https://www.ahajournals.org/doi/10.1161/JAHA.118.008096>

⁹ https://www.heart.org/idc/groups/heart-public/@wcm/@mwa/documents/downloadable/ucm_487492.pdf

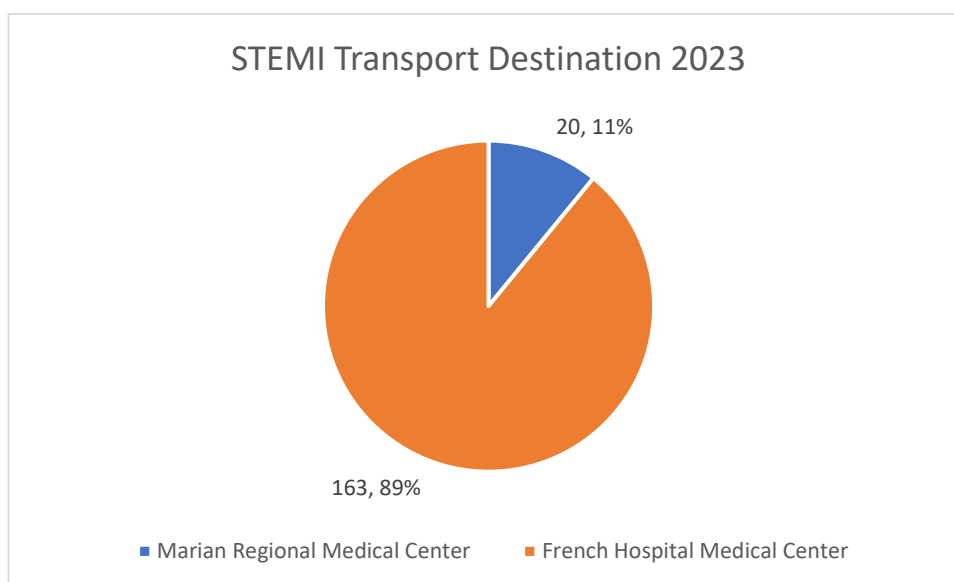
a patient directly to a percutaneous coronary intervention-capable hospital, even if it means driving past a closer hospital¹⁰.

In the rare situation that the closest, most appropriate STEMI center is not available to accept a STEMI patient due to an internal disaster or occupied Cath Lab suites, field providers will transport the patient to the next closest, most appropriate SRC or other receiving hospital.

SLOEMSA has a policy in place to assist field providers in determining destination for a STEMI patient. Policy document #152 *STEMI Triage and Destination* outlines criteria and destination(s) for suspected STEMI patients in SLO County.

STEMI Patient Volume

In 2023, 183 patients were treated and transported to a SRC. Approximately 89% of these patients were transported to French Hospital Medical Center, 11% were transported to Marian Regional Medical Center (Santa Barbara County).



Communication

Studies show that EMS transportation is associated with shorter door-to-balloon time in patients with ST-segment elevation myocardial infarction. In addition to EMS transportation, when prehospital crews make notification of an incoming STEMI patient to the receiving hospital, it is again associated with shorter door-to-balloon time¹¹.

Early notification of an incoming STEMI patient allows appropriate hospital resources to mobilize prior to patient arrival. Due to the time-sensitive nature of reperfusion on outcomes, the diligent practice

¹⁰ <https://www.ahajournals.org/doi/full/10.1161/circinterventions.117.005706>

¹¹ [https://www.ajemjournal.com/article/S0735-6757\(16\)30234-0/pdf](https://www.ajemjournal.com/article/S0735-6757(16)30234-0/pdf)

of STEMI-alerts from the field is a vital element in the continuum of care spectrum as it is meant to effectively and rapidly communicate the need for expeditious treatment upon patient arrival.

SLO County prehospital providers have two ways to make prehospital notification. The first, and most common, means of notification is via UHF radio frequency assigned to each receiving facility. The second means of notification is via a dedicated phone number for each receiving facility. In the case of possible STEMI or sustained return of spontaneous circulation (ROSC) in cardiac arrest patients, field units contact the SRC regardless of the closest receiving facility

SLOEMSA has policies in place to give direction on administering a notification report to receiving hospitals. Policy document #121 *EMS Base Station Report-12 Lead Consult* addresses the minimum acceptable information to be communicated and provides a standardized and consistent approach to pre-hospital notifications.

Inter-Facility Transfers

In SLO County approximately one-half of STEMI patients receiving PCI are transferred from one of SLO County's other receiving facilities. These are almost exclusively patients who arrive at an Emergency Department (ED) by means other than ambulance (e.g.: private vehicle, walk-in). Once these patients are diagnosed with a STEMI, an emergency inter-facility transfer to the closest SRC is arranged. There are currently agreements between the SLO County SRC and the three other receiving hospitals for inter-facility transfers of STEMI patients.

Data Collection

Retrospective data collection and analysis lie at the heart of quality improvement. Data aids in understanding how well the systems work, identifying potential areas for improvement, setting measurable goals, and monitoring the effectiveness of change. Robust data systems, with the ability to report clinical indicators and performance measures, are a key tool to accomplish Quality Improvement (QI) activities. The goal is to connect data from across the continuum of care from Prehospital to In-Hospital to Post-Hospital disposition in order to optimally evaluate patient outcomes¹².

The SRC in SLO County is currently using the National Cardiovascular Data Registry (NCDR) to collect and analyze pre-hospital, in-hospital, and post-hospital cardiac data, including STEMI and cardiac arrest patients. NCDR collects all the required data points listed in §100270.126, Data Management, including STEMI patient data elements and STEMI system elements.

STEMI Quality Improvement

Reaching for excellence in any system requires a functional decision-making process among the team of workers and users within that system. Inherent to this process is the need to know how the system is functioning and what to do to fix or improve it. The concept of continuous quality improvement (CQI) particularly in the field of health care relies mainly upon the following fundamental components:

¹² <https://emsa.ca.gov/wp-content/uploads/sites/71/2017/12/Core-Measure-Report-for-2016-Data.pdf>

- The availability of reliable and trusted information
- The ability to effectively communicate that information in easy to understand ways
- A standardized approach to reaching decisions and acting on those decisions

It is through SLOEMSA's Continuous Quality Improvement that the gap between performance and expectations narrows. It pushes the standards upward which results in better outcomes. Quality Improvement stresses understanding complex processes, measuring performance using reliable statistical methods, and using that information to build quality into our process.

SLOEMSA has policies in place to ensure continued high quality of patient care in emergency medical services provided in our community. Policy document #100-*Quality Improvement Plan* establishes a system-wide Quality Improvement Program to continuously monitor, review, evaluate and improve the delivery of Prehospital, In-Hospital and Post-Hospital care of all patients, including STEMI. The program has active members from all system partners and includes prospective, concurrent, and retrospective reviews as well as a feedback system to help close the QI loop.

STEMI Care Committee

As the delivery of cardiac care evolves to become more interconnected, coordinating care between prehospital Providers, Nurses, Physicians, and other disciplines has become increasingly important. In its simplest form, interprofessional collaboration is the practice of approaching patient care from a team-based perspective. When implementing interprofessional collaboration and learning to work together and respecting one another's perspectives in healthcare, multiple disciplines can work more effectively as a team to help improve patient outcomes. In addition, it improves the coordination and communication between healthcare professionals and thus in turn, improves the quality and safety of patient care.

STEMI system of care monitoring and evaluation in SLO County is conducted through the SLOEMSA STEMI Committee. The committee is comprised of EMSA staff, the STEMI Coordinator from the SRC, liaisons from all of the SRH's, a liaison from Marian Hospital SRC (Santa Barbara County), members of the SRC clinical team including cardiologists, and liaisons from the pre-hospital provider agencies (both fire and ambulance). The STEMI Care Committee meets quarterly and is tasked with reviewing performance data, identifying areas in need of improvement, and carrying out and monitoring improvement efforts. For these activities, the committee uses a variety of QI approaches and tools, including Plan, Do, Study, Act (PDSA) cycles, assessments, audits and feedback, benchmarking and best practices research. They provide expertise to address potential quality improvement initiatives within our STEMI system which contributes to the development or revision of STEMI related policies, procedures and treatment protocols.

Education and Outreach

According to the Robert Wood Johnson Foundation (RWJF), enhancing interdisciplinary collaboration and coordination in healthcare is imperative. As the delivery of care becomes more complex across a wide range of settings and the need to coordinate care among multiple providers becomes ever more important, developing well-functioning teams becomes a crucial objective throughout the health care system. Health professionals have traditionally operated in separate spheres. Studies show that if they "breakdown the walls of hierarchical silos" and come together as a team, they will improve the safety and quality of patient care.

Collaboration between professions starts with interdisciplinary education, which can break down those walls. Health professionals must begin working together before they start working. Interdisciplinary education will lead to more effective communication across disciplines and, ultimately, safer, more affordable, and higher quality care.¹³

In San Luis Obispo County, interdisciplinary education takes several forms. One form is through the STEMI Care Committee. By bringing in all the critical stakeholders, continuing education topics on STEMI issues are identified and disseminated to base stations and provider agencies who then provide continuing education on the topics identified.

Another form is through individual STEMI case follow-ups. Individual STEMI cases and their outcomes are forwarded to SLOEMSA who then relays them to the provider agencies for review with the crews who treated and transported the patients. This allows the treating paramedics and EMT's to see how important their role is in the continuum of care in turn helping to "breakdown the walls of hierarchical silos" previously discussed.

In addition to interdisciplinary education, there is a vital component of public education and outreach that contributes to the health and wellness of a community. One of the goals identified in Healthy People 2020 is to increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and injury, improve health, and enhance quality of life.

Cardiac care public education and outreach will contribute to the improvement of health outcomes in the United States and is a component of the SLOEMSA STEMI Critical Care System.¹⁴ FHMC, the SLO County designated SRC, provides several outreach programs. The "Healthy for Life Nutrition" series covers the risk and signs of heart disease and stroke. The course is provided in both English and Spanish in various locations throughout SLO County. FHMC also has designated staff who are certified CPR instructors who teach Spanish Heartsaver CPR community courses throughout the county.

Many of SLO County's EMS provider agencies, led by the county's largest ambulance provider San Luis Ambulance (SLA) conduct regular hands-only CPR demonstrations and participant practice. These demonstrations are held at SLA headquarters, various fire stations throughout the county, and other public venues such as the San Luis Obispo Farmers Market. Early bystander CPR has been shown to increase survival of out-of-hospital cardiac arrest.¹⁵ Our goal is to increase the number of citizens trained in hands-only CPR which will lead to greater increases in cardiac arrest survival.

¹³ <https://www.rwjf.org/en/library/articles-and-news/2010/11/interdisciplinary-collaboration-improves-safety-quality-of-care-.html>

¹⁴ <https://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs>

¹⁵ <https://newsroom.heart.org/news/compression-only-cpr-increases-survival-of-out-of-hospital-cardiac-arrest>

POLICY #100: CONTINUOUS QUALITY IMPROVEMENT

I. PURPOSE

- A. To establish a system-wide quality improvement program to evaluate the services provided within the County of San Luis Obispo (SLO) Emergency Medical Services (EMS) System.

II. SCOPE

- A. This policy applies to all EMS service providers (henceforth “providers”) and base hospitals within the County of SLO EMS System.

III. DEFINITIONS

- Emergency Medical Services System Continuous Quality Improvement Program (CQI Program) - methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervenes to reduce or eliminate these causes, and take steps to correct the process and recognize excellence in performance and delivery of care.

IV. POLICY

- A. The County of SLO EMS Agency (EMS Agency) will:
 - 1. Develop and implement, in cooperation with other EMS system participants, a system-wide written CQI Plan (attachment A), as defined in Title 22, Division 9, Chapter 12. This plan will include indicators, which address, but are not limited to, the following:
 - a. Personnel
 - b. Equipment and Supplies
 - c. Documentation
 - d. Clinical Care and Patient Outcome
 - e. Skills Maintenance/Competency
 - f. Transportation/Facilities
 - g. Public Education and Prevention
 - h. Risk Management
 - 2. Establish and facilitate a system-wide comprehensive quality assessment and improvement program. The program will include, but is not limited to, the following activities:
 - a. Regularly scheduled CQI Committee meetings
 - (1) The CQI Committee must be multidisciplinary and include representatives from all levels (ALS and BLS) of field prehospital personnel both public and private, air transport agencies, emergency

medical dispatch, base hospitals, Specialty Care Centers, and EMS Agency staff/personnel.

(2) The Chair of the Emergency Medical Care Committee (EMCC) will approve a CQI Committee Chairperson. The term of service will be two (2) years.

(3) Patient, provider and base hospital confidentiality will be strictly maintained at all times during the CQI process. A Confidentiality agreement will be signed at the beginning of each meeting by all participants

b. Ensures each provider and base hospital complies with reporting and other quality assessment requirements as specified or determined in Title 22 Division 9, Chapter 12, and the EMS Agency CQI Plan.

c. Ensures each provider and base hospital submits a CQI plan to the EMS Agency for approval.

d. Ensures each provider and base hospital conducts an annual review of their own individual CQI plan and submits any changes to the EMS Agency for approval.

e. Review provider and base hospital CQI plans every five years

B. EMS service providers will:

1. Develop and implement, in cooperation with other EMS system participants, a provider-specific written CQI program, as defined in Title 22, Division 9, Chapter 12, and the EMS Agency CQI Plan. Such programs must include indicators, which address, but are not limited to, the following:

- a. Personnel
- b. Equipment and Supplies
- c. Documentation
- d. Clinical Care and Patient Outcome
- e. Skills Maintenance/Competency
- f. Transportation/Facilities
- g. Public Education and Prevention
- h. Risk Management

2. Review the provider-specific CQI Program annually for appropriateness to the operation of the provider and revise as needed.

3. Participate in the EMS Agency CQI Program that may include making available mutually agreed upon relevant records for program monitoring and evaluation.

4. Develop, in cooperation with appropriate personnel/agencies, an action plan for performance improvement when the EMS CQI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, coordination and consultation are required with the provider and the EMS Agency.

5. Provide the EMS Agency with an annual update, from date of approval and annually thereafter, on the provider CQI Program. The update must include, but not be limited to; a summary of how the provider's CQI Program addressed the program indicators.

C. Base Hospitals will:

1. Develop and implement, in cooperation with other EMS system participants, a hospital-specific written EMS CQI program, as defined in Title 22, Division 9, Chapter 12, and the EMS Agency CQI Plan. Such programs must include indicators which address, but are not limited to, the following:

- a. Personnel
- b. Equipment and Supplies
- c. Documentation
- d. Clinical Care and Patient Outcome
- e. Skills Maintenance/Competency
- f. Transportation/Facilities
- g. Public Education and Prevention
- h. Risk Management

2. Review the hospital-specific EMS CQI Program annually for appropriateness to the operation of the base hospital and revise as needed.

3. Participate in the EMS Agency CQI Program that may include making available mutually agreed upon relevant records for program monitoring and evaluation.

4. Develop, in cooperation with appropriate personnel/agencies, an action plan for performance improvement when the EMS CQI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, coordination and consultation are required with the base hospital and the EMS Agency.

5. Provide the EMS Agency with an annual update, from date of approval and annually thereafter, on the base hospital EMS CQI Program. The update must include, but not be limited to; a summary of how the hospital's EMS CQI Program addressed the program indicators.

V. PROCEDURE

A. Review Process

1. The first efforts to resolve conflicts should occur on a peer-to-peer level. If the issue is a timely patient care conflict, the base station physician should be consulted. If the issue remains unresolved at the peer-to-peer level, an Opportunity for Improvement Form/Incident Report Form (Attachment C of the EMS Agency Plan) should be forwarded to the provider's CQI representative. The CQI representative will then determine the need to do any of the following:

- a. Resolve the issue at the provider level
- b. Resolve the issue with the other involved provider(s)

- c. Report system-wide implications to CQI Committee/EMS Medical Director
 - d. Handle inter-county issues
 - e. Identify and report any protocol, policy or emergency medical dispatch issues
 - f. Identify and manage and/or report any equipment issues
2. Opportunity for Improvement Form (Attachment C of the EMS Agency Plan) - any opportunity for improvement or patient care issue should be placed on the "Opportunity for Improvement Form"/Incident Report. All reports and additional contents are considered confidential documents and should not become part of, or referenced in, the PCR or First Responder Report. The Opportunity for Improvement Form/Incident Report must be submitted to the provider CQI representative.
 3. Reporting - All appropriate unresolved issues, mandatory requirements or issues with system-wide implications in patient care must be reported to the EMS Agency in a timely manner (Attachment B of the EMS Agency Plan – CQI Flow Chart).
 4. CQI Representative - Each provider and base hospital must designate a representative who will receive and review all opportunities for improvement related to their personnel.
 - a. Any individual, provider or base hospital that discovers or becomes aware of an opportunity for improvement will inform the appropriate designated representative who will notify involved personnel after following the above guidelines.
 - b. The designated representative is responsible for the identification and resolution of opportunities for improvement in a timely manner.
 - c. The EMS Agency Medical Director shall be notified of any reports within 72 hours of receiving any preliminary report of an opportunity for improvement.
 - d. The designated representative will maintain detailed documentation.
 - e. The designated representative will provide useful feedback to personnel.
 5. The designated representative must forward to the EMS Agency, within 72 hours, all opportunities for improvement, which may involve the California Health and Safety Code, Division 2.5, Section 1798.200 and/or Title 22 of the California Code of Regulations. Section 1798.200 states... "Any of the following items will be considered evidence of a threat to public health and safety and may result in denial, suspension, or revocation of a certificate issued under this division or placement on probation of a certificate holder" including:
 - a. "Fraud in the procurement of any certificate under this division."
 - b. "Gross negligence."
 - c. "Repeated negligent acts."
 - d. "Incompetence."
 - e. "The commission of any fraudulent, dishonest, or corrupt act which is substantially related to the qualifications, functions and duties of prehospital personnel."

- f. "Conviction of any crime which is substantially related to the qualifications, functions, and duties of prehospital personnel. The record of conviction or certified copy of the record shall be conclusive evidence of such conviction."
- g. "Violating or attempting to violate directly or indirectly, or assisting in or abetting the violation of, conspiring to violate, any provision of this division or regulations adopted by the authority pertaining to prehospital personnel."
- h. "Violating or attempting to violate any federal or state statute or regulation which regulates narcotics, dangerous drugs, or controlled substances."
- i. "Addiction to the excessive use of, or the misuse of, alcoholic beverages, narcotics, dangerous drugs, or controlled substances."
- j. "Functioning outside the supervision of medical control in the field care system operating at the local level, except as authorized by any other license or certification."
- k. "Demonstration of irrational behavior or occurrence of a physical disability to the extent that a reasonable and prudent person would have reasonable cause to believe that the ability to perform the duties normally expected may be impaired."

6. In cases involving paramedics, the EMS Agency Medical Director may temporarily suspend the license in the case of a threat to the public health and safety and forward the case to the California EMS Authority for further action.

B. Counseling and Remediation

1. Counseling and remediation are an important aspect of the quality improvement process and include, but are not limited to:

- a. Recognition, reward and reinforcement
- b. Case review and counseling on specific issues with focused QI review to monitor for recurrence over a specified period of time
- c. Didactic courses
- d. Supervised clinical time with a written outcome summary
- e. Didactic remediation with case scenario
- f. Topic oriented research
- g. Development of in-service or written paper on a specific topic with supervised review
- h. Patient Care Record (PCR) and/or medical dispatch record review with a supervised written summary
- i. Focused quality improvement review of ongoing care, including but not limited to, PCR review, field observation and tape review

2. Recurrence of issues at any level may require increased counseling, monitoring, and/or remediation.

- a. A written remediation agreement with the involved individual(s) may include, but not be limited to:

- (1) Identification of the specific opportunity to improve
 - (2) Identification of specific written future expectations including the expected time frames for successful completion
 - (3) Consequences for failure to comply
 - (4) Signature of involved personnel on the written agreement
 - (5) Timelines for resolution and conclusion
3. System-wide issues may be referred to the appropriate EMS Agency committee(s) for assistance in resolving the issue.

VI. AUTHORITY

- Title 22 Division 9, Chapter 12
- Health and Safety Code Sections 1797.103, 1797.107, 1797.174 and 1797.176.
- Reference: Health and Safety Code Sections 1797.94, 1797.174, 1797.202, 1797.204, 1797.220, and 1798.

VII. ATTACHMENTS

- A. County of San Luis Obispo Emergency Medical Services Agency Continuous Quality Improvement Plan
- B. CQI Review Process – Flow Chart
- C. Opportunity For Improvement/Incident Report Form

POLICY #121: EMS BASE STATION REPORT

I. PURPOSE

- A. To provide EMS personnel with a guideline for giving a brief, consistent, and clear report that provides pertinent information to base hospital personnel.

II. SCOPE

- A. This policy applies to all radio and telephone communications between the San Luis Obispo (SLO) EMS personnel, Sierra Vista Regional Medical Center (SVRMC), French Hospital Medical Center (FHMC), Twin Cities Community Hospital (TCCH), Arroyo Grande Community Hospital (AGH), and Marian Medical Center (MMC) providing patient information.

III. DEFINITIONS

The following terms shall initiate communication with a base hospital to better identify the type of patient or patient needs:

- “Notification” – Communication with intended receiving hospital for routine patient care not needing special orders, destination requests or consultation.
- “Alert” – Communication with intended receiving Specialty Care Base Hospital to identify patients meeting “Alert” triage criteria for a Specialty Care Center, i.e. Trauma Step 1 or 2, STEMI, ROSC or Stroke.
- “Medication Request” – When requesting a medication order beyond standing orders from a SLO Base Hospital physician or MICN.
- “Destination Consultation” – Communication with SLO Specialty Care Base Hospital physician or MICN for patients requiring a destination other than the Specialty Care Base Hospital, (i.e. Trauma and STEMI) or in circumstances where the initial intended destination needs to be re-routed to a closer or alternate hospital i.e. unmanageable airway.
- “Physician Consultation” – For circumstances needing SLO Base Hospital physician assistance when patient management is not clear or other unusual situations as determined by EMS personnel.
- “AMA Consultation” – The patient is requesting an AMA per EMS Agency Patient Refusal of Treatment and/or Transport Policy # 203
- “Termination” – Contact with the SLO Base Hospital physician or MICN to terminate resuscitative measures when the patient has not responded to medical therapy per EMS Agency Prehospital Determination of Death/ Do Not Resuscitate (DNR)/End of Life Care Policy # 125
- “MCI Level I” – When a MCI is declared with 5 to 10 patients
- “MCI Level II” – When a MCI is declared with 11 or more patients

IV. POLICY

- A. Common communication format will be used, with both parties utilizing professional communication etiquette, including; identifying who they are and with whom they are speaking with each transmission.
- B. Use acceptable language (plain text) and avoid using “10” codes, etc.
- C. EMS personnel will identify themselves with their identification number and transporting unit number when making contact with a base hospital.
- D. MICNs will confirm the base hospital name and state their identification number when receiving the base station report.
- E. Once contacted, the SLO Base Hospital, if not receiving the patient, must notify the receiving hospital of the incoming patient and provide that hospital with the prehospital care patient information.

V. PROCEDURE

- A. When initiating a Base Hospital contact include:
 - 1. Type of Base Hospital contact i.e. “Notification”, “Medication Request” “Step 1 Trauma Alert”, etc.
 - 2. Transport Code
 - 3. Estimated time of arrival (ETA)
- B. “*NOTIFICATIONS*” – contact the intended Receiving Base Hospital
 - 1. Age, gender
 - 2. Brief description of the chief complaint/mechanism of injury
 - 3. Protocol followed
 - 4. Base Hospital should refrain from further questioning
- C. “*ALERTS*”- contact the appropriate intended receiving hospital
Include the information above and the following information as it pertains to the specific call:
 - a. Vital Signs
 - b. Medications and procedures
 - c. Response to treatments
 - d. Pertinent positives and negatives
 - 1. “*STEMI ALERT*” – Contact intended receiving STEMI base (FHMC or MMC) for:
 - a. Patients positive for STEMI per EMS Agency Policy STEMI Triage and Destination #152
 - 2. “*TRAUMA ALERT*” – Contact intended receiving Trauma Center (SVRMC or MMC) for:
 - a. Patients meeting Step 1 or 2 of the trauma triage criteria per EMS Agency Trauma Patient Triage and Destination Policy #153

- b. Additional MIVT information to be included in the radio report
 1. M – Mechanism of injury
 2. I – Injuries identified and/or chief complaint
 3. V – Vital signs and symptoms:
 - (a) Blood pressure – communicate ANY episode of hypotension (BP < 90) that occurs at any time during the call
 - (b) Pulse rate
 - (c) Respiratory rate
 - (d) Glasgow Coma Scale (GCS)
 4. T – Treatments
3. “*STROKE ALERT*” – Contact intended Receiving Base Hospital for:
 - a. Patients meeting Stroke Alert criteria per EMS Agency Policy Suspected Stroke/TIA # 621
 - b. Include additional stroke specific information in the report:
 1. Any *BEFAST* information that was positive:
 - (a) B - Balance (changes or problems from normal)
 - (b) E - Eyes (sudden change in vision or double vision)
 - (c) F - Facial droop
 - (d) A - Arm drift
 - (e) S - Speech abnormalities
 - (f) T - Time last seen normal (not time of symptoms noticed)
- D. “*ROSC*” (Return of Spontaneous Circulation) – Contact nearest STEMI BASE HOSPITAL (FHMC or MMC) for:
 - a. Patients with ROSC per EMS Agency Pulseless Cardiac Arrest (Atraumatic) Policy #641
- E. “*MEDICATION REQUEST*” - contact the SLO Receiving Base Hospital
- F. “*CONSULTATION*” - contact the SLO Receiving Base Hospital except as noted below:
 1. *DESTINATION CONSULTATION* - contact appropriate receiving SLO BASE HOSPITAL or SPECIALITY CARE CENTER
 - a. *TRAUMA DESTINATION CONSULT* - Contact the SLO Trauma Center (SVRMC) per Trauma Triage and Destination Policy #153
 1. Use MIVT format.
 2. ETA to destination options
 - b. *12-LEAD CONSULT* – Contact the SLO STEMI Base Hospital (FHMC) per STEMI Triage and Destination Policy #152
- G. *PHYSICIAN CONSULTATION* – contact appropriate SLO Base Hospital or Specialty Care Center

- H. "AMA" – contact the SLO Receiving Base Hospital per AMA Policy #203
- I. "TERMINATION"- refer to Prehospital Determination of Death/ Do Not Resuscitate (DNR)/End of Life Care Policy #125
 - a. Adult Atraumatic Arrest of Cardiac Origin - contact the SLO STEMI Base Hospital (FHMC) if the patient has not responded to resuscitative measures
 - b. Traumatic Arrest – contact the SLO Trauma Center (SVRMC)
 - c. All other terminations - contact closest receiving SLO base hospital
- J. "MCI Level I and Level II" – initiate an MCI notification per EMS Agency MCI Policy #210

VI. AUTHORITY

- Health and Safety Code, Division 2.5, Sections 1798 &1798

VII. ATTACHMENTS

- A. Base Hospital notification list

POLICY #152: STEMI TRIAGE AND DESTINATION (Telemetry Trial)

I. PURPOSE

- A. To establish guidelines for Emergency Medical Services (EMS) personnel to identify and transport patients with acute ST-segment Elevation Myocardial Infarction (STEMI) who could benefit from the rapid response and specialized services of a STEMI Receiving Center (SRC).

II. SCOPE

- A. This policy applies to adult patients with chest pain or other symptoms indicative of Acute Coronary Syndrome (ACS) with a 12-lead ECG demonstrating elevated ST-segments indicating a specific type of myocardial infarction.

III. DEFINITIONS/GLOSSARY

- Percutaneous Coronary Intervention (PCI): A broad group of percutaneous techniques utilized for the diagnosis and treatment of patients with STEMI.
- Return of Spontaneous Circulation (ROSC): The return of a palpable pulse after cardiac arrest.
- STEMI: An acute myocardial infarction that generates a specific type of ST-segment elevation on a 12-lead ECG.
- “STEMI Alert”: A report from EMS personnel that notifies a STEMI Receiving Center as early as possible that a patient has a specific computer-interpreted prehospital 12-lead ECG indicating a STEMI, allowing the SRC to initiate the internal procedures to provide appropriate and rapid treatment interventions.
- “12-Lead Consultation” – Contact SLO County STEMI Receiving Hospital (French Hospital Medical Center) when the patient does not meet a STEMI ALERT Criteria and transmitting the 12-lead ECG would benefit the consultation.
- STEMI Receiving Center (SRC): A facility licensed for cardiac catheterization laboratory and recognized as an SRC by the County of San Luis Obispo Emergency Medical Services Agency (EMS Agency).
- STEMI Referral Hospital (SRH): An acute care hospital in the County of San Luis Obispo (SLO) that is not designated as a STEMI Receiving Center.
- SLO STEMI Receiving Center (SLO SRC) – refers to the STEMI Receiving Center in San Luis Obispo County (French Hospital Medical Center) to be used for medical direction and or destination decisions.

IV. POLICY

- A. Determine if patient condition meets STEMI Patient Triage Criteria.
- B. “STEMI Alert” notifications - contact the nearest SRC (**French or Marian**) as soon as possible

- C. "12- Lead ECG Consultations" and/or "Destination" consultations - contact the SLO SRC (**French**)

V. PROCEDURE

- A. Determine if patient condition meets STEMI Patient Triage criteria:

1. Patients meeting EMS Agency Protocol Adult Chest Pain #640: or with indications for 12-lead ECG per EMS Agency 12-lead ECG Policy #707 with computerized interpretation of an accurately performed pre-hospital 12-lead ECG indicating *****STEMI***** (or equivalent computerized interpretation).

- B. Destination and Notification

1. Transport to nearest SRC (French or Marian) or as directed by a SLO SRC (French).

a. Patients meeting the STEMI Patient Triage Criteria are considered a "STEMI Alert" and must be transported to the nearest SRC.

b. Patients with ROSC regardless of 12-lead ECG reading

c. The SRC Emergency Department must be notified as early as possible of the incoming "STEMI Alert" and /or ROSC to activate the SRC's internal STEMI/PCI system.

2. An Emergency Department physician at the SLO SRC (**French**) must be consulted to determine patient destination in the following:

a. "STEMI Alert":

(1) The patient is unstable with a SBP<90mmHg and transport time to the SRC would add more than 30 minutes to the transport time to a STEMI Referral Hospital (SRH).

(2) Patient is uncooperative with the procedure and/or expresses a personal preference for destination other than the SRC; see EMS Agency Policy #203: Patient Refusal of Treatment or Transport.

b. Questionable 12-Lead ECG

c. Patients who, while enroute, develop unmanageable airway or cardiac arrest without ROSC must be transported to the closest hospital, with the transporting provider notifying the intended SRC of the change in destination.

d. When a patient is diverted to another hospital the SLO SRC (French) shall notify the receiving hospital and provide information regarding the destination decision.

- C. Contact the nearest SRC as soon as possible with "STEMI Alert" Notification

1. For patients with identified STEMI, destination must be promptly determined after the prehospital 12-lead ECG is completed and read. The SRC must be notified as soon as possible.

2. The "STEMI Alert" notification must contain the following information:

a. Call identified as a "STEMI Alert".

- b. ETA to SRC.
 - c. Patient age and gender.
 - d. Confirmation of ECG reading and whether it appears to be free of significant artifact.
 - e. Confirmation that the appropriate treatment protocol is being followed.
 - f. Results of any medications given.
 - g. Additional information if required:
 - (1) Any confusion regarding chief complaint or treatment.
 - (2) Destination decision assistance.
3. ECG Transmission:
- a. With a STEMI Alert or ROSC and the equipment is available, the ALS provider shall transmit a 12-lead ECG to a SRC (French or Marian);
 - (1) Notify the SRC that you are capable of 12-lead ECG transmission and that you have transmitted, or are about to transmit the 12-lead ECG previously obtained.
 - (2) Include on the transmitted 12-lead ECG the patient age and sex required for the ECG monitor to accomplish its interpretation and be used as an identifier for the SRC.
 - (3) Do not include the name of the patient with the transmission of the 12-lead ECG.
 - b. When “Consulting” with a SLO SRC (French) and transmitting the 12-lead ECG would benefit the consultation:
 - (1) Notify the SLO SRC (French) that you are capable of 12-lead ECG transmission and that you have transmitted, or are about to transmit the 12-lead ECG.
 - (2) Include on the transmitted 12-lead ECG the patient age and sex required for the ECG monitor to accomplish its interpretation and be used as an identifier for the SRC
 - (3) Do not include the name of the patient with the transmission of the 12-lead ECG.
4. Documentation
- a. Findings of prehospital 12-lead ECGs, the time of the “STEMI Alert,” and patient identification must be documented on the 12-lead ECG and the prehospital PCR.
 - b. Two copies of the prehospital 12-lead ECG (multiple if performed) must be made, with one delivered to the receiving hospital responsible for the continued care of the patient, and one included with the prehospital PCR.

VI. AUTHORITY

- California Health and Safety Code, Division 2.5, Sections 1797.67, 1798, 1798.170.

POLICY #400: STEMI RECEIVING CENTER DESIGNATION

I. PURPOSE

- A. To define requirements for designation as a STEMI Receiving Center in the County of San Luis Obispo (SLO).

II. SCOPE

- A. This policy applies to all hospitals in the County of SLO seeking designation as a STEMI Receiving Center.

III. DEFINITIONS/GLOSSARY

- Percutaneous Coronary Intervention (PCI): A broad group of percutaneous techniques utilized for the diagnosis and treatment of patients with STEMI.
- STEMI: An acute myocardial infarction that generates a specific type of ST-segment elevation on a 12-lead ECG.
- “STEMI Alert”: A report from prehospital personnel that notifies a STEMI Receiving Center as early as possible that a patient has a specific computer-interpreted prehospital 12-lead ECG indicating a STEMI, allowing the SRC to initiate the internal procedures to provide appropriate and rapid treatment interventions.
- STEMI Receiving Center (SRC): A facility licensed for cardiac catheterization laboratory and approved to operate as an SRC by the County of SLO Emergency Medical Services Agency (EMS Agency).
- STEMI Referral Hospital (SRH): An acute care hospital in the County of SLO that is not designated as a STEMI Receiving Center.

IV. POLICY

- A. To be designated as a SRC in the County of SLO, a hospital must meet the following requirements:
 1. Possess current California licensure as an acute care facility providing Basic Emergency Medical Services.
 2. Hold current status as a Base Hospital in the County of SLO.
 3. Have the ability to enter into a written agreement with the County of SLO identifying SRC and County roles and responsibilities.
 4. Agree to accept all EMS patients meeting STEMI patient triage criteria and all “STEMI Alert” patients transferred from other County of SLO hospitals (except when on diversion due to a declared hospital in-house internal disaster), and provide a plan for the triage and treatment of simultaneously presenting STEMI patients regardless of ICU/CCU or ED saturation status.

5. Meet SRC designation requirements as defined in the County of SLO EMS Agency SRC Designation Criteria Application and Evaluation matrix (Attachment A) which includes:
 - a. Hospital Services including:
 - (1) Special permit for cardiac catheterization laboratory pursuant to the provisions of Title 22, Division 5, of the California Code of Regulations.
 - (2) Intra-aortic balloon pump capability with necessary staff available 24 hours a day 7 days a week 365 days a year.
 - (3) California permit for cardiovascular surgery or a written plan for emergency transport to a facility with cardiovascular surgery available with timely (within 1 hour) transfer steps and agreements.
 - (4) Continuous availability of PCI resources 24 hours a day 7 days a week 365 days a year.
 - (5) Dedicated priority "Specialty Care" phone line available 24 hours a day 7 days a week 365 days a year to be used for pre-hospital communication regarding "STEMI Alert" patients and for notifications of "STEMI Alert" transfers from other hospitals.
 - b. Hospital Personnel including:
 - (1) SRC Medical Director who must be board-certified in Internal Medicine with a sub-specialty in cardiovascular disease.
 - (2) SRC Program Manager who must be an RN.
 - (3) Cardiac Catheterization Lab Manager/Coordinator who must be an RN if not directly reporting to the SRC Program Manager.
 - (4) A daily roster of interventional cardiologists who must:
 - (a) Be available and present in the SRC within 30 minutes of the activation of the SRC's internal STEMI/PCI system.
 - (b) Have privileges in PCI.
 - (5) A daily roster of cardiovascular surgeons who must be available and present in the SRC within 30 minutes of documented request, or SRCs without cardiovascular surgery capability must have written transfer guidelines and a plan for emergency transfer within 1 hour if medically necessary.
 - (6) Other personnel who must be promptly available and present in the SRC within 30 minutes of the activation of the SRC's internal STEMI/PCI system including:
 - (a) Appropriate cardiac catheterization nursing and support personnel.
 - (b) RN or CV Perfusionist trained in intra-aortic balloon pump management.
 - c. Clinical Requirements including:

- (1) ACC/AHA guidelines for activity levels of facilities and practitioners for both primary PCI and total PCI events are adopted herein and may require period updating:
 - (a) Interventionalist must perform a minimum of 11 primary PCI procedures and 75 PCI procedures per year.
 - (b) SRC must perform a minimum of 36 primary PCI procedures and 200 total PCI procedures annually.
 - (2) Performance (timeliness) and outcome measures will be assessed initially in the survey process, and will be monitored closely on an ongoing basis by the SRC and the EMS Agency through a Performance Improvement Program for EMS Patients (Item 5.e below).
- d. Policies and Procedures including:
- (1) Cardiac interventionalist activation
 - (2) Cardiac catheterization lab team activation
 - (3) STEMI contingency plans for personnel and equipment
 - (4) Coronary angiography
 - (5) PCI and use of fibrinolytics
 - (6) Inter-facility transfer policies/protocols for STEMI
 - (7) Transfer agreements for cardiac surgery, as appropriate
 - (8) STEMI patient triage
- e. Performance Improvement Program for EMS Patients including:
- (1) An SRC must provide two representatives to participate in the EMS Agency STEMI Quality Improvement (QI) Committee:
 - (a) A QI representative
 - (b) A cardiologist
 - (2) An SRC will hold routine multidisciplinary meetings that must include representatives from SRHs, County of SLO prehospital providers and the EMS Agency.
 - (3) An SRC must implement a written internal SRC QI plan/program with an internal review process that includes:
 - (a) Door-to Balloon times
 - (b) Death rate (within 30 days, related to procedure regardless of mechanism)
 - (c) Compliance
 - (d) Emergency CABG rate (result of procedure failure or complication)
 - (e) Vascular complications (access site, transfusion, coronary perforation or operative intervention required)
 - (f) Cerebrovascular accident rate (peri-procedure)
 - (g) Post-procedure nephrotoxicity (increase in serum

creatinine of >0.5)

(h) Sentinel event, system and organization issue review and resolution processes

(4) A SRC must participate in prehospital STEMI-related educational activities as may be required by the EMS Agency

f. Data Collection, Submission and Analysis including:

(1) A SRC must participate in the National Cardiac Data Registry (NCDR).

(2) A SRC must participate in EMS Agency data collection as defined in Attachment B: Data Requirements for STEMI Receiving Centers.

B. A hospital may lose its designation as an SRC for one or more of the following reasons:

1. Inability to meet and maintain SRC Designation Criteria
2. Failure to provide required data
3. Failure to participate in STEMI System QI activities
4. Other criteria as defined and reviewed by the EMS Agency STEMI QI Committee

V. PROCEDURE

- A. To apply for designation as a SRC in the County of SLO, a Base Hospital must pay the initial application fee and submit an application for designation to the EMS Agency.
- B. SRC designation may be awarded to a hospital following a satisfactory review of written documentation, an initial site survey by EMS Agency staff and a cardiologist from out of the area, and designation approval by the EMS Agency.
- C. The SRC designation period will coincide with the period covered in a written agreement between the SRC and the County of San Luis Obispo.

VI. AUTHORITY

- Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2
- California Code of Regulations, Title 22, Section 100175

VII. ATTACHMENTS

- A. Application and Evaluation Matrix
- B. Data Requirements for STEMI Receiving Center

ADULT CARDIAC CHEST PAIN/ACUTE CORONARY SYNDROME**FOR USE IN ADULT PATIENTS****BLS**

- Universal Protocol #601 Pulse Oximetry
 - O₂ administration per Airway Management Protocol #602
- **Aspirin** 162 mg PO (non-enteric coated) chewable tablets
- May assist with administration of patient's prescribed **Nitroglycerin** with SBP ≥ 100 mmHg

ALS Standing Orders

- Obtain 12-lead ECG early
- **Nitroglycerin** 0.4 mg SL tablet or spray
 - Repeat every 5 min
- **Nitroglycerin Paste** 1 inch (1 Gm) may be considered after initial dose(s) of SL Nitroglycerin
- **HOLD NITROGLYCERIN** and consult base if:
 - SBP is trending towards or drops < 100 mmHg or in the presence of other signs/symptoms of hemodynamic instability
 - Evidence of Right Ventricular Infarction (RVI) – see Notes

MODERATE or SEVERE PAIN

- **Refractory to Nitroglycerin**
 - **Fentanyl** 25-50 mcg SLOW IV (over 1 min), titrated to pain improvement, maintain SBP ≥ 100 mmHg
 - May repeat after 5 min if needed (not to exceed 200 mcg total)

If difficulty obtaining IV

- **Fentanyl** 50-100 mcg IM/IN (use 1 mcg/kg as guideline)
 - May repeat after 15 min if needed (not to exceed 200 mcg total)

Base Hospital Orders Only

- **Nitroglycerin** with
 - Significant decrease in SBP after administration
 - Patients taking erectile dysfunction medications
 - Atrial fibrillation with RVR
 - Evidence of RVI
- Additional **Fentanyl**
 - **Persistent hypotension**
- **Normal Saline** bolus up to 500 mL
- **Push-Dose Epinephrine 10 mcg/mL** 1mL IV/IO every 1-3 min
 - Repeat as needed to maintain SBP >90 mmHg
 - See notes for mixing instructions
- OR**
- **Epinephrine Drip** start at 10 mcg/min IV/IO infusion
 - Consider for extended transport
 - See formulary for mixing instructions
- As needed

Notes

- Acute Coronary Syndrome – a group of conditions resulting from acute myocardial ischemia – including: chest/upper body discomfort, shortness of breath, nausea/vomiting, or diaphoresis
- Evidence for RVI: All inferior STEMI should be evaluated for ST elevation in V4R

- Atrial fibrillation with RVR is atrial fibrillation with a ventricular rate > 100
- Early notification of the SRC with "STEMI Alert" with a 12-lead ECG reading of ***Acute MI Suspected*** or equivalent based on monitor type.
- "STEMI Alerts" consider a secondary IV with NS lock to assist the Cath Lab in tubing changes
- **Mixing Push-Dose Epinephrine 10 mcg/mL (1:100,000): Mix 9 mL of Normal Saline with 1 mL of Cardiac Epinephrine 1:10,000 (0.1 mg/mL), mix well**

**County of San Luis Obispo
Emergency Medical Services Agency**

Continuous Quality Improvement Plan

April 2023

Table of Contents

1. Introduction	3
Vision Statement	
Philosophical Statement of Professional Ethics and Values	
Authority	
Purpose	
2. Structure and Organization	5
EMS Agency Organizational Chart	
CQI Committee Membership	
CQI Process	
CQI Procedures	
CQI Review Process	
Committee membership	
Responsibilities of the CQI Committee	
Flow of Information	
Interagency Responsibilities	
County of SLO EMS Agency	
Base Hospitals	
Emergency Medical Dispatch	
First Responders - BLS	
ALS Responder	
3. Data Collection, Evaluation and Reporting	13
4. Action to Improve	14
5. Training and Education.....	17
6. Annual Update	17
7. Attachments	18

Attachments

- Policy 100 - Continuous Quality Improvement Policy
- Attachment A – CQI Plan
- Attachment B - CQI Process Algorithm
- Attachment C - Opportunity for Improvement Form
- Trauma QI Indicators
- Tri-TAC Dashboard
- STEMI CQI Indicators
- Cardiac Arrest Indicators

1. INTRODUCTION

The County of San Luis Obispo EMS Division is comprised of the Emergency Medical Services (EMS) Agency and the Public Health Emergency Preparedness Program. As a division of the Public Health Department, the County of SLO EMS Agency provides system guidance and oversight through pre-hospital provider and public comment-driven policy development and a comprehensive quality improvement program. We support medical disaster preparedness through the disaster response planning process, and support the appropriate use of 911, CPR, AEDs and First Aid through public education. We ensure excellent pre-hospital personnel through training, certification, accreditation, authorization and continuing education program review. We participate with the Public Health Department, in the management and coordination of public health emergencies, such as: Natural Disasters, Pandemic Flu and Bioterrorism incidents.

The County of San Luis Obispo is both geographically and demographically diverse. The county covers 3,200 square miles and includes urban areas along the Highway 101 corridor, coastal recreational areas, and remote areas on the eastern side of the county. EMS providers serve approximately 300,000 residents which can fluctuate at various times of the year with the Cal Poly student and the tourism populations. The EMS system responds to approximately 21,000 calls a year.

Vision

The EMS Agency is dedicated to the assurance of optimal prehospital care. Our goal is to continuously improve the quality of the emergency medical care delivery system.

The EMS Agency operates on three basic principles:

- Foster growth, continuous improvement, and professional development of our staff and members of the EMS community.
- Promote and utilize innovative approaches to prehospital care.
- Support a cooperative and collaborative working environment.

As a public benefit agency, we are responsive and responsible to the community. We value and encourage the individual contribution in the achievement of our goals.

Philosophical Statement of Professional Ethics and Values

As an agency dedicated to the assurance of optimal prehospital care in the County of San Luis Obispo, the EMS Agency has an obligation to ensure the emergency medical services community maintains the highest possible standards for professional medical treatment of the public. To this end, the EMS Agency supports the need for the emergency medical services community to demand of its employees the highest expectation for professional ethics and personal integrity. This extends from personal conduct as a representative of the emergency medical services community, to the emergency medical assistance provided through the course of their employment.

Recognizing the public's expectation for professional and ethical conduct of those in the medical services field, the EMS Agency will continue to assist the emergency medical services community through its philosophic support of professional ethics and values. Moreover, the EMS Agency will maintain an expectation of professional and ethical conduct of those members of the emergency medical services community whom the Agency supports through its program coordination, including certification, training, accreditation and continuing education

Authority

On January 1, 2006 the California Emergency Medical Services Authority (EMSA) implemented regulations related to quality improvement for emergency medical services throughout the state.

This program has been developed in accordance with California Code of Regulations Title 22, Chapter 12, Article 4 and utilizes the guidelines established by the EMSA documents # 163 "EMS System Quality Improvement Indicators", #166 "Emergency Medical Systems Quality Improvement Program Model Guidelines", the EMS Core Quality Measures Document and the guidelines established by the Emergency Medical Services Administrators Association of California (EMSAAC).

As defined in Title 22 "Emergency Medical Services Quality Improvement Program" or EMS CQI Program are methods of evaluation that are composed of structure, process and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate the causes, and take steps to correct the process and recognize excellence in performance and delivery of care.

Purpose

The purpose of the EMS Agency Continuous Quality Improvement (CQI) Program is to establish a system-wide process for evaluating and improving the quality of pre-hospital care in the County of San Luis Obispo. This plan is designed with the intent to facilitate a consistent ability to attain key EMS quality objectives with the input and cooperation of the providers and customers of those served. The objectives include:

- Assuring that the level of patient care is consistent with the policies and field treatment guidelines
- Evaluation and improvements of system-wide performance
- Assignment of responsibility for monitoring and evaluating activities
- Delineation of scope of care
- Identification of important aspects of pre-hospital care
- Collection, analysis and dissemination of data from dispatch to discharge
- Promotion of appropriate utilization of EMS resources and services
- Cultivate standardization of the quality improvement process.

Fundamental to the program is the understanding that it will be developed over time and allows for individual variances based on available resources.

There is a focus on quality improvement of the overall local EMS system and how it interfaces with the statewide EMS system. Nine (9) focus areas identified in Section III and Appendix E of the Emergency Medical Services System Quality Improvement Program shall include but not be limited to:

- Personnel
- Equipment and Supplies
- Documentation
- Clinical Care and Patient Outcome
- Skills Maintenance/ Competency
- Transportation /Facilities
- Public Education and Prevention
- Risk Management

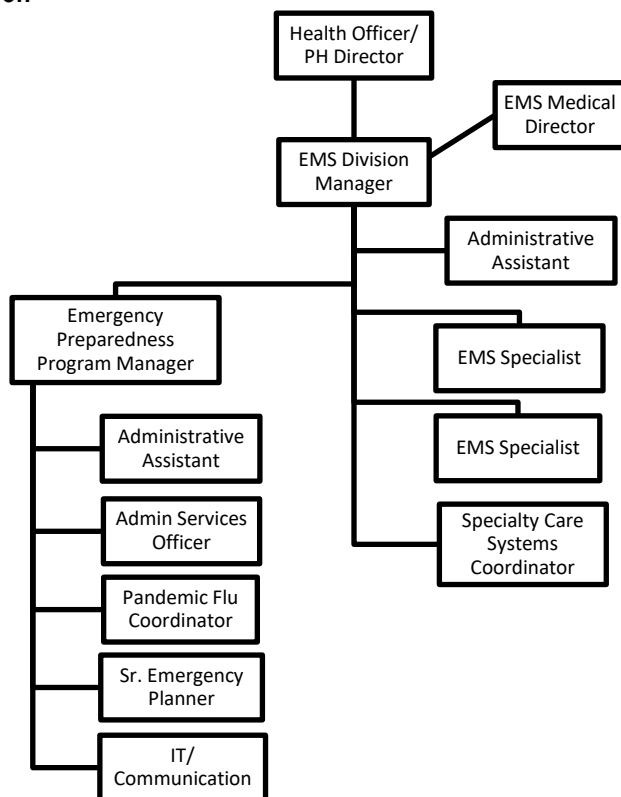
1. STRUCTURE AD ORGANIZATION

The County of San Luis Obispo Emergency Medical Services, a division of the County of San Luis Obispo Public Health Department, oversees a system of services organized to provide rapid response to serious medical emergencies, including immediate medical care and patient transport to definitive care in an appropriate hospital setting. The County the Board of Supervisors designated the Public Health Department as the Local EMS Agency (LEMSA). The County Health Officer/Public Health Department Director thus serves as the overall EMS Agency director, with the EMS Division Manager serving as the EMS Agency Administrator, and representative on EMSAAC. The Health Officer, who is appointed by the Board of Supervisors, reports administratively to the Health Agency Director, who in turn reports to the County Administrator and the Board of Supervisors. The Board is comprised of five elected Supervisors, each representing a distinct area of the County.

The EMS Medical Director oversees medical components of the EMS System and is responsible for prehospital medical control within the system. This includes protocol development, policies, procedures, equipment approval, medical dispatch, base station protocols, and continuous quality performance.

The Emergency Medical Care Committee (EMCC) is responsible for vetting local policies and procedures prior to implementation and acts as an advisory committee to the EMS Agency. The EMCC is a diverse board comprised of members representing the entire EMS system including: County Medical Association Physicians, Emergency Medicine Physicians, City Government, Consumers ,EMS Field Personnel, Sheriff's Department, Public EMS Providers, Hospitals, Prehospital Transport Providers, and Mobile Intensive Care Nurses.

EMS Agency Organization



EMCC Membership

Representing	Number of Representatives	Appointing Authority
Prehospital Provider	1	Ambulance providers
Physicians	1	County Medical Society
City Government	1	City Managers
EMS Field Personnel	1	County Health Officer
Public Providers	1	County Fire Chiefs Association
Sheriff's Department	1	County Sheriff
Hospitals	1	Hospital Administrators
Emergency Medical Physician	1	County Health Officer
MICN or ED Nurse Manager	1	County Health Officer
Consumer Representative	2	County Health Officer

CQI Process

Quality improvement is a dynamic process that provides feedback and performance data on the EMS system. This information is based on indicators that reflect standards of care in the community, state and nation.

- Define a problem
- Measure data to validate and quantify the problem
- Analyze the data and indicators of the problem to determine the cause
- Develop and implement a plan of action through education or policy/procedure revision
- Measure and monitor results, providing feedback
- Continue monitoring to assure compliance

CQI Committee Procedures

- The EMS Medical Director shall oversee the CQI program
- The EMS CQI Coordinator shall ensure the coordination of the committee programs and activities
- The EMS CQI Committee shall meet on regular intervals
- All committee members shall sign a confidentially statement
- The EMS Agency shall maintain records in a confidential manner during the review process and shall destroy identifiable patient information directly following the review process

In addition to the EMS Agency CQI Committee, the following identifies a number of collaborative committees established to review specific areas of Quality Improvement. Each committee has at least one EMS Agency representative who assists in identifying the EMS system quality indicators that are reviewed.

- Trauma Committee
- STEMI Committee
- Regional Trauma Care Committee (RTCC)
- Tri-county Trauma Committee (Tri-TAC)
- Ambulance Performance and Operations Committee (APOC)
- County Fire Chiefs Association
- EMDAC/ EMSAAC
- Field Training Officer (FTO) Committee

CQI Committee Membership

The organizational structure of the EMS Agency CQI Committee shall be multidisciplinary and representative of the participating agencies. The EMS Agency is the receiving agency of the information collected by the participating agencies and shall provide guidance to the CQI Committee. The CQI Committee shall be an advisory body to the EMS Medical Director

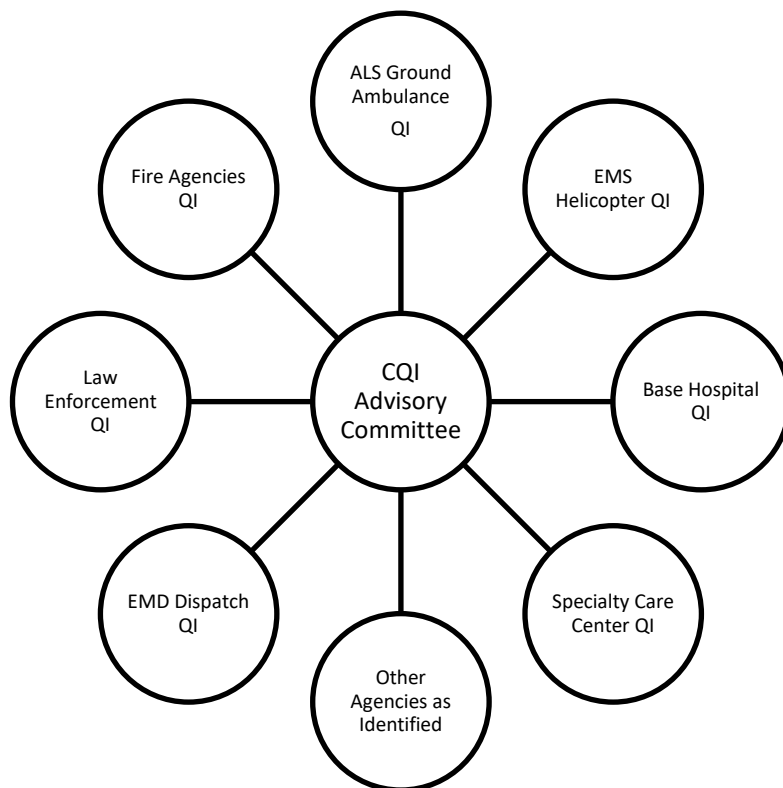
Agency	Number of Representatives	Appointing Authority
ALS Ground Ambulance Provider	1	EMCC Ambulance Provider Representative
EMS Helicopter - Public	1	EMCC/Operations Committee Representative
EMS Helicopter - Private	1	EMCC/Operations Committee Representative
Fire Service BLS	1	EMCC/Operations Committee - Fire Chiefs Assoc. Representative
Fire Service ALS	1	EMCC/Operations Committee - Fire Chiefs Assoc. Representative
Law Enforcement	1	EMCC/Operations Committee Representative County Criminal Justice Admin. Assoc.
EMS Dispatch	1	EMCC/County Sheriff Dept. Operations Committee Representative
Emergency Physician	1	EMCC Emergency Physician Representative
Base Hospital/MICN	1	EMCC -MICN Representative
Specialty Care Center	1	As Approved e.g. Trauma, STEMI Center

Responsibilities of the EMS CQI Committee

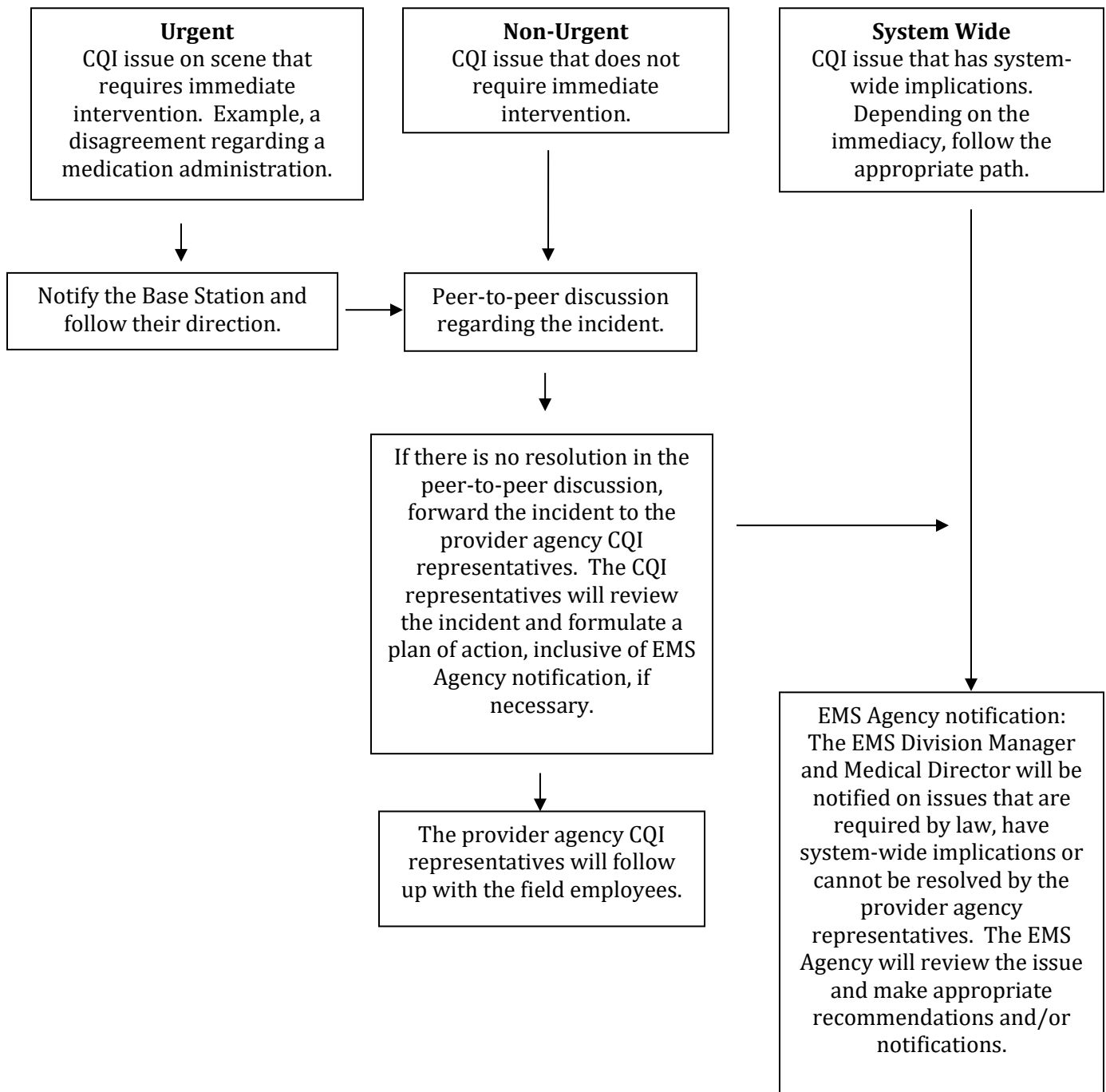
California Code of Regulations Title 22, Division 9, Chapter 12, Section 100400

- Develop and implement a system-wide EMS CQI program to include indicators addressing the nine (6) State ECQIP focus areas
- Annual evaluation of the system-wide EMS CQI Program for effectiveness and outcomes
- Provide for continuous input and feedback with EMS Provider groups
- Ensure availability of training and in-service education for EMS personnel
- Develop in cooperation with appropriate agencies/personnel a performance improvement plan to address identified improvement needs and provide technical and medical oversight for system and clinical issues
- Publish a summary of activity and plan implementation for periodic review
- Ensure that their respective agencies monitors, collects data on and evaluates information on the locally identified indicators

**CQI Committee
Organizational Structure
CQI Representatives from the Participating Agencies**

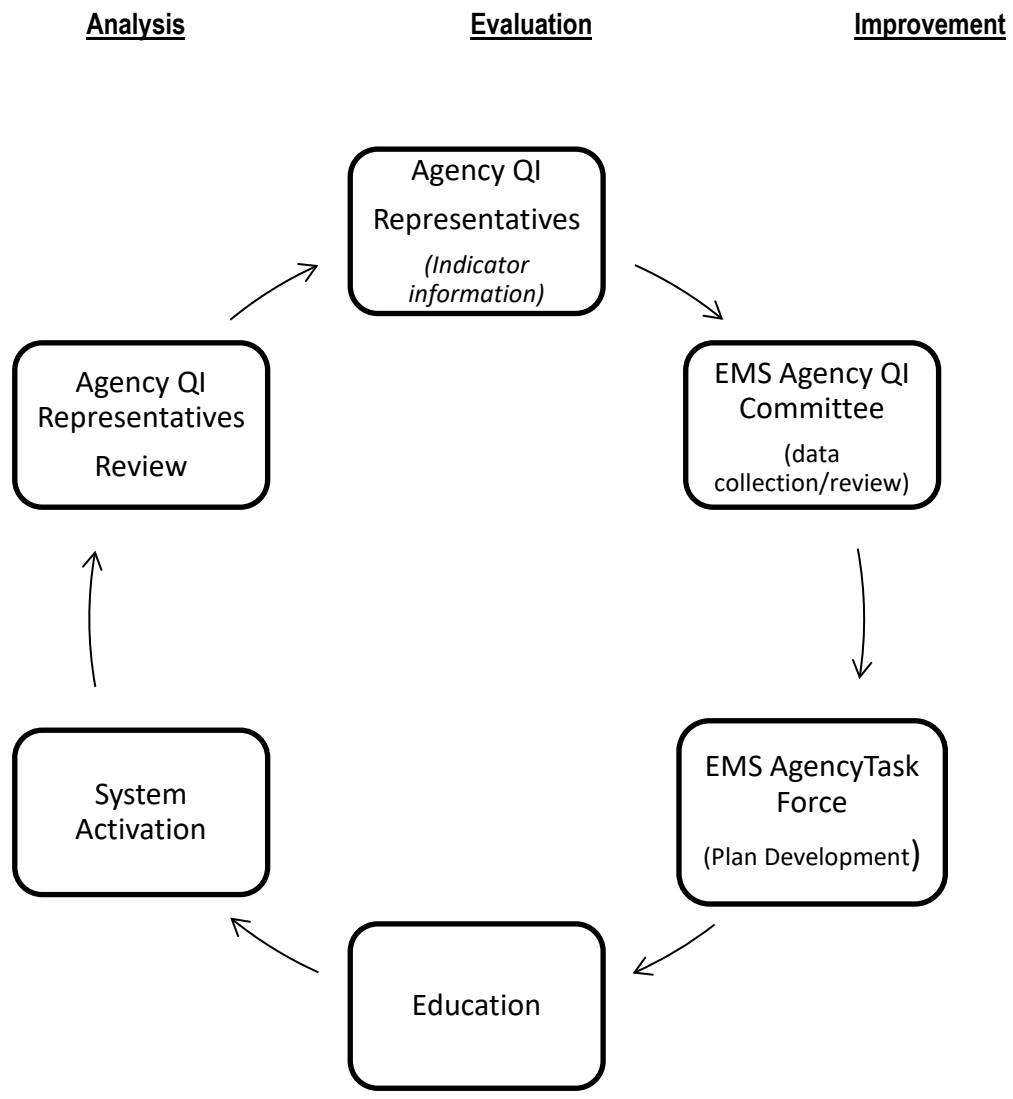


CQI Review Process:



- Depending on the issue, the CQI representative(s) may contact the EMS Agency as soon as necessary.

Flow of Information and Activity



Interagency CQI Responsibilities

Interagency CQI responsibilities listed below are based upon Title 22 California Code of regulations Chapter 12 EMS System Quality Improvement (EMSA Policy QI Program Guidelines #101)

County of SLO EMS Agency

- Provide a Medical Director to oversee the EMS system medical care
- Provide staff as needed to provide the coordination of the EMS CQI program
- Cooperate with the State EMSA with statewide CQI programs
- Provide for system-wide direction through the establishment of policies, procedures and guidelines
- Designate EMS Base Hospitals to provide on-line consultation and triage
- Provide for and coordinate retrospective evaluation of EMS system performance – both clinical and operational. Determine educational or other needs to improve system performance
- Credential and maintain records for EMT I, EMT P, MICN and EMD providers
- Approve primary and continuing education programs
- Conduct periodic review of policies, procedures and treatment guidelines.
- Ensure that all EMS personnel are notified of system changes
- Develop and distribute EMS System Plans/Updates, Hospital Resource guides and any other system reports as is appropriate
- Collect system data to evaluate system performance
- Process and review all incident review requests to assure evaluation and/or investigation
- Provide other contract compliance activities as warranted

Base Hospital Responsibilities

- Designate an Emergency Department Physician as a base hospital Medical Director
- Designate a Base Hospital MICN Liaison/CQI Nurse
- Assure the presence of a currently certified MICN or Base Hospital Physician in the ED at all times for radio consultation to the pre-hospital personnel
- Assure staff, MICNs and Base Physicians are familiar with EMS policies, procedures and treatment protocols
- Implement a Base Hospital CQI program to include:
 - Evaluation and education of performance
 - Assist pre-hospital providers and the EMS Agency in evaluating and improving EMS patient care
- Develop and implement CQI programs consistent with State regulations and local guidelines
- Provide for follow up on base-directed calls
- Provide education, in coordination with ALS Provider, through formal and informal classes
- Provide clinical setting for maintenance and remediation of skills, as available
- Provide statistical information for monitoring and evaluating EMS system as needed
- Assist in the coordination, training, and evaluation of new procedures and pilot programs
- Participate in EMS Agency CQI activities

Emergency Medical Dispatch Agency

- Provide dispatchers trained and certified as EMD
- Assure dispatchers follow EMD policies and procedures
- Establish a procedure to implement updates and system changes
- Assign a liaison/CQI representative to interface with EMS Agency
- Assist the EMS Agency in evaluating and improving EMS services
- Use EMD formal CQI plan to evaluate and improve performance
- Provide CQI summary and protocol compliance according to policy
- Participate in EMSA CQI activities

First Responder Agencies

- Provide first responder services with staff trained to minimum of first aid, CPR and AED
- Assure personnel are familiar with EMS policies and procedures
- Assign a liaison/CQI representative to interface with EMS Agency
- Establish a procedure to update agency personnel of EMS system changes and updates
- Participate in EMS Agency CQI and training activities
- Provide staff oversight, monitoring, data collection and feedback
- Submit all pre-hospital patient data to EMS Agency following AED use
- Monitor response times and identify ways to improve if deemed necessary

ALS /BLS Responding Agencies

- Assure EMS personnel are currently and appropriately credentialed per EMSA policy
- Assign a liaison/CQI representative to interface with EMS Agency
- Assure personnel are familiar with EMS policies and procedures
- Establish a procedure to update agency personnel of EMS system changes and updates
- Develop, implement and participate in CQI programs consistent with pertinent State regulations and local guidelines
- Provide the EMS Agency with data necessary for monitoring and evaluating the EMS system
- Provide dispatch data and clinical data as specified in County agreements
- Document accurately patient care information for each patient contact on an EMS Agency-approved electronic/paper patient care report
- Monitor and evaluate patient care issues, response times and other pertinent issues. Identify areas of improvement and steps to improve and re-evaluate
- Participate in EMS Agency CQI programs

Air Ambulance Agencies

- Assign a liaison/CQI representative to interface with EMS Agency
- Assure EMS personnel and pilots are currently and appropriately credentialed at all times
- Establish a procedure to update agency personnel of EMS system changes and updates
- Develop, implement and participate in CQI programs consistent with pertinent State regulations and local guidelines
- Provide the EMS Agency with data necessary for monitoring and evaluating the EMS system
- Document accurately patient care information for each patient contact on an EMS Agency-approved electronic/paper patient care report

- Monitor and evaluate patient care issues, response times and other pertinent issues. Identify areas of improvement and steps to improve and re-evaluate
- Participate in EMS Agency CQI programs

3. DATA COLLECTION , EVALUATION of INDICATORS AND REPORTING

Purpose: in order to effectively evaluate the EMS system the data must be valid, reliable and standardized.

Data Collection Programs:

Various data collection systems currently exist within the EMS Agency that are relevant to the CQI process. These include:

- ImageTrend Elite (all agencies including transport and non-transport)
- SLO EMS Agency ImageTrend repository
- Provider submitted study data – e.g. airway study forms
- Dispatch CAD data
- Trauma One – trauma registry
- National Cardiovascular Registry (NCDR)
- ReddiNet
- CARES

These data systems are used to evaluate performance in the following ways:

- Prospectively identify areas of potential improvement
- Answer questions about the EMS system
- Monitor changes once improvement plans are implemented
- Provide accurate information enabling data driven decisions
- Monitor individual performance within the EMS system
- Support research that will improve the system and potentially broaden EMS knowledge through publication

Evaluation of Indicators

The EMS Agency CQI coordinator will review and analyze the quality indicators on a regular basis (monthly/quarterly/annually) and create a report to be presented to the CQI Committee and any other committees as deemed appropriate.

Analysis shall be presented in a format that allows for rapid interpretation by the evaluators. Measurements may include:

- Statistical
 - Measures of central tendency
 - Measures of dispersion
 - Process analysis
 - Trending
 - Causation
 - Benchmarking
 - Best practices
 - Published references

Decision-Making Process – the following is a sample of a process used for evaluation, analysis and decision-making to be used by the EMS CQI Committee:

- Identify the objective
- Present the indicators and EMS information
- Compare performance with benchmarks or goals
- Discuss performance with peers/colleagues
- Determine if improvement or further evaluation needed
- Establish a plan
- Develop training/educational needs
- Assign follow-up for the plan of action

4. ACTION TO IMPROVE AND REPORTING

Once the need for improvement has been identified by the CQI Committee a number of approaches and models of problem solving and analysis are available. In each case the EMS CQI Committee should choose a method that is systematic, based on finding and measurable. The approach is a team-oriented process that is designed to be accomplishable and not overwhelm the system. Smaller sub-group of the EMS CQI Committee may be utilized in the design and oversight of such programs.

It is recommended that the CQI Committee choose a standardized approach and use the same process each time a project is undertaken. The following are traditional components of a standardized improvement process:

- Establish criteria for measurement and evaluation
- Evaluate the information
- Make decision to take action to improve
- Establish measurable criteria for improvement
- Establish an improvement plan
- Measure the results of the improvement plan
- Evaluate the need to standardize or integrate change into the system
- Establish a plan to monitor future activities

Specific CQI Indicators for County of SLO EMS Agency

It would be overwhelming to list each activity and quality indicator the system reviews. The following is a list of standard focus areas with a table to follow that identifies specific target areas. The target areas are identified and updated each year through input from the providers and other system activities.

- Approval of EMT and EMT-P Training Programs
- Approval of EMD program
- Approval of EMS CE programs
- Pharmaceutical inventory control
- Treatment protocol review and update
- Treatment protocol compliance
- Cardiac Arrest
- Trauma System
- STEMI System
- Intubation success rate

- Competency in infrequently used skills
- Air ambulance utilization
- EMS Authority Core Measures

Sample of CQI programs

Clinical Area	Element	CQI Indicator /performance Measure	CQI Status	Improvement Activities/Plan
Airway				
Airway	ETT	<ul style="list-style-type: none"> ▪ % Success by attempt ▪ % success by patient ▪ Success by type of device ▪ Success by location of patient (floor/gurney) 	Ongoing, Core Measure	<ul style="list-style-type: none"> ▪ Continue accreditation requirement of 2 tubes every 6 mos. ▪ Provide CE and advanced skill lab opportunities
Airway ETCO2	ETCO2	% patients with advanced airway placement utilizing ETCO2	Ongoing, Core Measure	<ul style="list-style-type: none"> ▪ Provide training on documentation ▪ ePCR improvements
Cardiac				
Cardiac Arrest	By-stander CPR	% Cardiac arrest receiving bystander CPR	Active	<ul style="list-style-type: none"> ▪ Hands-only CPR programs ▪ Public education
Cardiac Arrest	ROSC/ survival to discharge	% Survival to Hospital Discharge	Active, Core Measure	<ul style="list-style-type: none"> ▪ Implementation HPCPR training ▪ Update field P&P ▪ Add Mega Code training to Advance Protocol Review ▪ Investigate CARES
Cardiac Arrest	Time from 911 to defibrillation	Median time from 911 to defibrillation	Ongoing	<ul style="list-style-type: none"> ▪ Identify AED placement Inclusion into CADs ▪ Public education
STEMI	Times	<ul style="list-style-type: none"> ▪ % E2D <90 min ▪ % D2D < 90 min ▪ %ED 2D from SRF to SRC transfers <120 min 	Ongoing	<ul style="list-style-type: none"> ▪ ACTION participation ▪ Outcome data sharing
STEMI	ASA	% Patient meeting chest pain protocol receiving ASA	Ongoing Core Measure	<ul style="list-style-type: none"> ▪ Monthly monitoring
Trauma				
Trauma	Time	<ul style="list-style-type: none"> ▪ Time on scene without extrication < 15min ▪ # response times of > 20 min for transport unit without BLS on scene <10 min ▪ # transport to TC > 30 min 	Ongoing	<ul style="list-style-type: none"> ▪ PHTLS ▪ Helicopter utilization review committee

Trauma	Over/under triage	<ul style="list-style-type: none"> ▪ % patient transported to non-TC with subsequent transfer to TC from the ED ▪ ISS of >15 at a non-trauma center that was transferred to a TC 	Ongoing	<ul style="list-style-type: none"> ▪ Quarterly monitoring ▪ Tri—County TAC review
Trauma	PCR to trauma service <24 hrs.	<ul style="list-style-type: none"> ▪ % of PCRs that are missing after 24 hours 	Ongoing	<ul style="list-style-type: none"> ▪ Quarterly monitoring
Trauma	Documentation of Triage Step	<ul style="list-style-type: none"> ▪ % of PCRs with triage correctly documented 	Ongoing	<ul style="list-style-type: none"> ▪ Quarterly monitoring
Stroke				
Stroke	Glucose	% patients presenting with stroke symptom and have glucose test documented	Ongoing	<ul style="list-style-type: none"> ▪ Quarterly monitoring
Procedures				
IO	Success	% Success by device - adult and pediatric	Ongoing	<ul style="list-style-type: none"> ▪ Quarterly monitoring
Spinal Motion Restriction	Spinal Motion Restriction	% patients Meeting NEXIS criteria receiving Spinal Motion restriction	In process	
Operations				
Transportation	Ambulance Response times	% compliance to response time requirements by Zone, Urban reserve lines and city/area	Ongoing and in process	<ul style="list-style-type: none"> ▪ Annual monitoring
Transportation	Rate of transport	% of Code 3 responses that are transported	On going	<ul style="list-style-type: none"> ▪ Annual monitoring
Dispatch	Pre-arrival instructions	% pre-arrival instructions for cardiac arrest	In process	
Education				
CE Program	Compliance to CE program approval requirements	% CE records meet compliance standards for EMS CE program approval	In Process	<ul style="list-style-type: none"> ▪ Random annual audit
Public Health	Hands-Only CPR	<ul style="list-style-type: none"> ▪ # of citizens trained in Hands-only CPR ▪ # of cardiac arrest responses with by-stander CPR 	Ongoing	<ul style="list-style-type: none"> ▪ Annual monitoring

5. TRAINING AND EDUCATION

Once the CQI Committee has identified plans to address a need, education and training becomes a critical component of the process. The EMS Agency and EMS CQI Committee will make recommendations for educational needs/offerings throughout the system based upon their findings.

Any recommended changes in policy, procedure or practice go before the appropriate advisory committees and are signed by the County of San Luis Obispo Medical Director or EMS Division Manager. Once the plan has been implemented the EMS Agency will standardize the changes within the appropriate policies and procedures. The EMS Agency oversees all policy updates. The EMS Agency ensures and documents that the updates are available and completed by all affected EMS personnel. This can be accomplished via training classes, training memos, train-the trainer programs and other means as recommended. The providers are ultimately responsible for ensuring staff has met the training requirements. Rosters and records may be requested by the EMS Agency for verification.

Policy changes and training material are made available on the EMS Agency website with implementation.

www.sloemsa.org

6. ANNUAL UPDATE

Annual progress reports shall serve as the annual update of the CQI program. The EMS Agency is responsible for annually updating the EMS Plan and its compliance with the current strategic goals. The CQI Plan and the EMS Plan will be reflective of the common goals and objectives of the EMS Agency. The CQI Coordinator will complete a summary of the activity to include:

- Indicators monitored
- Key findings/priority issues identified
- Improvement actions plans
- Goals met or require follow-up

Any updates to the EMS CQI Plan shall be submitted to the State EMS Authority with the EMS Agency System Plan update.

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

A. SYSTEM ORGANIZATION AND MANAGEMENT

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Agency Administration:					
1.01	LEMSA Structure	X			
1.02	LEMSA Mission	X			
1.03	Public Input	X			
1.04	Medical Director	X	X		
Planning Activities:					
1.05	System Plan	X			
1.06	Annual Plan Update	X			
1.07	Trauma Planning*	X	X		
1.08	ALS Planning*	X			
1.09	Inventory of Resources	X			
1.10	Special Populations	X			
1.11	System Participants	X			
Regulatory Activities:					
1.12	Review & Monitoring	X			
1.13	Coordination	X			
1.14	Policy & Procedures Manual	X			
1.15	Compliance w/Policies	X			
System Finances:					
1.16	Funding Mechanism	X			
Medical Direction:					
1.17	Medical Direction*	X			
1.18	QA/QI	X	X		
1.19	Policies, Procedures, Protocols	X			X

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

A. SYSTEM ORGANIZATION AND MANAGEMENT (continued)

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
1.20	DNR Policy		X			
1.21	Determination of Death		X			
1.22	Reporting of Abuse		X			
1.23	Interfacility Transfer		X			
Enhanced Level: Advanced Life Support						
1.24	ALS Systems		X	X		
1.25	On-Line Medical Direction		X	X		
Enhanced Level: Trauma Care System:						
1.26	Trauma System Plan		X			
Enhanced Level: Pediatric Emergency Medical and Critical Care System:						
1.27	Pediatric System Plan		X			
Enhanced Level: Exclusive Operating Areas:						
1.28	EOA Plan		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

B. STAFFING/TRAINING

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Local EMS Agency:						
2.01	Assessment of Needs		X			
2.02	Approval of Training		X			
2.03	Personnel		X			
Dispatchers:						
2.04	Dispatch Training	X				X
First Responders (non-transporting):						
2.05	First Responder Training		X	X		
2.06	Response		X			
2.07	Medical Control		X			
Transporting Personnel:						
2.08	EMT-I Training		X	X		
Hospital:						
2.09	CPR Training		X			
2.10	Advanced Life Support		X	X		
Enhanced Level: Advanced Life Support:						
2.11	Accreditation Process		X			
2.12	Early Defibrillation		X			
2.13	Base Hospital Personnel		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

C. COMMUNICATIONS

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Communications Equipment:						
3.01	Communication Plan*		X	X		
3.02	Radios		X	X		
3.03	Interfacility Transfer*		X			
3.04	Dispatch Center		X			
3.05	Hospitals		X	X		
3.06	MCI/Disasters		X			
Public Access:						
3.07	9-1-1 Planning/Coordination		X	X		
3.08	9-1-1 Public Education		X			
Resource Management:						
3.09	Dispatch Triage	X				X
3.10	Integrated Dispatch		X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

D. RESPONSE/TRANSPORTATION

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
4.01	Service Area Boundaries*		X	X		
4.02	Monitoring		X	X		
4.03	Classifying Medical Requests		X			
4.04	Prescheduled Responses		X			
4.05	Response Time*		X			
4.06	Staffing		X			
4.07	First Responder Agencies		X			
4.08	Medical & Rescue Aircraft*		X			
4.09	Air Dispatch Center		X			
4.10	Aircraft Availability*		X			
4.11	Specialty Vehicles*		X	X		
4.12	Disaster Response		X			
4.13	Intercounty Response*		X	X		
4.14	Incident Command System		X			
4.15	MCI Plans		X			
Enhanced Level: Advanced Life Support:						
4.16	ALS Staffing		X	X		
4.17	ALS Equipment		X			
Enhanced Level: Ambulance Regulation:						
4.18	Compliance		X			
Enhanced Level: Exclusive Operating Permits:						
4.19	Transportation Plan		X			
4.20	“Grandfathering”		X			
4.21	Compliance		X			
4.22	Evaluation		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

E. FACILITIES/CRITICAL CARE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
5.01	Assessment of Capabilities		X	X		
5.02	Triage & Transfer Protocols*		X			
5.03	Transfer Guidelines*		X			
5.04	Specialty Care Facilities*		X			
5.05	Mass Casualty Management		X	X		
5.06	Hospital Evacuation*		X			
Enhanced Level: Advanced Life Support:						
5.07	Base Hospital Designation*		X			
Enhanced Level: Trauma Care System:						
5.08	Trauma System Design		X			
5.09	Public Input		X			
Enhanced Level: Pediatric Emergency Medical and Critical Care System:						
5.10	Pediatric System Design		X			
5.11	Emergency Departments		X	X		
5.12	Public Input		X			
Enhanced Level: Other Specialty Care Systems:						
5.13	Specialty System Design		X			
5.14	Public Input		X			

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

F. DATA COLLECTION/SYSTEM EVALUATION

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:					
6.01 QA/QI Program		X	X		
6.02 Prehospital Records		X			
6.03 Prehospital Care Audits		X	X		
6.04 Medical Dispatch		X			
6.05 Data Management System*		X	X		
6.06 System Design Evaluation		X			
6.07 Provider Participation		X			
6.08 Reporting		X			
Enhanced Level: Advanced Life Support:					
6.09 ALS Audit		X	X		
Enhanced Level: Trauma Care System:					
6.10 Trauma System Evaluation		X			
6.11 Trauma Center Data		X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES**G. PUBLIC INFORMATION AND EDUCATION**

	Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:					
7.01	Public Information Materials	X	X		
7.02	Injury Control	X	X		
7.03	Disaster Preparedness	X	X		
7.04	First Aid & CPR Training	X	X		

TABLE 1: MINIMUM STANDARDS/RECOMMENDED GUIDELINES

H. DISASTER MEDICAL RESPONSE

		Does not currently meet standard	Meets minimum standard	Meets recommended guidelines	Short-range plan	Long-range plan
Universal Level:						
8.01	Disaster Medical Planning*		X			
8.02	Response Plans		X	X		
8.03	HazMat Training		X			
8.04	Incident Command System		X	X		
8.05	Distribution of Casualties*		X	X		
8.06	Needs Assessment		X	X		
8.07	Disaster Communications*		X			
8.08	Inventory of Resources		X	X		
8.09	DMAT Teams		X			
8.10	Mutual Aid Agreements*		X			
8.11	CCP Designation*		X			
8.12	Establishment of CCPs		X			
8.13	Disaster Medical Training		X	X		
8.14	Hospital Plans		X	X		
8.15	Interhospital Communications		X			
8.16	Prehospital Agency Plans		X	X		
Enhanced Level: Advanced Life Support:						
8.17	ALS Policies		X			
Enhanced Level: Specialty Care Systems:						
8.18	Specialty Center Roles		X			
Enhanced Level: Exclusive Operating Areas/Ambulance Regulations:						
8.19	Waiving Exclusivity		X			

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT

Reporting Year: January 1, 2023 – December 31, 2023

NOTE: Number (1) below is to be completed for each county. The balance of Table 2 refers to each agency.

1. Percentage of population served by each level of care by county:
(Identify for the maximum level of service offered; the total of a, b, and c should equal 100%.)

County: San Luis Obispo

- | | |
|---|--------------|
| A. Basic Life Support (BLS) | _____ % |
| B. Limited Advanced Life Support (LALS) | _____ % |
| C. Advanced Life Support (ALS) | <u>100</u> % |

2. Type of agency
- a) **Public Health Department**
 - b) **County Health Services Agency**
 - c) Other (non-health) County Department
 - d) Joint Powers Agency
 - e) Private Non-Profit Entity
 - f) Other: _____

3. The person responsible for day-to-day activities of the EMS agency reports to
- a) **Public Health Officer**
 - b) Health Services Agency Director/Administrator
 - c) Board of Directors
 - d) Other: _____

4. Indicate the non-required functions which are performed by the agency:

- | | |
|---|---------|
| Implementation of exclusive operating areas (ambulance franchising) | ___X___ |
| Designation of trauma centers/trauma care system planning | ___X___ |
| Designation/approval of pediatric facilities | _____ |
| Designation of other critical care centers | ___X___ |
| Development of transfer agreements | ___X___ |
| Enforcement of local ambulance ordinance | ___X___ |
| Enforcement of ambulance service contracts | ___X___ |
| Operation of ambulance service | _____ |
| Continuing education | ___X___ |
| Personnel training | ___X___ |
| Operation of oversight of EMS dispatch center | _____ |
| Non-medical disaster planning | _____ |
| Administration of critical incident stress debriefing team (CISD) | _____ |

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

Administration of disaster medical assistance team (DMAT)	_____
Administration of EMS Fund [Senate Bill (SB) 12/612]	_____
Other: _____	_____
Other: _____	_____
Other: _____	_____

5. EXPENSES

Salaries and benefits (All but contract personnel)	\$ <u>665,147</u>
Contract Services (e.g. medical director)	<u>84,240</u>
Operations (e.g. copying, postage, facilities)	<u>72,012</u>
Travel	<u>8,170</u>
Fixed assets	_____
Indirect expenses (overhead)	<u>28,040</u>
Ambulance subsidy	_____
EMS Fund payments to physicians/hospital	_____
Dispatch center operations (non-staff)	_____
Training program operations	_____
Other: _____	_____
Other: _____	_____
Other: _____	_____
TOTAL EXPENSES	\$ <u>858,274</u>

6. SOURCES OF REVENUE

Special project grant(s) [from EMSA]	\$ _____
Preventive Health and Health Services (PHHS) Block Grant	_____
Office of Traffic Safety (OTS)	_____
State general fund	_____
County general fund	\$ <u>646,658</u>
Other local tax funds (e.g., EMS district)	_____
County contracts (e.g. multi-county agencies)	_____
Certification fees	\$ <u>33,520</u>
Training program approval fees	_____
Training program tuition/Average daily attendance funds (ADA)	_____
Job Training Partnership ACT (JTPA) funds/other payments	_____
Base hospital application fees	_____

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

Trauma center application fees	_____
Trauma center designation fees	\$ <u>75,000</u>
Pediatric facility approval fees	_____
Pediatric facility designation fees	_____
Other critical care center application fees	_____
Type: _____	
Other critical care center designation fees	\$ <u>25,000</u>
Type: <u>STEMI</u>	
Ambulance service/vehicle fees	_____
Contributions	_____
EMS Fund (SB 12/612)	_____
Other grants: Nuclear Power Preparedness	\$ <u>1,500</u>
Other fees: Course fees	\$ _____
Other (specify): Court penalties board designated	\$ <u>76,596</u>
TOTAL REVENUE	\$ <u>858,274</u>

*TOTAL REVENUE SHOULD EQUAL TOTAL EXPENSES.
IF THEY DON'T, PLEASE EXPLAIN.*

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

7. Fee structure

_____ We do not charge any fees

___X___ Our fee structure is:

First responder certification	\$ _____
EMS dispatcher certification	_____
EMT-I certification	<u>29</u>
EMT-I recertification	<u>29</u>
EMT-defibrillation certification	_____
EMT-defibrillation recertification	_____
AEMT certification	_____
AEMT recertification	_____
EMT-P accreditation	<u>145</u>
Mobile Intensive Care Nurse/Authorized Registered Nurse certification	<u>87</u>
MICN/ARN recertification	<u>87</u>
EMT-I training program approval	<u>8731</u>
AEMT training program approval	_____
EMT-P training program approval	<u>8731</u>
MICN/ARN training program approval	_____
Base hospital application	_____
Base hospital designation	_____
Trauma center application	_____
Trauma center designation	_____
Pediatric facility approval	_____
Pediatric facility designation	_____
Other critical care center application	_____
Type: _____	
Other critical care center designation	_____
Type: _____	
Ambulance service license	_____
Ambulance vehicle permits	_____
Other: _____	_____
Other: _____	_____
Other: _____	_____

TABLE 2: SYSTEM ORGANIZATION AND MANAGEMENT (cont.)

CATEGORY	ACTUAL TITLE	FTE POSITIONS (EMS ONLY)	TOP SALARY BY HOURLY EQUIVALENT	BENEFITS (%of Salary)	COMMENTS
EMS Admin./Coord./Director	Director, EMS Division	1.0			
Admin.Asst.	Admin Assistant III	1.0			
ALS Coord./Field Coord./Trng Coordinator	EMS Coordinator Compliance (ASO II)	1.0			
Program Coordinator/Field Liaison/STEMI Coordinator	EMS Coordinator (ASO II)	1.0			
Trauma Coordinator	EMS Coordinator (ASO II)	1.0			
Medical Director	Contractor				
Other MD/Medical Consult/Training Medical Director					
Disaster Medical Planner					
Dispatch Supervisor					
Medical Planner					
Data Evaluator/Analyst					
QA/QI Coordinator					
Public Info. & Education Coordinator					
Executive Secretary					
Other Clerical					
Data Entry Clerk					
Other					

TABLE 3: STAFFING/TRAINING

Reporting Year: **January 1, 2023 – December 31, 2023**

NOTE: Table 3 is to be reported by agency.

	EMT - Is	EMT - IIs	EMT - Ps	MICN
Total Certified	297	0		39
Number newly certified this year	88	0		10
Number recertified this year	209	0		29
Total number of accredited personnel on July 1 of the reporting year		0	265	
Number of certification reviews resulting in:				
a) formal investigations	1		1	0
b) probation	4		1	0
c) suspensions	1		0	0
d) revocations	1		0	0
e) denials	0		0	0
f) denials of renewal	0		0	0
g) no action taken	0		0	0

1. Early defibrillation:

- a) Number of EMT-I (defib) authorized to use AEDs
- b) Number of public safety (defib) certified (non-EMT-I)

762
0+

2. Do you have an EMR training program

yes no

TABLE 4: COMMUNICATIONS

Note: Table 4 is to be answered for each county.

County: **San Luis Obispo County**

Reporting Year: **January 1, 2023 – December 31, 2023**

- | | |
|---|-----------------------------------|
| 1. Number of primary Public Service Answering Points (PSAP) | <u>7</u> |
| 2. Number of secondary PSAPs | <u>1</u> |
| 3. Number of dispatch centers directly dispatching ambulances | <u>1</u> |
| 4. Number of EMS dispatch agencies utilizing EMD guidelines | <u>3</u> |
| 5. Number of designated dispatch centers for EMS Aircraft | <u>1</u> |
| 6. Who is your primary dispatch agency for day-to-day emergencies?
<u>San Luis Obispo County Sheriff's Office – Med Com</u> | |
| 7. Who is your primary dispatch agency for a disaster?
<u>San Luis Obispo County Sheriff's Office – Med Com</u> | |
| 8. Do you have an operational area disaster communication system? | X Yes <input type="checkbox"/> No |
| a. Radio primary frequency <u>468.000</u> | |
| b. Other methods <u>Reddinet, CAHAN, Cellular, Satellite</u> | |
| c. Can all medical response units communicate on the same disaster communications system? | X Yes <input type="checkbox"/> No |
| d. Do you participate in the Operational Area Satellite Information System (OASIS)? | X Yes <input type="checkbox"/> No |
| e. Do you have a plan to utilize the Radio Amateur Civil Emergency Services (RACES) as a back-up communication system? | X Yes <input type="checkbox"/> No |
| 1) Within the operational area? | X Yes <input type="checkbox"/> No |
| 2) Between operation area and the region and/or state? | X Yes <input type="checkbox"/> No |
-

TABLE 5: RESPONSE/TRANSPORTATION

Reporting Year: January 1, 2023 – December 31, 2023

Note: Table 5 is to be reported by agency.

Early Defibrillation Providers

- 1. Number of EMT-Defibrillation providers

SYSTEM STANDARD RESPONSE TIMES (90TH PERCENTILE)

Enter the response times in the appropriate boxes:

	METRO/URBAN	SUBURBAN/ RURAL	WILDERNESS	SYSTEMWIDE
BLS and CPR capable first responder				
Early defibrillation responder				
Advanced life support responder				
Transport Ambulance	10	20/30	60	

TABLE 6: FACILITIES/CRITICAL CARE

Reporting Year: January 1, 2023 – December 31, 2023

NOTE: Table 6 is to be reported by agency.

Trauma

Trauma patients:

1. Number of patients meeting trauma triage criteria	(STEPS 1-4)	<u>853</u>
2. Number of major trauma victims transported directly to a trauma center by ambulance	(STEPS 1&2)	<u>175</u>
3. Number of major trauma patients transferred to a trauma center		<u>2</u>
4. Number of patients meeting triage criteria who weren't treated at a trauma center		<u>141/853 (consult with trauma center prior to transport)</u>

Emergency Departments

Total number of emergency departments	<u>4</u>
1. Number of referral emergency services	
2. Number of standby emergency services	
3. Number of basic emergency services	<u>4</u>
4. Number of comprehensive emergency services	

Receiving Hospitals

1. Number of receiving hospitals with written agreements	<u>4</u>
2. Number of base hospitals with written agreements	<u>4</u>

TABLE 7: DISASTER MEDICAL

Reporting Year: January 1, 2023 – December 31, 2023

County: San Luis Obispo

NOTE: Table 7 is to be answered for each county.

SYSTEM RESOURCES

1. Casualty Collections Points (CCP)
 - a. Where are your CCPs located? N/A
 - b. How are they staffed? N/A
 - c. Do you have a supply system for supporting them for 72 hours? Yes No
2. CISD
Do you have a CISD provider with 24 hour capability? Yes No
3. Medical Response Team
 - a. Do you have any team medical response capability? Yes No
 - b. For each team, are they incorporated into your local response plan? Yes No
 - c. Are they available for statewide response? Yes No
 - d. Are they part of a formal out-of-state response system? Yes No
4. Hazardous Materials
 - a. Do you have any HazMat trained medical response teams? Yes No
 - b. At what HazMat level are they trained? _____
 - c. Do you have the ability to do decontamination in an emergency room? Yes No
 - d. Do you have the ability to do decontamination in the field? Yes No

OPERATIONS

1. Are you using a Standardized Emergency Management System (SEMS) that incorporates a form of Incident Command System (ICS) structure? Yes No
2. What is the maximum number of local jurisdiction EOCs you will need to interact with in a disaster? 8 including County
3. Have you tested your MCI Plan this year in a:
 - a. real event? Yes No
 - b. exercise? Yes No

TABLE 7: DISASTER MEDICAL (cont.)

4. List all counties with which you have a written medical mutual aid agreement:

5. Do you have formal agreements with hospitals in your operational area to participate in disaster planning and response? Yes No

6. Do you have formal agreements with community clinics in your operational areas to participate in disaster planning and response? Yes No

7. Are you part of a multi-county EMS system for disaster response? Yes No

8. Are you a separate department or agency? Yes No

9. If not, to whom do you report? ___Public Health Administrator_____

8. If your agency is not in the Health Department, do you have a plan to coordinate public health and environmental health issues with the Health Department? Yes No

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo **Provider:** San Luis Ambulance Services, Inc. **Response Zone:** North, Central, South

Address: 3546 S Higuera St **Number of Ambulance Vehicles in Fleet:** 23
San Luis Obispo, CA 93406

Phone Number: 805.543.2626 **Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day:** 13

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Non-Transport BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input checked="" type="checkbox"/> CCT <input type="checkbox"/> Water <input checked="" type="checkbox"/> IFT

<u>Ownership:</u> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<u>If Public:</u> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	---	--	---	--

Transporting Agencies

29854 Total number of responses
23555 Number of emergency responses
5184 Number of non-emergency responses

20256 Total number of transports
1330 Number of emergency transports
18407 Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo **Provider:** Cambria Community Healthcare District **Response Zone:** North Coast

Address: 2511 Main Street
Cambria, CA 93428

Number of Ambulance Vehicles in Fleet: 4

Phone Number: 805.927.8304

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 2

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input checked="" type="checkbox"/> Other Explain: Healthcare Dist.	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	---	--	---	--

Transporting Agencies

1039 Total number of responses
953 Number of emergency responses
86 Number of non-emergency responses

617 Total number of transports
83 Number of emergency transports
534 Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo **Provider:** Mercy Air **Response Zone:** Multi County

Address: 4990 Wing Way **Number of Ambulance Vehicles in Fleet:** 1
Paso Robles, CA 93446

Phone Number: 805.239.5922 **Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day:** 1

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input type="checkbox"/> Ground <input type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input checked="" type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input checked="" type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	---

<u>Ownership:</u> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<u>If Public:</u> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input checked="" type="checkbox"/> Rotary <input checked="" type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input checked="" type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	---	--	---	---

Air Ambulance Services

266 Total number of EMS responses/requests
323 Number of emergency responses
0 Number of non-emergency responses

71 Total number of EMS transports
139 Number of emergency transports
0 Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: January 1, 2023 – December 31, 2023

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: CALSTAR 7 (GMR/Reach) Respo All Zones

Address: 4933 Bailey Loop Number of Ambulance Vehicles in Fleet: 4
McClellan, CA 95652

Phone Number: 916.921.4027 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 4

<u>Written Contract:</u> X Yes <input type="checkbox"/> No	<u>Medical Director:</u> X Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> X Yes <input type="checkbox"/> No	<u>Level of Service:</u> X Transport <input type="checkbox"/> ALS <input type="checkbox"/> 9-1-1 <input type="checkbox"/> Ground <input type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit X Air <input type="checkbox"/> 7-Digit X CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT	
--	--	---	---	--

<u>Ownership:</u> <input type="checkbox"/> Public X Private	<u>If Public:</u> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> X Rotary X Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue X Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	---	--	---	---

Air Ambulance Services

188 Total number of EMS responses/requests
109 Number of emergency responses
79 Number of non-emergency responses

88 Total number of EMS transports
88 Number of emergency transports
70 Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: January 1, 2023 – December 31, 2023

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: California Highway Patrol Response Zone: All Zones

Address: 675 California Blvd Number of Ambulance Vehicles in Fleet: 1 Air Rescue Helicopter
San Luis Obispo, CA 93401

Phone Number: 805.549.3261 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: 1 Air Rescue Helicopter

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Level of Service:</u> <input checked="" type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input type="checkbox"/> Ground <input type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input checked="" type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input type="checkbox"/> Fire <input checked="" type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input checked="" type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input checked="" type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input checked="" type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	--	---

Air Ambulance Services

16 Total number of responses
16 Number of emergency responses
0 Number of non-emergency responses

5 Total number of transports
2 Number of emergency transports
3 Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: Templeton Fire Department Response Zone: North

Address: 206 5th Street Number of Ambulance Vehicles in Fleet: N/A
Templeton, CA 93465

Phone Number: 805.434.4911 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal <input checked="" type="checkbox"/> CSD	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

550 Total number of responses
492 Number of emergency responses
58 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: County of San Luis Obispo **Provider:** San Luis Obispo City Fire Dept. **Response Zone:** Central

Address: 2160 Santa Barbara Avenue **Number of Ambulance Vehicles in Fleet:** 1 Reserve Ambulance
San Luis Obispo, CA 93401-5240

Phone Number: 805.781.7390 **Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day:** 0, only used if system inundated

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

3588 Total number of responses
3321 Number of emergency responses
267 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: Santa Margarita Fire Department

Response Zone: North

Address: 22375 El Camino Real
Santa Margarita, CA 93453

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.438.3185

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<p><u>Written Contract:</u></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><u>Medical Director:</u></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><u>System Available 24 Hours:</u></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><u>Level of Service:</u></p> <p><input type="checkbox"/> Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT</p>
---	---	--	---

<p><u>Ownership:</u></p> <p><input checked="" type="checkbox"/> Public <input type="checkbox"/> Private</p>	<p><u>If Public:</u></p> <p><input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____</p>	<p><u>If Public:</u></p> <p><input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal <input checked="" type="checkbox"/> CSD</p>	<p><u>If Air:</u></p> <p><input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing</p>	<p><u>Air Classification:</u></p> <p><input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue</p>
--	---	--	--	---

Transporting Agencies

69 Total number of responses
63 Number of emergency responses
6 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: San Miguel Fire Department Response Zone: North

Address: 1150 Mission Street Number of Ambulance Vehicles in Fleet: N/A
San Miguel, CA 93451

Phone Number: 805.467.3300 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal <input checked="" type="checkbox"/> CSD	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

190 Total number of responses
178 Number of emergency responses
12 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: Paso Robles Dept. Emergency Svcs

Response Zone: North

Address: 900 Park Street
Paso Robles, CA 93446

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.227.7560

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<p><u>Written Contract:</u></p> <p>X Yes <input type="checkbox"/> No</p>	<p><u>Medical Director:</u></p> <p>X Yes <input type="checkbox"/> No</p>	<p><u>System Available 24 Hours:</u></p> <p>X Yes <input type="checkbox"/> No</p>	<p><u>Level of Service:</u></p> <p><input type="checkbox"/> Transport X ALS X 9-1-1 X Ground <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT</p>
---	---	--	---

<p><u>Ownership:</u></p> <p>X Public <input type="checkbox"/> Private</p>	<p><u>If Public:</u></p> <p>X Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____</p>	<p><u>If Public:</u></p> <p>X City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal</p>	<p><u>If Air:</u></p> <p><input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing</p>	<p><u>Air Classification:</u></p> <p><input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue</p>
--	--	--	---	--

Transporting Agencies

3259 Total number of responses
3136 Number of emergency responses
109 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: Morro Bay Fire Department

Response Zone: Central

Address: 75 Harbor Street
Morro Bay, CA 93442-1907

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.772.6242

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

1855 Total number of responses
1480 Number of emergency responses
375 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: Five Cities Fire Authority Response Zone: South

Address: 140 Traffic Way Number of Ambulance Vehicles in Fleet: N/A
Arroyo Grande, CA 93420

Phone Number: 805.473.5490 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal <input checked="" type="checkbox"/> JPA	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

3891 Total number of responses
3289 Number of emergency responses
602 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: Diablo Canyon Power Plant Fire

Response Zone: Central

Address: PO Box 56 MS 104/4/28A
Avila Beach, CA 93424

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.545.2900

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> 9-1-1 <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> IFT <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water
--	--	---	---

<u>Ownership:</u> <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	<u>If Public:</u> <input type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> State <input type="checkbox"/> Federal <input type="checkbox"/> County <input type="checkbox"/> Fire District	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	---	--	---	--

Transporting Agencies

8 Total number of responses
8 Number of emergency responses
0 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: California Men's Colony Fire

Response Zone: Central

Address: 2100 Colony Drive
San Luis Obispo, CA 93409

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.547.7849

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<p><u>Written Contract:</u></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><u>Medical Director:</u></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><u>System Available 24 Hours:</u></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><u>Level of Service:</u></p> <p><input type="checkbox"/> Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT</p>
---	---	--	--

<p><u>Ownership:</u></p> <p><input checked="" type="checkbox"/> Public <input type="checkbox"/> Private</p>	<p><u>If Public:</u></p> <p><input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____</p>	<p><u>If Public:</u></p> <p><input type="checkbox"/> City <input type="checkbox"/> County <input checked="" type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal</p>	<p><u>If Air:</u></p> <p><input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing</p>	<p><u>Air Classification:</u></p> <p><input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue</p>
--	--	--	---	--

Transporting Agencies

294 Total number of responses
287 Number of emergency responses
7 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: Cambria Fire Department

Response Zone: North Coast

Address: 2850 Burton Drive
Cambria, CA 93428

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.927.6240

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> ALS <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input checked="" type="checkbox"/> 9-1-1 <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> IFT <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input type="checkbox"/> Water
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal <input checked="" type="checkbox"/> CSD	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

1056 Total number of responses
710 Number of emergency responses
346 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo

Provider: CAL FIRE SLU/SLO Co FD

Response Zone: ALL

Address: 1150 Laurel Ln. STE 175
San Luis Obispo, CA 93401

Number of Ambulance Vehicles in Fleet: N/A

Phone Number: 805.543.4244

Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input checked="" type="checkbox"/> 9-1-1 <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> IFT <input checked="" type="checkbox"/> Ground <input type="checkbox"/> Air <input checked="" type="checkbox"/> Water
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input checked="" type="checkbox"/> State <input type="checkbox"/> Federal <input checked="" type="checkbox"/> County <input type="checkbox"/> Fire District	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	--	---	--

Transporting Agencies

11131 Total number of responses
8037 Number of emergency responses
3094 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: Atascadero State Hospital Fire Response Zone: North
 Address: PO Box 7006 Number of Ambulance Vehicles in Fleet: N/A
Atascadero, CA 93423
 Phone Number: 805.468.2649 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input checked="" type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input type="checkbox"/> City <input type="checkbox"/> County <input checked="" type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

346 Total number of responses
268 Number of emergency responses
78 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 8: Resource Directory

Reporting Year: **January 1, 2023 – December 31, 2023**

Response/Transportation/Providers

Note: Table 8 is to be completed for each provider by county. Make copies as needed.

County: San Luis Obispo Provider: Atascadero Fire Department Response Zone: North

Address: 6005 Lewis Avenue Number of Ambulance Vehicles in Fleet: N/A
Atascadero, CA 93422

Phone Number: 805.461.5070 Average Number of Ambulances on Duty At 12:00 p.m. (noon) on Any Given Day: N/A

<u>Written Contract:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Medical Director:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>System Available 24 Hours:</u> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Level of Service:</u> <input type="checkbox"/> Transport <input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> 9-1-1 <input checked="" type="checkbox"/> Ground <input checked="" type="checkbox"/> Non-Transport <input type="checkbox"/> BLS <input type="checkbox"/> 7-Digit <input type="checkbox"/> Air <input type="checkbox"/> 7-Digit <input type="checkbox"/> CCT <input type="checkbox"/> Water <input type="checkbox"/> IFT
--	--	---	--

<u>Ownership:</u> <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	<u>If Public:</u> <input checked="" type="checkbox"/> Fire <input type="checkbox"/> Law <input type="checkbox"/> Other Explain: _____	<u>If Public:</u> <input checked="" type="checkbox"/> City <input type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal	<u>If Air:</u> <input type="checkbox"/> Rotary <input type="checkbox"/> Fixed Wing	<u>Air Classification:</u> <input type="checkbox"/> Auxiliary Rescue <input type="checkbox"/> Air Ambulance <input type="checkbox"/> ALS Rescue <input type="checkbox"/> BLS Rescue
--	--	---	---	--

Transporting Agencies

1907 Total number of responses
1603 Number of emergency responses
304 Number of non-emergency responses

N/A Total number of transports
N/A Number of emergency transports
N/A Number of non-emergency transports

Table 9: Resources Directory

Facilities

County: San Luis Obispo

Note: Complete information for each facility by county. Make copies as needed.

Facility: Arroyo Grande Community Hospital Telephone Number: 805.489.4261
Address: 345 S. Halcyon Road
Arroyo Grande, CA 93420

<p><u>Written Contract:</u></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><u>Service:</u></p> <p><input type="checkbox"/> Referral Emergency <input checked="" type="checkbox"/> Basic Emergency</p> <p><input type="checkbox"/> Standby Emergency <input type="checkbox"/> Comprehensive Emergency</p>	<p><u>Base Hospital:</u></p> <p><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p>	<p><u>Burn Center:</u></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
---	---	--	--

<p>Pediatric Critical Care Center¹ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No EDAP² <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No PICU³ <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><u>Trauma Center:</u></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><u>If Trauma Center what level:</u></p> <p><input type="checkbox"/> Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> Level IV</p>
--	--	---

<p><u>STEMI Center:</u></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p><u>Stroke Center:</u></p> <p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
---	--

¹ Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*
² Meets EMSA *Emergency Departments Approved for Pediatrics (EDAP) Standards*
³ Meets California Children Services (CCS) *Pediatric Intensive Care Unit (PICU) Standards*

Table 9: Resources Directory

Facilities

County: San Luis Obispo

Note: Complete information for each facility by county. Make copies as needed.

Facility: Sierra Vista Regional Medical Center Telephone Number: 805.546.7600
Address: 1010 Murray Street
San Luis Obispo 93405

<u>Written Contract:</u>	<u>Service:</u>	<u>Base Hospital:</u>	<u>Burn Center:</u>
X Yes No	<input type="checkbox"/> Referral Emergency <input checked="" type="checkbox"/> Basic Emergency <input type="checkbox"/> Standby Emergency <input type="checkbox"/> Comprehensive Emergency	X Yes No	<input type="checkbox"/> Yes X No

Pediatric Critical Care Center⁴ EDAP⁵ PICU⁶	<input type="checkbox"/> Yes X No <input type="checkbox"/> Yes X No <input type="checkbox"/> Yes X No	<u>Trauma Center:</u>	<u>If Trauma Center what level:</u>
		X Yes No	<input type="checkbox"/> Level I <input checked="" type="checkbox"/> Level III <input type="checkbox"/> Level II <input type="checkbox"/> Level IV

<u>STEMI Center:</u>	<u>Stroke Center:</u>
<input type="checkbox"/> Yes X No	<input type="checkbox"/> Yes X No

⁴ Meets EMSA *Pediatric Critical Care Center (PCCC) Standards*

⁵ Meets EMSA *Emergency Departments Approved for Pediatrics (EDAP) Standards*

⁶ Meets California Children Services (CCS) *Pediatric Intensive Care Unit (PICU) Standards*

Table 9: Resources Directory

Facilities

County: San Luis Obispo

Note: Complete information for each facility by county. Make copies as needed.

Facility: French Hospital Medical Center Telephone Number: 805.543.5353
Address: 1911 Johnson Avenue
San Luis Obispo 93401

<p><u>Written Contract:</u></p> <p>X Yes No</p>	<p><u>Service:</u></p> <p><input type="checkbox"/> Referral Emergency <input type="checkbox"/> Standby Emergency <input checked="" type="checkbox"/> Basic Emergency <input type="checkbox"/> Comprehensive Emergency</p>	<p><u>Base Hospital:</u></p> <p>X Yes No</p>	<p><u>Burn Center:</u></p> <p><input type="checkbox"/> Yes X No</p>
--	---	---	--

<p>Pediatric Critical Care Center⁷ <input type="checkbox"/> Yes X No EDAP⁸ <input type="checkbox"/> Yes X No PICU⁹ <input type="checkbox"/> Yes X No</p>	<p><u>Trauma Center:</u></p> <p><input type="checkbox"/> Yes X No</p>	<p><u>If Trauma Center what level:</u></p> <p><input type="checkbox"/> Level I <input type="checkbox"/> Level II <input type="checkbox"/> Level III <input type="checkbox"/> Level IV</p>
---	--	---

<p><u>STEMI Center:</u></p> <p>X Yes No</p>	<p><u>Stroke Center:</u></p> <p><input type="checkbox"/> Yes X No</p>
--	--

⁷ Meets EMSA Pediatric Critical Care Center (PCCC) Standards

⁸ Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards

⁹ Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

Table 9: Resources Directory

Facilities

County: San Luis Obispo

Note: Complete information for each facility by county. Make copies as needed.

Facility: Twin Cities Hospital Telephone Number: 805.434.3500
Address: 1100 Las Tablas Road
Templeton, 93465

<u>Written Contract:</u>	<u>Service:</u>	<u>Base Hospital:</u>	<u>Burn Center:</u>
X Yes No	<input type="checkbox"/> Referral Emergency <input checked="" type="checkbox"/> Basic Emergency <input type="checkbox"/> Standby Emergency <input type="checkbox"/> Comprehensive Emergency	X Yes No	<input type="checkbox"/> Yes X No

Pediatric Critical Care Center¹⁰ EDAP¹¹ PICU¹²	<input type="checkbox"/> Yes X No <input type="checkbox"/> Yes X No <input type="checkbox"/> Yes X No	<u>Trauma Center:</u>	<u>If Trauma Center what level:</u>
		Yes X No	<input type="checkbox"/> Level I Level III <input type="checkbox"/> Level II <input type="checkbox"/> Level IV

<u>STEMI Center:</u>	<u>Stroke Center:</u>
<input type="checkbox"/> Yes X No	<input type="checkbox"/> Yes X No

¹⁰ Meets EMSA Pediatric Critical Care Center (PCCC) Standards

¹¹ Meets EMSA Emergency Departments Approved for Pediatrics (EDAP) Standards

¹² Meets California Children Services (CCS) Pediatric Intensive Care Unit (PICU) Standards

TABLE 10: RESOURCES DIRECTORY -- Approved Training Programs

County: County of San Luis Obispo

Reporting Year: January 1, 2023 – December 31, 2023

NOTE: Table 10 is to be completed by county. Make copies to add pages as needed.

Training Institution: <u>Cuesta Community College</u>		Telephone Number: <u>805.592-9283</u>
Address: <u>Highway 1, San Luis Obispo 93401</u>		
Student Eligibility*:	<u>Open to the public</u>	**Program Level <u>EMT1</u>
	Cost of Program:	
	Basic: <u>\$1368</u>	Number of students completing training per year:
	Refresher: <u>\$101</u>	Initial training: <u>120</u>
		Refresher: <u>15</u>
		Continuing Education: <u> </u>
		Expiration Date: <u> </u>
	Number of courses:	
	Initial training: <u>6</u>	
	Refresher: <u>2</u>	
	Continuing Education: <u> </u>	

Training Institution: <u>Cuesta Community College</u>		Telephone Number: <u>805.592.9283</u>
Address: <u>Highway 1, San Luis Obispo 93401</u>		
Student Eligibility*:	<u>Open to the public</u>	**Program Level <u>EMT-P</u>
	Cost of Program:	
	Basic: <u>\$7165</u>	Number of students completing training per year:
	Refresher: <u> </u>	Initial training: <u>12</u>
		Refresher: <u> </u>
		Continuing Education: <u> </u>
		Expiration Date: <u> </u>
	Number of courses:	
	Initial training: <u>1</u>	
	Refresher: <u> </u>	
	Continuing Education: <u> </u>	

*Open to general public or restricted to certain personnel only.

** Indicate whether EMT-I, AEMT, EMT-P, MICN, or EMR; if there is a training program that offers more than one level complete all information for each le

TABLE 11: RESOURCES DIRECTORY -- Dispatch Agency

County: San Luis Obispo **Reporting Year:** January 1, 2023 – December 31, 2023

NOTE: Make copies to add pages as needed. Complete information for each provider by county.

Name:	San Luis Obispo County Sheriff's Office		Primary Contact:	Watch Commander		
Address:	<u>1585 Kansas Ave CA 93405</u>					
	<u>San Luis Obispo 93405</u>					
Telephone Number:	<u>805-781-4553</u>					
Written Contract: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Medical Director: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Day-to-Day <input checked="" type="checkbox"/> X <input type="checkbox"/> Disaster <input checked="" type="checkbox"/> X	Number of Personnel Providing Services: <u>4</u>	<input type="checkbox"/> EMD Training	<input type="checkbox"/> EMT-D	<input type="checkbox"/> ALS
			<input type="checkbox"/> BLS	<input type="checkbox"/> LALS	<input type="checkbox"/> Other	
Ownership: <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private	If Public: <input type="checkbox"/> Fire <input type="checkbox"/> Law <input checked="" type="checkbox"/> X <input type="checkbox"/> Other Explain: _____		If Public: <input type="checkbox"/> City <input checked="" type="checkbox"/> County <input type="checkbox"/> State <input type="checkbox"/> Fire District <input type="checkbox"/> Federal			

EMS PLAN
AMBULANCE ZONE SUMMARY FORM
Reporting Period: January 1st, 2023 – December 31st, 2023

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

<p>Local EMS Agency or County Name: San Luis Obispo County</p>
<p>Area or subarea (Zone) Name or Title: North Coast</p>
<p>Name of Current Provider(s): Include company name(s) and length of operation (uninterrupted) in specified area or subarea. Cambria Community Healthcare District</p>
<p>Area or subarea (Zone) Geographic Description: <i>Generally described as the Northwest Coastal portion of San Luis Obispo County that includes all of the Cambria Health Care District plus additional areas that are best serviced from the coastside area and has the following general boundaries:</i></p> <p>West Boundary: Pacific Ocean from Monterey Co line south to Villa Creek North Boundary: Monterey Co line from the Pacific Ocean to Rocky Butte Truck Trail East Boundary: Coastal Ridge from Monterey County line near Rocky Butte Truck Trail, then southeasterly along the main coastal ridge through Rocky Butte repeater site to the intersection of Highway 46 West and Old Creek/ Santa Rosa Creek Roads (all Santa Rosa Creek Road addresses are included in the North Coast Zone). South Boundary: From Highway 46 West and Old Creek/Santa Rosa Creek roads intersection, southwesterly to the Pacific Ocean staying just north of Villa Creek Road (all Old Creek Road and Villa Creek Road addresses are included in the Central Zone).</p>
<p>Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): Include intent of local EMS agency and Board action. Exclusive</p>
<p>Type of Exclusivity, “Emergency Ambulance”, “ALS”, or “LALS” (HS 1797.85): Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.). Emergency Ambulance, 9-1-1 Emergency Response</p>

Method to achieve Exclusivity, if applicable (HS 1797.224):

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

CCHD is provider of services to area prior to January 1, 1981

EMS PLAN
AMBULANCE ZONE SUMMARY FORM
Reporting Period: January 1st, 2023 – December 31st, 2023

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

<p>Local EMS Agency or County Name: San Luis Obispo County</p>
<p>Area or subarea (Zone) Name or Title: North</p>
<p>Name of Current Provider(s): <small>Include company name(s) and length of operation (uninterrupted) in specified area or subarea.</small> San Luis Ambulance Service, Inc</p>
<p>Area or subarea (Zone) Geographic Description: <i>Generally described as the "North County" portion of San Luis Obispo County. The North Zone has the following general boundaries:</i></p> <p>West Boundary: Main coastal ridge boundary (eastern boundary of the North Coast Zone) from the Monterey County line southeasterly through Rocky Butte repeater site to Highway 46 West and Santa Rosa Creek/Old Creek Road intersection, to Highway 41 West near Cerro Alto Road, to Highway 101 just north of Cuesta Summit (excludes all of West Cuesta Ridge Road and Tassajera Creek Road).</p> <p>North Boundary: Monterey County Line east of Rocky Butte Road to Kern County line.</p> <p>East Boundary: Kern County Line north of Highway 166 to Kings County line.</p> <p>South Boundary: An extension of the western boundary southeasterly from Highway 101 just north of Cuesta Summit, then to Hi Mountain Peak, then generally southeast through Caliente Peak and to the Kern County line just north of Highway 166.</p>
<p>Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): <small>Include intent of local EMS agency and Board action.</small> Exclusive</p>
<p>Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): <small>Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).</small> Emergency Ambulance, 9-1-1 Emergency Response</p>

Method to achieve Exclusivity, if applicable (HS 1797.224):

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

SLA is provider of services to area prior to January 1, 1981

EMS PLAN
AMBULANCE ZONE SUMMARY FORM
Reporting Period: January 1st, 2023 – December 31st, 2023

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

<p>Local EMS Agency or County Name: San Luis Obispo County</p>
<p>Area or subarea (Zone) Name or Title: Central</p>
<p>Name of Current Provider(s): <small>Include company name(s) and length of operation (uninterrupted) in specified area or subarea.</small> San Luis Ambulance Service, Inc.</p>
<p>Area or subarea (Zone) Geographic Description: <i>Generally described as the "Central" or "Mid-County" portion of San Luis Obispo County. The Central Zone has the following general boundaries:</i></p> <p>West Boundary: Pacific Ocean from Villa Creek south to Pirate's Cove (just north of Shell Beach).</p> <p>North Boundary: Shared boundary with the North Coast Zone from the Pacific Ocean just north of Villa Creek Road then northeasterly to the intersection of Highway 46 West and Santa Rosa/Old Creek Roads.</p> <p>East Boundary: Shared boundary with the North Zone from the intersection of Highway 46 West and Santa Rosa/Old Creek Roads, then southeast to Highway 41 West near Cerro Alto Road, to Highway 101 just north of Cuesta Summit (includes all of West Cuesta Ridge Road and Tassajera Creek Road).</p> <p>South Boundary: Shared boundary with the South Zone from the Pacific Ocean north of Shell Beach, then easterly through Gragg Canyon (between Shell Beach and Squire Canyon), to the intersection of Highway 227 and Price Canyon Road, then east just north of Orcutt Road and Tiffany Ranch Road, then northeast to Hi Mountain Peak area and the southern boundary to the North Zone.</p>
<p>Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): <small>Include intent of local EMS agency and Board action.</small> Exclusive</p>
<p>Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): <small>Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).</small> Emergency Ambulance, 9-1-1 Emergency Response</p>

Method to achieve Exclusivity, if applicable (HS 1797.224):

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.

SLA is provider of services to area prior to January 1, 1981

EMS PLAN
AMBULANCE ZONE SUMMARY FORM
Reporting Period: January 1st, 2023 – December 31st, 2023

In order to evaluate the nature of each area or subarea, the following information should be compiled for each zone individually. Please include a separate form for each exclusive and/or nonexclusive ambulance zone.

<p>Local EMS Agency or County Name: San Luis Obispo County</p>
<p>Area or subarea (Zone) Name or Title: South</p>
<p>Name of Current Provider(s): <small>Include company name(s) and length of operation (uninterrupted) in specified area or subarea.</small> San Luis Ambulance Service, Inc</p>
<p>Area or subarea (Zone) Geographic Description: <i>Generally described as the "South County" of San Luis Obispo County. The South Zone has the following general boundaries:</i></p> <p>West Boundary: Pacific Ocean from the Shell Beach south to the Santa Barbara County line</p> <p>North Boundary: Shared boundary with the Central Zone from the Pacific Ocean north of Shell Beach, then easterly through Gragg Canyon (between Shell Beach and Squire Canyon), to the intersection of Highway 227 and Price Canyon Road, then east just north of Orcutt Road and Tiffany Ranch Road, then northeast to Hi Mountain Peak area and the southern boundary of the North Zone.</p> <p>East Boundary: Shared boundary with the North Zone from Hi Mountain Peak area, then generally southeast through Caliente Peak and to the Kern County line just north of Highway 166 (including all of Highway 166 and that portion of the Cuyama area in San Luis Obispo County).</p> <p>South Boundary: The Santa Barbara County line from the Pacific Ocean to Kern County line.</p>
<p>Statement of Exclusivity, Exclusive or non-Exclusive (HS 1797.6): <small>Include intent of local EMS agency and Board action.</small> Non Exclusive</p>
<p>Type of Exclusivity, "Emergency Ambulance", "ALS", or "LALS" (HS 1797.85): <small>Include type of exclusivity (Emergency Ambulance, ALS, LALS, or combination) and operational definition of exclusivity (i.e., 911 calls only, all emergencies, all calls requiring emergency ambulance service, etc.).</small></p>

Method to achieve Exclusivity, if applicable (HS 1797.224):

If grandfathered, pertinent facts concerning changes in scope and manner of service. Description of current provider including brief statement of uninterrupted service with no changes to scope and manner of service to zone. Include chronology of all services entering or leaving zone, name or ownership changes, service level changes, zone area modifications, or other changes to arrangements for service.

If competitively-determined, method of competition, intervals, and selection process. Attach copy/draft of last competitive process used to select provider or providers.



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT

Nicolas Drews *Health Agency Director*

Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

August 23rd, 2024

California EMS Authority
Attention: Tom McGinnis, State Trauma System
10901 Gold Center Drive, Suite 400
Rancho Cordova, California 95670

Regarding: County of San Luis Obispo Trauma Plan Update – Calendar Year 2023

Good afternoon Mr. McGinnis,

In March 2012, the County of San Luis Obispo designated Sierra Vista Regional Medical Center as a Level III Trauma Center. The County of San Luis Obispo's trauma program has not had significant changes to its primary system design during the calendar year 2023. However, the system has continued to maintain excellence in the delivery of patient care thanks to ongoing quality improvement, and performance improvement (PI) initiatives undertaken by system-stake holders.

The attached Trauma Update Report for calendar year 2023 includes a trauma system overview, system changes, the goals and objectives, and the trauma program performance improvement projects and measures.

Please contact me with any questions or if you desire additional information.

Ryan Rosander
EMS Coordinator
SLOEMSA
County of San Luis Obispo, Public Health Department
805.788.2513
rrosander@co.slo.ca.us

Attachments:
TAG membership list
2023 Trauma Program Indicators

Emergency Medical Services

2995 McMillan Ave, Ste. 178 | San Luis Obispo, CA 93401 | (P) 805-788-2519

<https://www.slocounty.ca.gov/>



COUNTY OF SAN LUIS OBISPO HEALTH AGENCY
PUBLIC HEALTH DEPARTMENT

Nicolas Drews *Health Agency Director*

Penny Borenstein, MD, MPH *Health Officer/Public Health Director*

Trauma Plan Update
January 1, 2023 – December 31, 2023

The County of San Luis Obispo (SLO) EMS Agency Trauma Care System Plan was developed in compliance with Section 1798.160, et seq., Health and Safety Code and originally approved by the California EMS Authority in March 2010. The following report is a system update for the 2023 calendar year.

System Overview

The County of SLO's trauma program functions with a single in-county Level III trauma center, Sierra Vista Regional Medical Center: and, in collaboration with Marian Regional Medical Center (MRMC) a Level II trauma center in neighboring Santa Barbara County. Due to the proximity of MRMC to the County of SLO, an MOU was developed memorializing the acceptance of trauma patients, as defined by local trauma triage and destination policy, across county lines. This MOU was included in The County of SLO's 2014-2015 Trauma Plan Update submitted to the EMS Authority. The County of SLO's trauma program also continues to work cooperatively with the neighboring counties of Ventura, Fresno, Monterey, and Santa Barbara's other more, distant trauma center.

The County of SLO's EMS Agency utilizes Trauma One and Image Trend data programs to identify and monitor trauma patients, which is both NEMSIS/CEMSIS compliant. All agencies within the County of SLO utilize Image Trend.

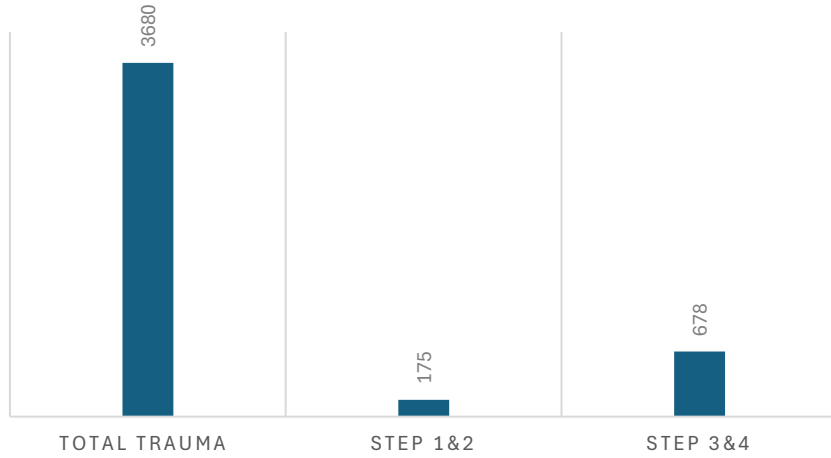
During the calendar year 2023 the system had a total of 3680 EMS responses for trauma patients with 853 meeting trauma triage criteria. The trauma centers received 95% of trauma patients meeting Step 1 or 2. The SLO EMS trauma policies require a trauma center consultation to determine destination of patients meeting Step 3 and 4 criteria. The trauma centers received 78% of those patients that were consulted on. Emergency Department outcomes for patients meeting Step 3 or 4 are reviewed for potential under/over-triage through the Performance Improvement (PI) program in the Trauma Advisory Group (TAG) and at the regional Tri-Counties (SLO, Santa Barbara and Ventura Counties) Trauma Audit Committee.

Emergency Medical Services

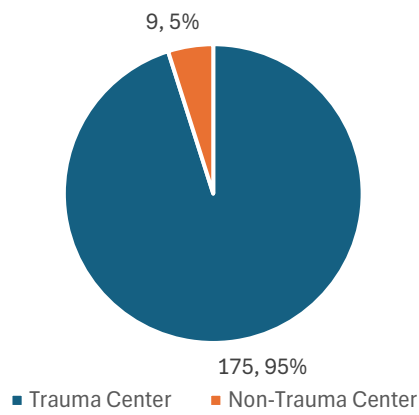
2995 McMillan Ave, Ste. 178 | San Luis Obispo, CA 93401 | (P) 805-788-2519

<https://www.slocounty.ca.gov/>

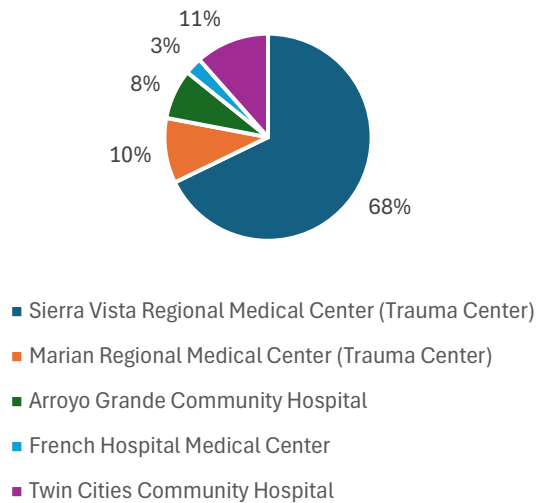
TOTAL TRAUMA VOLUME CALENDAR YEAR 2023



Distribution of Trauma Alerts (Steps 1 and 2) Calendar Year 2023



Distribution of Trauma Consults (Steps 3 and 4) Calendar Year 2023



Changes in the Trauma System

There were no “significant changes” (as defined in the Trauma System Plan Revision and Annual Trauma System Status Report Guidelines) to the trauma system plan previously approved by the EMS Authority.

Number and Designation Level of Trauma Centers

- Sierra Vista Regional Medical Center, San Luis Obispo – Level III Trauma Center
- Marian Regional Medical Center, Santa Maria (Santa Barbara County, participates as cooperative partner with MOU on file) – Level II Trauma Center

Trauma System Goals and Objectives for 2023

- Continued review of past PI program indicators with Trauma Advisory Group (TAG)
- Coordinate and participate in training and drills with system EMS provider agencies and trauma centers.
- Continue participation in the Tri-County peer review programs.
- Align SLO County’s trauma steps more closely with the American College of Surgeons (ACS) guidelines.

System Performance Improvement

System PI Projects in 2023:

- Reviewed trauma PI indicators with Trauma Advisory Group - attached
- Participation in the Tri-County PI and peer review program
- Continued a feedback report providing patient outcomes from both the trauma center and non-trauma centers to the EMS provider PI Coordinators
- Participate in EMS Authority Core Measures project

Progress on Addressing EMS Authority Trauma System Plan Comments

The EMS Authority approved the last Trauma System Status Report without any recommendations, required actions, or comments requiring action.

Other system Issues

No other issues at this time.

Submitted by:

Ryan Rosander
EMS Coordinator
SLOEMSA

County of San Luis Obispo, Public Health Department
805.788.2513
rrosander@co.slo.ca.us

Attachments:

 TAG membership list
 2023 Trauma Program Indicators

TRAUMA ADVISORY GROUP MEMBERSHIP
[2023]

REPRESENTATIVE POSITION	NUMBER OF REPRESENTATIVES	NAME
EMCC Representative	1	Bob Neumann - Chair
Trauma Program Physician Director	1each	Eric Salinger, M.D. Lars Ola Sjöholm M.D.
Trauma Nurse Program Manager	1each	Deanna Porter, R.N. Lisa Abeloe R.N.
Trauma Center ED Physician Director	1each	Gary Lucchesi, M.D. Terrance McGovern M.D.
Non-Trauma Center ED Physician Director (or Representative)	1 each hospital	AGCH – Stefan Tiege M.D. FHMC – Rachael May, M.D. TCCH – Kathryn Haran , M.D.
ED Nursing Director (or Representative)	1 each hospital	AGCH – Shauna Zoric, R.N. FHMC – Natasha Lukasiewich, R.N. TCCH – Holly Cole, R.N. SVRMC – Diane Burke, R.N. MRMC – Tauny Sexton R.N.
Transport Provider	1 from each provider	CCHD – Timothy Nurge SLAS – Nate Otter
Air Transport	1 from each provider	CHP – Doug Weeda CALSTAR – Aaron Hartney Mercy Air- Lisa Epps
Public Provider	1	Dan McCrain
Med-Com	1	Jennifer Mebane
Non-Voting Members – other invitees to assist in the medical audit review, i.e. MMC Trauma Representative, Coroner, Orthopedist, Pediatrician	As needed	EMS Agency Staff

2023 Trauma Program Indicators

EMS System Volume Report – EMS Agency

1. Prehospital Trauma Patients: Alerts and Trauma Consultation
2. Destination of Trauma Consultations

Prehospital Performance Review – EMS Agency

1. PCR records missing 24 hours after patient delivery to the TC
Goal – 0% missing
2. Transports with > 30 min scene to hospital by ground
 - a. Measure: review for possible indication of air transportation by time and need criteria set forth in Policy 119
3. Trauma Alerts (step 1 or 2) with > 10 on scene time requiring extrication
 - a. Measured from EMS transporting agency patient contact to start of transport
 - b. Goal - < 90%
4. Alerts (step 1 or 2) with > 20 minute from dispatch to scene of EMS personnel
 - a. Includes arrival of EMS first responder
 - b. Goal - 0%

EMS Hospital System Review – EMS Agency

1. Over Triage Rate
 - a. Number/percent of Trauma Alert (Step 1 or 2) with an ISS <15
 - b. Goal – 30-50%
2. Under Triage Rate
 - a. Number/percent of Trauma Alert (Step 1 or 2) with an ISS >15
 - b. Goal - < 5%
3. Non-Trauma Center Patient Outcome Information
 - a. Admit to Med Surg
 - b. Admit to OR
 - c. Admit to ICU
 - d. Admit to DOU
 - e. Died
 - f. Discharged
 - g. Transferred

Focused Trauma Audit Filters for Quarterly TAG Report from TC

1. Presence of the trauma surgeon in the ED within 30 minutes of notification
 - a. % that no times documented
 - b. Meet 30 minutes or less 90% of the time
 - c. Documentation occurs 100% of the time

2. Lack of definitive airway management for patients leaving the ED with GCS 8 or less
 - a. % there was no documentation of airway
 - b. Goal - 0 %
3. Delay to OR, Laparotomy
 - a. Patients with abdominal injuries and hypotension (< 90 mmHg) after initial fluid resuscitation who do not undergo laparotomy within 1 hour of ED or TC arrival
4. Delay to OR, Craniotomy
 - a. Patients with epidural or subdural brain hematoma receiving craniotomy > 4 hours after ED or TC arrival – excludes those performed for ICP monitoring
5. Delay in OR, Open or Long Bone Fracture
 - b. Interval of greater than 8 hours between ED or TC arrival and the initiation of debridement of an open fracture – excluded low velocity GSW
6. Initial Surgical Intervention > 24 hours
 - a. Initial abdominal, thoracic, vascular or cranial surgery performed > 24 hours after arrival to ED or TC (excludes patients identified in 3,4 or 5)
7. Unexpected return to OR
 - a. Unexpected return to OR after initial surgery
8. Unexpected readmission
 - a. Readmission to hospital for complications related to prior trauma admission
9. Referring Facility Complication
 - a. Complications to be identified by TC Medical Director

Additional Quarterly TAG Report from the TC

1. Volume
 - a. Age
 - b. ISS
 - c. MOI
2. Trauma Alert Patient Outcomes
 - a. Disposition
 - i. Died
 - ii. Admitted without surgery
 - iii. Admitted with surgery
 - iv. Transferred
 - v. Discharged home
 - vi. Discharged to Rehabilitation or SNF
 - b. Median Length of Stay in ED
 - i. Age
 - ii. ISS
 - iii. Response Level – Tier 1 and Tier 2

**STEMI Plan prepared for the
California Emergency Medical Services Authority
2023**

Plan prepared by:

County of San Luis Obispo
Department of Public Health
Emergency Medical Services Agency
2995 McMillan Ave, Ste. 178
San Luis Obispo, CA 93401
(805) 788-2519

Plan reviewed and edited by:

William Mulkerin, MD, Medical Director
Penny Borenstein, MD, Acting EMS Director
Ryan Rosander, EMS Coordinator
Rachel Oakley, EMS Coordinator
Alyssa Vardas, Administrative Assistant

Table of Contents

STEMI Critical Care System	2
STEMI Continuum of Care	2
Goals Within the Continuum of Care	3
Three Areas of Collaboration: A Team Approach	4
Stakeholders	5
San Luis Obispo County EMS Agency	5
San Luis Obispo County STEMI Receiving Center and other Receiving Hospitals	6
San Luis Obispo County Pre-Hospital Providers	7
The ACS/STEMI Patient	7
Destination	7
Communication	8
STEMI Patient Volume	8
Inter-Facility Transfers	9
Data Collection	9
STEMI Quality Improvement	9
STEMI Care Committee	10
Education and Outreach	10
Attachments:	
1. Policy #100 QI Policy	
2. Policy #121 EMS Base Station Report	
3. Policy #152 STEMI Triage and Destination	
4. Policy #400 STEMI Receiving Center Designation	
5. Protocol #640 Adult Chest Pain/Acute Coronary Syndrome	
6. Procedure #707 12-Lead ECG	

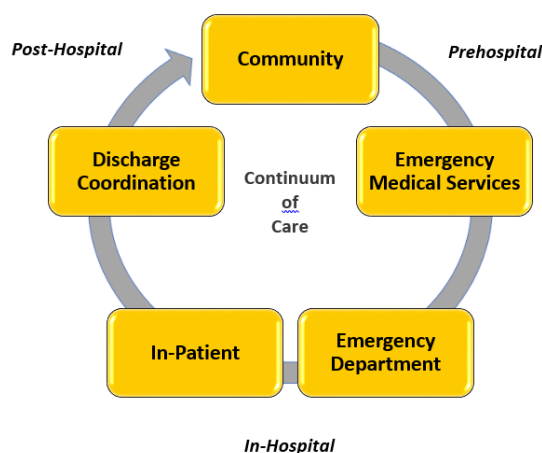
STEMI Critical Care System

Heart disease is the leading cause of death and long-term disability in the U.S. Every year in the U.S. approximately 805,000 people have a heart attack. Of these, 605,000 are first time events and 200,000 are subsequent events¹. Approximately 695,000 people die from heart disease each year. Coronary Heart Disease (CHD) is the most common cause with approximately 375,000 deaths each year². In 2021 in California, there were 62,797 deaths from all heart disease, a population rate of 141.9/100,000³. Heart attack, also known as Myocardial Infarction (MI), is a life-changing event that places heavy burden on patients, family, and caregivers, physically, emotionally, and financially. When a patient suffers an MI, particularly an ST Elevation MI (STEMI), timely intervention is critical to reduce mortality, morbidity, and disability as well as improve survival quality of life.

In July 2019, the California Emergency Medical Services Authority (EMSA) implemented new regulations, 3, CCR Title 22 7.1, outlining local EMS Agency's requirements for a STEMI Critical Care System. The broad objective for a California STEMI Critical Care System is to improve the care of patients suffering from a life-threatening acute heart attack. The new regulations are designed to provide a consistent application of standardized care throughout the state.

In 2010, San Luis Obispo County EMS Agency (SLOEMSA) developed and implemented a STEMI Critical Care System. The SLO County STEMI system links prehospital and hospital care to deliver treatment to STEMI patients who potentially require immediate medical or surgical intervention.

STEMI Continuum of Care



Rapid coronary artery reperfusion is the foundation of treatment for acute ST-Elevation myocardial infarction (STEMI) to improve survival. Despite two decades of evidence and seven years since best

¹ <https://www.cdc.gov/heartdisease/facts.htm>

² <https://www.cdc.gov/heartdisease/facts.htm>

³ <https://www.heart.org/-/media/files/about-us/policy-research/fact-sheets/quality-systems-of-care/quality-systems-of-care-california.pdf?la>

practice guidelines were introduced, 30-50% of patients fail to have these guidelines applied to their care. Considering the number of Percutaneous Coronary Intervention (PCI)-capable hospitals increased by almost 50%, and that 90% of Americans live within 60 minutes of a PCI-capable facility, inadequate access cannot entirely explain these systematic failures. The challenge lies within a highly fragmented healthcare system comprising approximately 4,750 acute care hospitals and more than 15,000 emergency medical services (EMS) agencies in the United States. The challenge is further exacerbated by structural barriers that hinder coordination between EMS providers and hospitals. Such fragmentation has hindered the development of coordinated treatment plans along and throughout the continuum of care⁴.

Improved adherence to the American College of Cardiology and American Heart Association (ACC/AHA) heart failure guidelines translates to improved clinical outcomes in real world heart failure patients. Data shows that with each 10% improvement in ACC/AHA guideline-recommended care there was an associated 13% lower odds of 24-month mortality⁵. STEMI systems of care improve care and support for cardiac patients throughout their health care journey from prehospital care to in-hospital care through post-hospital care. This collaboration and standardization across the continuum of care is paramount to improve outcomes.

The continuum of care is important to caregivers and patients alike. It leads to an improvement of patient satisfaction levels, reduces costs, and improves health. Keeping up the continuum of care is especially important for patient populations such as those who are more dependent on healthcare services. These patient populations include the elderly, those suffering from complex medical conditions, mentally vulnerable patients and patients with chronic diseases. This suggests that continuum of care is particularly beneficial to the cardiac patient population, including STEMI, and that STEMI systems of care depend on robust collaboration to ensure that the continuum of care is optimally exercised.

Goals Within the Continuum of Care

The San Luis Obispo STEMI continuum of care can be broken down and evaluated at three levels:

1. **Prehospital**

Includes the community and Emergency Medical Services which provides rapid identification and transport of suspected STEMI patients to the most appropriate facility.

2. **In-Hospital**

Includes the Emergency Department and In-Patient admissions of the hospital which provides optimum cardiac treatment for every STEMI.

⁴ <https://ahajournals.org/doi/full/10.1161/circulationaha.115.019474>

⁵ https://www.ehdc.org/sites/default/files/resources/files/transitions%20of%20care_Pina_10.17.17.pdf

3. **Post-Hospital**

Includes the discharge coordination of patients as well as community efforts to ensure resources are available and accessible to patients. The goal is to improve post-discharge care while providing education and facilitation of home support systems.

Within each level of the continuum of care, there are identified goals designed to build safety into the STEMI system of care, ensuring that patients receive the safest and most reliable care across the continuum.

1. **Prehospital**

Primary Prevention
 Early Identification and Rapid Response
 Treatment and Transport
 Education and Outreach
 Performance Improvement
 Data Management

2. **In-Hospital**

Hospital Services
 Hospital Personnel
 Clinical Capabilities
 Education and Outreach
 Performance Improvement
 Data Management

3. **Post-Hospital**

Post Discharge Care
 Secondary and Tertiary Prevention
 Resources and Referrals
 Education and Outreach
 Performance Improvement
 Data management

At each step in the system of care, it is important to also include education and outreach, performance improvement, and data management.

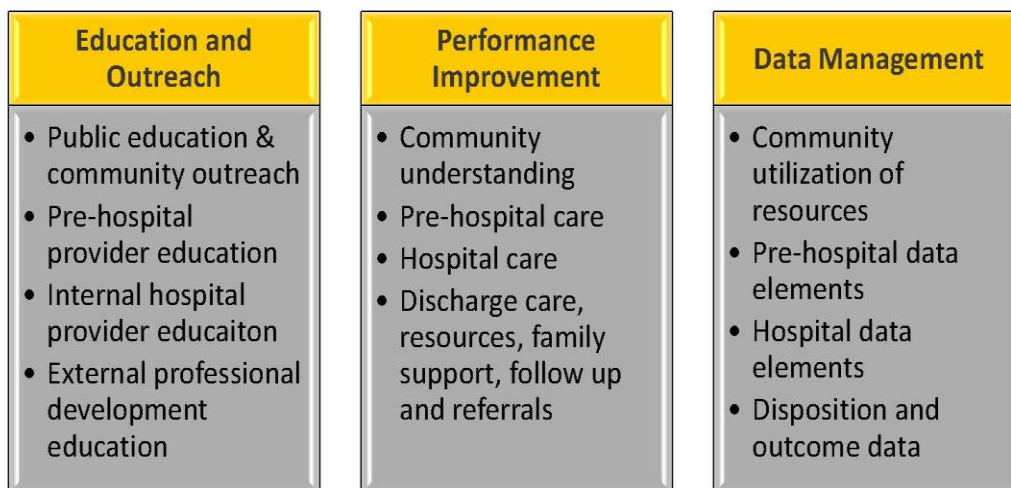
Three Areas of Collaboration: A Team Approach

Recognizing that patient outcomes are greatly dependent on the quality of care within each level of care on the continuum, it is critical for San Luis Obispo County providers to work in a collaborative team approach wherever possible. Common themes span across the Prehospital, In-Hospital and Post-Hospital levels that identify opportunities to maximize SLOEMSA's team approach to care of the cardiac patient.

- Community education where EMS and other healthcare professionals promote and support an integrated system of care. Interprofessional and interdisciplinary education systems

prepare care providers to work collaboratively together as a team. When combined with community education and outreach efforts, the patients have an active role in their personal health and well-being.

- Performance Improvement invariably involves work across multiple systems and disciplines within a practice. Within the healthcare practice continuum, this is particularly applicable as patients have various formal and informal care providers throughout their course of illness and into their discharge disposition.
- Good data can help identify, verify and proactively address issues, measure progress and capitalize on opportunities. When data is gathered, tracked, and analyzed in a credible way over time, it becomes possible to measure progress and success. Policies, procedures, services, and interventions can then be evaluated, modified, and improved.



A team approach from a truly integrated healthcare system will go beyond education, outreach, performance improvement and data management/sharing. SLOEMSA's aim is to create a seamless system which requires EMS professionals and community partners to commit to the same shared objectives and find ways to achieve them together. This team approach from a people-centered EMS system takes advantages of the strengths and resources brought by each organization and provider to protect the health and wellness of individuals and communities.

Stakeholders

San Luis Obispo County EMS Agency (SLOEMSA)

San Luis Obispo (SLO) County is located along California's central coast, about halfway between Los Angeles and San Francisco. Encompassing an area of 3,616 sq. miles, SLO County has a mix of urban communities and large sparsely populated rural areas. The County's population of 282,424 (2020) is concentrated along the U.S. Hwy 101 and California State Hwy 1 corridors including the cities of Grover Beach, Arroyo Grande, Pismo Beach, San Luis Obispo, Morro Bay, Atascadero, and Paso Robles, as well as other communities such as Nipomo, Los Osos, and Cambria. In addition to permanent residents, SLO County has an increasing number of visitors drawn to the County's numerous outdoor

and cultural activities⁶. As a result of the population concentration, most of the County's emergency services, including advanced life support (ALS) fire and ambulance, are located primarily in the communities listed above. The rural, less populated areas are covered by Cal Fire resources containing mostly basic life support (BLS) personnel equipped with automatic external defibrillators. This utilization of resources ensures everyone in SLO County receives timely emergency response when needed.

SLOEMSA is comprised of an EMS Administrator, EMS Medical Director (part-time contracted), three (3) EMS Coordinators, and one (1) Administrative Assistant. Although one EMS Coordinator is designated as the STEMI staff liaison, all staff members have input in the STEMI Critical Care System. We work closely with stakeholders, including representatives from the designated STEMI Receiving Center, (SRC), other County receiving hospitals, and public and private EMS provider agencies. It is through the work that is managed collectively as a group that the STEMI System of Care exhibits optimal performance.

San Luis Obispo County STEMI Receiving Center

SLO County has a total of five prehospital receiving hospitals. Four of these hospitals are within SLO County and one hospital is physically located just outside of SLO County in Santa Barbara County (Santa Maria). One hospital in SLO County, French Hospital Medical Center (FHMC), is a SLOEMSA designated STEMI Receiving Center. Marian Regional Medical Center (MRMC) in Santa Maria is designated as a STEMI Receiving Center by the Santa Barbara County EMS Agency. STEMI patients in the southern part of SLO County may be transported to MRMC as the closest STEMI Receiving Center.

The California State Regulations define a STEMI Receiving Center (SRC) as a "licensed general acute care facility that meets the minimum hospital STEMI care requirements pursuant to Section 100270.124 and is able to perform Percutaneous Coronary Intervention (PCI)."

SLOEMSA has a written agreement with FHMC designating it as a STEMI receiving center. To be considered for STEMI receiving center designation, FHMC must hold current Chest Pain Certification by The Joint Commission and complete a SLOEMSA STEMI Center Designation Application packet. The application packet contains an evaluation tool that SLOEMSA uses to ensure the facility meets the requirements to receive STEMI Center Designation. STEMI Centers must also maintain compliance with SLOEMSA designation criteria outlined in Policy #400, *STEMI Receiving Center Designation*.

SLO County Pre-hospital Providers

The County of San Luis Obispo is comprised of a mix of public and private EMS Advanced Life Support (ALS) providers and Basic Life Support (BLS) First Responders. A combination of ground, air and specialty Critical Care Transport (CCT) are all offered within the county. The community can access emergency transport services via public providers through the 9-1-1 system.

Once on scene, the first responder and ambulance transport crews coordinate their efforts to rapidly identify, treat and transport STEMI patients to an SRC. A critical component in the continuum of care is the transfer of 12-Lead ECG findings. Providers electronically transmit 12-Lead ECGs to the receiving

⁶ http://www.sloevc.org/files/SLO%20County%20Tourism%20Report_2008%20%28v_2%29.pdf

hospital and when needed, prehospital providers can contact the SRC for medical direction or consultation. Field crews notify the SRC of the incoming patient with a “STEMI Alert” radio report in order to allow hospital staff to prepare for expeditious triage and treatment upon patient arrival. Prehospital providers work closely with the SRC staff to ensure that all pertinent information is relayed for a seamless transition within the continuum of care.

SLOEMSA has a policy in place to describe the process in which 12-Lead ECG transmission takes place. Policy document #152 *STEMI Triage and Destination* serves as an advanced life support skill guideline for obtaining, utilizing, and transmitting 12-Lead ECG’s and determining patient destination with suspected STEMI patients.

The ACS /STEMI Patient

SLOEMSA believes that rapid identification, treatment and transport of STEMI patients by emergency medical personnel is a valuable part of optimal care for the victims of cardiac emergencies. Morbidity and mortality rates in STEMI patients have been shown to be directly related to the degree of myocardial damage sustained as a result of vessel occlusion⁷. An important determinant of outcomes for the STEMI patient is timely reperfusion of the coronary arteries. Reperfusion of the affected artery can salvage myocardium that would otherwise become necrotic⁸.

A STEMI diagnosis is based on electrocardiographic changes that show evidence of evolving myocardial injury, as well as the presentation of the patient. When there are electrocardiographic changes and the patient presents with pain or symptoms of suspected cardiac origin, the patient goes directly to the cardiac catheterization laboratory for a possible reperfusion treatment. Therefore, STEMI patients benefit the most from rapid coronary reperfusion therapy⁹.

It is imperative that field personnel are well trained and STEMI receiving centers are well prepared for the patient that presents with STEMI. SLOEMSA has several policies in place to assist field providers in the rapid identification of a patient who may be suffering a STEMI. Policy #640 *Adult Cardiac Chest Pain/Acute Coronary Syndrome*; describes signs, symptoms and treatment of chest pain of suspected cardiac origin including possible STEMI patients; Procedure #707 *12-Lead ECG* outlines the indications, documentation and contact guidelines for possible STEMI patients; Policy #152 *STEMI Triage and Destination* is a guideline for EMS personnel to identify and transport patients with acute STEMI who could benefit from the rapid response and specialized services of an SRC.

Destination

In STEMI systems of care, STEMI patients should be transported to the closest, most appropriate facility staffed and equipped to perform immediate percutaneous coronary intervention (PCI) to facilitate reperfusion. STEMI destination policies that allow emergency medical services to bypass non-percutaneous coronary intervention-capable facilities are associated with significantly faster treatment times for patients with ST-Elevation MI. Time to treatment in STEMI is a critical determinant of patient outcomes. Reducing delays relies on a robust emergency medical system that can transport

⁷ <https://www.ahajournals.org/doi/10.1161/JAHA.118.008096>

⁸ <https://www.ahajournals.org/doi/10.1161/JAHA.118.008096>

⁹ https://www.heart.org/idc/groups/heart-public/@wcm/@mwa/documents/downloadable/ucm_487492.pdf

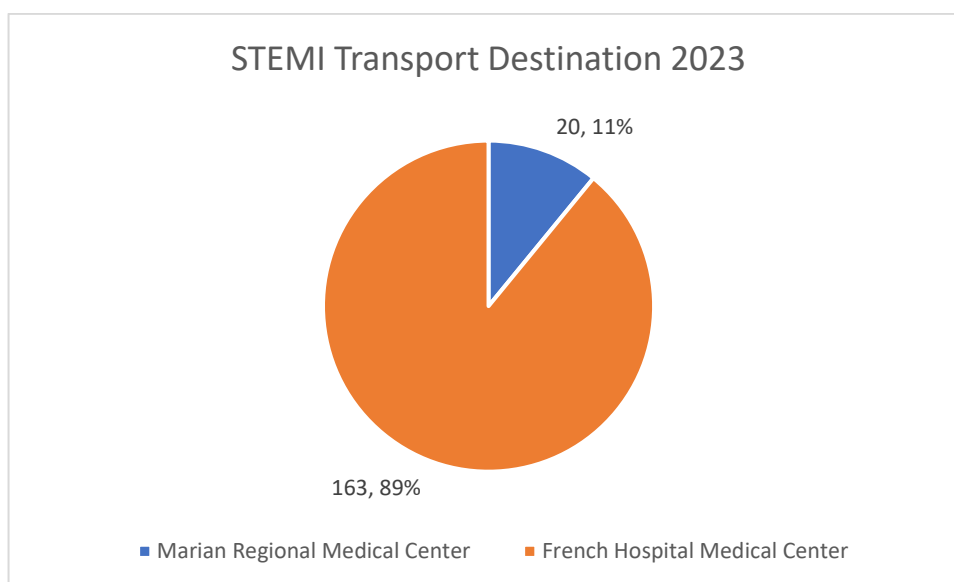
a patient directly to a percutaneous coronary intervention-capable hospital, even if it means driving past a closer hospital¹⁰.

In the rare situation that the closest, most appropriate STEMI center is not available to accept a STEMI patient due to an internal disaster or occupied Cath Lab suites, field providers will transport the patient to the next closest, most appropriate SRC or other receiving hospital.

SLOEMSA has a policy in place to assist field providers in determining destination for a STEMI patient. Policy document #152 *STEMI Triage and Destination* outlines criteria and destination(s) for suspected STEMI patients in SLO County.

STEMI Patient Volume

In 2023, 183 patients were treated and transported to a SRC. Approximately 89% of these patients were transported to French Hospital Medical Center, 11% were transported to Marian Regional Medical Center (Santa Barbara County).



Communication

Studies show that EMS transportation is associated with shorter door-to-balloon time in patients with ST-segment elevation myocardial infarction. In addition to EMS transportation, when prehospital crews make notification of an incoming STEMI patient to the receiving hospital, it is again associated with shorter door-to-balloon time¹¹.

Early notification of an incoming STEMI patient allows appropriate hospital resources to mobilize prior to patient arrival. Due to the time-sensitive nature of reperfusion on outcomes, the diligent practice

¹⁰ <https://www.ahajournals.org/doi/full/10.1161/circinterventions.117.005706>

¹¹ [https://www.ajemjournal.com/article/S0735-6757\(16\)30234-0/pdf](https://www.ajemjournal.com/article/S0735-6757(16)30234-0/pdf)

of STEMI-alerts from the field is a vital element in the continuum of care spectrum as it is meant to effectively and rapidly communicate the need for expeditious treatment upon patient arrival.

SLO County prehospital providers have two ways to make prehospital notification. The first, and most common, means of notification is via UHF radio frequency assigned to each receiving facility. The second means of notification is via a dedicated phone number for each receiving facility. In the case of possible STEMI or sustained return of spontaneous circulation (ROSC) in cardiac arrest patients, field units contact the SRC regardless of the closest receiving facility

SLOEMSA has policies in place to give direction on administering a notification report to receiving hospitals. Policy document #121 *EMS Base Station Report-12 Lead Consult* addresses the minimum acceptable information to be communicated and provides a standardized and consistent approach to pre-hospital notifications.

Inter-Facility Transfers

In SLO County approximately one-half of STEMI patients receiving PCI are transferred from one of SLO County's other receiving facilities. These are almost exclusively patients who arrive at an Emergency Department (ED) by means other than ambulance (e.g.: private vehicle, walk-in). Once these patients are diagnosed with a STEMI, an emergency inter-facility transfer to the closest SRC is arranged. There are currently agreements between the SLO County SRC and the three other receiving hospitals for inter-facility transfers of STEMI patients.

Data Collection

Retrospective data collection and analysis lie at the heart of quality improvement. Data aids in understanding how well the systems work, identifying potential areas for improvement, setting measurable goals, and monitoring the effectiveness of change. Robust data systems, with the ability to report clinical indicators and performance measures, are a key tool to accomplish Quality Improvement (QI) activities. The goal is to connect data from across the continuum of care from Prehospital to In-Hospital to Post-Hospital disposition in order to optimally evaluate patient outcomes¹².

The SRC in SLO County is currently using the National Cardiovascular Data Registry (NCDR) to collect and analyze pre-hospital, in-hospital, and post-hospital cardiac data, including STEMI and cardiac arrest patients. NCDR collects all the required data points listed in §100270.126, Data Management, including STEMI patient data elements and STEMI system elements.

STEMI Quality Improvement

Reaching for excellence in any system requires a functional decision-making process among the team of workers and users within that system. Inherent to this process is the need to know how the system is functioning and what to do to fix or improve it. The concept of continuous quality improvement (CQI) particularly in the field of health care relies mainly upon the following fundamental components:

¹² <https://ems.ca.gov/wp-content/uploads/sites/71/2017/12/Core-Measure-Report-for-2016-Data.pdf>

- The availability of reliable and trusted information
- The ability to effectively communicate that information in easy to understand ways
- A standardized approach to reaching decisions and acting on those decisions

It is through SLOEMSA's Continuous Quality Improvement that the gap between performance and expectations narrows. It pushes the standards upward which results in better outcomes. Quality Improvement stresses understanding complex processes, measuring performance using reliable statistical methods, and using that information to build quality into our process.

SLOEMSA has policies in place to ensure continued high quality of patient care in emergency medical services provided in our community. Policy document #100-*Quality Improvement Plan* establishes a system-wide Quality Improvement Program to continuously monitor, review, evaluate and improve the delivery of Prehospital, In-Hospital and Post-Hospital care of all patients, including STEMI. The program has active members from all system partners and includes prospective, concurrent, and retrospective reviews as well as a feedback system to help close the QI loop.

STEMI Care Committee

As the delivery of cardiac care evolves to become more interconnected, coordinating care between prehospital Providers, Nurses, Physicians, and other disciplines has become increasingly important. In its simplest form, interprofessional collaboration is the practice of approaching patient care from a team-based perspective. When implementing interprofessional collaboration and learning to work together and respecting one another's perspectives in healthcare, multiple disciplines can work more effectively as a team to help improve patient outcomes. In addition, it improves the coordination and communication between healthcare professionals and thus in turn, improves the quality and safety of patient care.

STEMI system of care monitoring and evaluation in SLO County is conducted through the SLOEMSA STEMI Committee. The committee is comprised of EMSA staff, the STEMI Coordinator from the SRC, liaisons from all of the SRH's, a liaison from Marian Hospital SRC (Santa Barbara County), members of the SRC clinical team including cardiologists, and liaisons from the pre-hospital provider agencies (both fire and ambulance). The STEMI Care Committee meets quarterly and is tasked with reviewing performance data, identifying areas in need of improvement, and carrying out and monitoring improvement efforts. For these activities, the committee uses a variety of QI approaches and tools, including Plan, Do, Study, Act (PDSA) cycles, assessments, audits and feedback, benchmarking and best practices research. They provide expertise to address potential quality improvement initiatives within our STEMI system which contributes to the development or revision of STEMI related policies, procedures and treatment protocols.

Education and Outreach

According to the Robert Wood Johnson Foundation (RWJF), enhancing interdisciplinary collaboration and coordination in healthcare is imperative. As the delivery of care becomes more complex across a wide range of settings and the need to coordinate care among multiple providers becomes ever more important, developing well-functioning teams becomes a crucial objective throughout the health care system. Health professionals have traditionally operated in separate spheres. Studies show that if they "breakdown the walls of hierarchical silos" and come together as a team, they will improve the safety and quality of patient care.

Collaboration between professions starts with interdisciplinary education, which can break down those walls. Health professionals must begin working together before they start working. Interdisciplinary education will lead to more effective communication across disciplines and, ultimately, safer, more affordable, and higher quality care.¹³

In San Luis Obispo County, interdisciplinary education takes several forms. One form is through the STEMI Care Committee. By bringing in all the critical stakeholders, continuing education topics on STEMI issues are identified and disseminated to base stations and provider agencies who then provide continuing education on the topics identified.

Another form is through individual STEMI case follow-ups. Individual STEMI cases and their outcomes are forwarded to SLOEMSA who then relays them to the provider agencies for review with the crews who treated and transported the patients. This allows the treating paramedics and EMT's to see how important their role is in the continuum of care in turn helping to "breakdown the walls of hierarchical silos" previously discussed.

In addition to interdisciplinary education, there is a vital component of public education and outreach that contributes to the health and wellness of a community. One of the goals identified in Healthy People 2020 is to increase the quality, availability, and effectiveness of educational and community-based programs designed to prevent disease and injury, improve health, and enhance quality of life.

Cardiac care public education and outreach will contribute to the improvement of health outcomes in the United States and is a component of the SLOEMSA STEMI Critical Care System.¹⁴ FHMC, the SLO County designated SRC, provides several outreach programs. The "Healthy for Life Nutrition" series covers the risk and signs of heart disease and stroke. The course is provided in both English and Spanish in various locations throughout SLO County. FHMC also has designated staff who are certified CPR instructors who teach Spanish Heartsaver CPR community courses throughout the county.

Many of SLO County's EMS provider agencies, led by the county's largest ambulance provider San Luis Ambulance (SLA) conduct regular hands-only CPR demonstrations and participant practice. These demonstrations are held at SLA headquarters, various fire stations throughout the county, and other public venues such as the San Luis Obispo Farmers Market. Early bystander CPR has been shown to increase survival of out-of-hospital cardiac arrest.¹⁵ Our goal is to increase the number of citizens trained in hands-only CPR which will lead to greater increases in cardiac arrest survival.

¹³ <https://www.rwjf.org/en/library/articles-and-news/2010/11/interdisciplinary-collaboration-improves-safety-quality-of-care-.html>

¹⁴ <https://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs>

¹⁵ <https://newsroom.heart.org/news/compression-only-cpr-increases-survival-of-out-of-hospital-cardiac-arrest>

POLICY #100: CONTINUOUS QUALITY IMPROVEMENT

I. PURPOSE

- A. To establish a system-wide quality improvement program to evaluate the services provided within the County of San Luis Obispo (SLO) Emergency Medical Services (EMS) System.

II. SCOPE

- A. This policy applies to all EMS service providers (henceforth “providers”) and base hospitals within the County of SLO EMS System.

III. DEFINITIONS

- Emergency Medical Services System Continuous Quality Improvement Program (CQI Program) - methods of evaluation that are composed of structure, process, and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervenes to reduce or eliminate these causes, and take steps to correct the process and recognize excellence in performance and delivery of care.

IV. POLICY

- A. The County of SLO EMS Agency (EMS Agency) will:

- 1. Develop and implement, in cooperation with other EMS system participants, a system-wide written CQI Plan (attachment A), as defined in Title 22, Division 9, Chapter 12. This plan will include indicators, which address, but are not limited to, the following:

- a. Personnel
- b. Equipment and Supplies
- c. Documentation
- d. Clinical Care and Patient Outcome
- e. Skills Maintenance/Competency
- f. Transportation/Facilities
- g. Public Education and Prevention
- h. Risk Management

- 2. Establish and facilitate a system-wide comprehensive quality assessment and improvement program. The program will include, but is not limited to, the following activities:

- a. Regularly scheduled CQI Committee meetings
 - (1) The CQI Committee must be multidisciplinary and include representatives from all levels (ALS and BLS) of field prehospital personnel both public and private, air transport agencies, emergency

medical dispatch, base hospitals, Specialty Care Centers, and EMS Agency staff/personnel.

(2) The Chair of the Emergency Medical Care Committee (EMCC) will approve a CQI Committee Chairperson. The term of service will be two (2) years.

(3) Patient, provider and base hospital confidentiality will be strictly maintained at all times during the CQI process. A Confidentiality agreement will be signed at the beginning of each meeting by all participants

b. Ensures each provider and base hospital complies with reporting and other quality assessment requirements as specified or determined in Title 22 Division 9, Chapter 12, and the EMS Agency CQI Plan.

c. Ensures each provider and base hospital submits a CQI plan to the EMS Agency for approval.

d. Ensures each provider and base hospital conducts an annual review of their own individual CQI plan and submits any changes to the EMS Agency for approval.

e. Review provider and base hospital CQI plans every five years

B. EMS service providers will:

1. Develop and implement, in cooperation with other EMS system participants, a provider-specific written CQI program, as defined in Title 22, Division 9, Chapter 12, and the EMS Agency CQI Plan. Such programs must include indicators, which address, but are not limited to, the following:

- a. Personnel
- b. Equipment and Supplies
- c. Documentation
- d. Clinical Care and Patient Outcome
- e. Skills Maintenance/Competency
- f. Transportation/Facilities
- g. Public Education and Prevention
- h. Risk Management

2. Review the provider-specific CQI Program annually for appropriateness to the operation of the provider and revise as needed.

3. Participate in the EMS Agency CQI Program that may include making available mutually agreed upon relevant records for program monitoring and evaluation.

4. Develop, in cooperation with appropriate personnel/agencies, an action plan for performance improvement when the EMS CQI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, coordination and consultation are required with the provider and the EMS Agency.

5. Provide the EMS Agency with an annual update, from date of approval and annually thereafter, on the provider CQI Program. The update must include, but not be limited to; a summary of how the provider's CQI Program addressed the program indicators.

C. Base Hospitals will:

1. Develop and implement, in cooperation with other EMS system participants, a hospital-specific written EMS CQI program, as defined in Title 22, Division 9, Chapter 12, and the EMS Agency CQI Plan. Such programs must include indicators which address, but are not limited to, the following:

- a. Personnel
- b. Equipment and Supplies
- c. Documentation
- d. Clinical Care and Patient Outcome
- e. Skills Maintenance/Competency
- f. Transportation/Facilities
- g. Public Education and Prevention
- h. Risk Management

2. Review the hospital-specific EMS CQI Program annually for appropriateness to the operation of the base hospital and revise as needed.

3. Participate in the EMS Agency CQI Program that may include making available mutually agreed upon relevant records for program monitoring and evaluation.

4. Develop, in cooperation with appropriate personnel/agencies, an action plan for performance improvement when the EMS CQI Program identifies a need for improvement. If the area identified as needing improvement includes system clinical issues, coordination and consultation are required with the base hospital and the EMS Agency.

5. Provide the EMS Agency with an annual update, from date of approval and annually thereafter, on the base hospital EMS CQI Program. The update must include, but not be limited to; a summary of how the hospital's EMS CQI Program addressed the program indicators.

V. PROCEDURE

A. Review Process

1. The first efforts to resolve conflicts should occur on a peer-to-peer level. If the issue is a timely patient care conflict, the base station physician should be consulted. If the issue remains unresolved at the peer-to-peer level, an Opportunity for Improvement Form/Incident Report Form (Attachment C of the EMS Agency Plan) should be forwarded to the provider's CQI representative. The CQI representative will then determine the need to do any of the following:

- a. Resolve the issue at the provider level
- b. Resolve the issue with the other involved provider(s)

- c. Report system-wide implications to CQI Committee/EMS Medical Director
 - d. Handle inter-county issues
 - e. Identify and report any protocol, policy or emergency medical dispatch issues
 - f. Identify and manage and/or report any equipment issues
2. Opportunity for Improvement Form (Attachment C of the EMS Agency Plan) - any opportunity for improvement or patient care issue should be placed on the "Opportunity for Improvement Form"/Incident Report. All reports and additional contents are considered confidential documents and should not become part of, or referenced in, the PCR or First Responder Report. The Opportunity for Improvement Form/Incident Report must be submitted to the provider CQI representative.
 3. Reporting - All appropriate unresolved issues, mandatory requirements or issues with system-wide implications in patient care must be reported to the EMS Agency in a timely manner (Attachment B of the EMS Agency Plan – CQI Flow Chart).
 4. CQI Representative - Each provider and base hospital must designate a representative who will receive and review all opportunities for improvement related to their personnel.
 - a. Any individual, provider or base hospital that discovers or becomes aware of an opportunity for improvement will inform the appropriate designated representative who will notify involved personnel after following the above guidelines.
 - b. The designated representative is responsible for the identification and resolution of opportunities for improvement in a timely manner.
 - c. The EMS Agency Medical Director shall be notified of any reports within 72 hours of receiving any preliminary report of an opportunity for improvement.
 - d. The designated representative will maintain detailed documentation.
 - e. The designated representative will provide useful feedback to personnel.
 5. The designated representative must forward to the EMS Agency, within 72 hours, all opportunities for improvement, which may involve the California Health and Safety Code, Division 2.5, Section 1798.200 and/or Title 22 of the California Code of Regulations. Section 1798.200 states... "Any of the following items will be considered evidence of a threat to public health and safety and may result in denial, suspension, or revocation of a certificate issued under this division or placement on probation of a certificate holder" including:
 - a. "Fraud in the procurement of any certificate under this division."
 - b. "Gross negligence."
 - c. "Repeated negligent acts."
 - d. "Incompetence."
 - e. "The commission of any fraudulent, dishonest, or corrupt act which is substantially related to the qualifications, functions and duties of prehospital personnel."

- f. "Conviction of any crime which is substantially related to the qualifications, functions, and duties of prehospital personnel. The record of conviction or certified copy of the record shall be conclusive evidence of such conviction."
- g. "Violating or attempting to violate directly or indirectly, or assisting in or abetting the violation of, conspiring to violate, any provision of this division or regulations adopted by the authority pertaining to prehospital personnel."
- h. "Violating or attempting to violate any federal or state statute or regulation which regulates narcotics, dangerous drugs, or controlled substances."
- i. "Addiction to the excessive use of, or the misuse of, alcoholic beverages, narcotics, dangerous drugs, or controlled substances."
- j. "Functioning outside the supervision of medical control in the field care system operating at the local level, except as authorized by any other license or certification."
- k. "Demonstration of irrational behavior or occurrence of a physical disability to the extent that a reasonable and prudent person would have reasonable cause to believe that the ability to perform the duties normally expected may be impaired."

6. In cases involving paramedics, the EMS Agency Medical Director may temporarily suspend the license in the case of a threat to the public health and safety and forward the case to the California EMS Authority for further action.

B. Counseling and Remediation

1. Counseling and remediation are an important aspect of the quality improvement process and include, but are not limited to:

- a. Recognition, reward and reinforcement
- b. Case review and counseling on specific issues with focused QI review to monitor for recurrence over a specified period of time
- c. Didactic courses
- d. Supervised clinical time with a written outcome summary
- e. Didactic remediation with case scenario
- f. Topic oriented research
- g. Development of in-service or written paper on a specific topic with supervised review
- h. Patient Care Record (PCR) and/or medical dispatch record review with a supervised written summary
- i. Focused quality improvement review of ongoing care, including but not limited to, PCR review, field observation and tape review

2. Recurrence of issues at any level may require increased counseling, monitoring, and/or remediation.

- a. A written remediation agreement with the involved individual(s) may include, but not be limited to:

- (1) Identification of the specific opportunity to improve
 - (2) Identification of specific written future expectations including the expected time frames for successful completion
 - (3) Consequences for failure to comply
 - (4) Signature of involved personnel on the written agreement
 - (5) Timelines for resolution and conclusion
3. System-wide issues may be referred to the appropriate EMS Agency committee(s) for assistance in resolving the issue.

VI. AUTHORITY

- Title 22 Division 9, Chapter 12
- Health and Safety Code Sections 1797.103, 1797.107, 1797.174 and 1797.176.
- Reference: Health and Safety Code Sections 1797.94, 1797.174, 1797.202, 1797.204, 1797.220, and 1798.

VII. ATTACHMENTS

- A. County of San Luis Obispo Emergency Medical Services Agency Continuous Quality Improvement Plan
- B. CQI Review Process – Flow Chart
- C. Opportunity For Improvement/Incident Report Form

POLICY #121: EMS BASE STATION REPORT

I. PURPOSE

- A. To provide EMS personnel with a guideline for giving a brief, consistent, and clear report that provides pertinent information to base hospital personnel.

II. SCOPE

- A. This policy applies to all radio and telephone communications between the San Luis Obispo (SLO) EMS personnel, Sierra Vista Regional Medical Center (SVRMC), French Hospital Medical Center (FHMC), Twin Cities Community Hospital (TCCH), Arroyo Grande Community Hospital (AGH), and Marian Medical Center (MMC) providing patient information.

III. DEFINITIONS

The following terms shall initiate communication with a base hospital to better identify the type of patient or patient needs:

- “Notification” – Communication with intended receiving hospital for routine patient care not needing special orders, destination requests or consultation.
- “Alert” – Communication with intended receiving Specialty Care Base Hospital to identify patients meeting “Alert” triage criteria for a Specialty Care Center, i.e. Trauma Step 1 or 2, STEMI, ROSC or Stroke.
- “Medication Request” – When requesting a medication order beyond standing orders from a SLO Base Hospital physician or MICN.
- “Destination Consultation” – Communication with SLO Specialty Care Base Hospital physician or MICN for patients requiring a destination other than the Specialty Care Base Hospital, (i.e. Trauma and STEMI) or in circumstances where the initial intended destination needs to be re-routed to a closer or alternate hospital i.e. unmanageable airway.
- “Physician Consultation” – For circumstances needing SLO Base Hospital physician assistance when patient management is not clear or other unusual situations as determined by EMS personnel.
- “AMA Consultation” – The patient is requesting an AMA per EMS Agency Patient Refusal of Treatment and/or Transport Policy # 203
- “Termination” – Contact with the SLO Base Hospital physician or MICN to terminate resuscitative measures when the patient has not responded to medical therapy per EMS Agency Prehospital Determination of Death/ Do Not Resuscitate (DNR)/End of Life Care Policy # 125
- “MCI Level I” – When a MCI is declared with 5 to 10 patients
- “MCI Level II” – When a MCI is declared with 11 or more patients

IV. POLICY

- A. Common communication format will be used, with both parties utilizing professional communication etiquette, including; identifying who they are and with whom they are speaking with each transmission.
- B. Use acceptable language (plain text) and avoid using “10” codes, etc.
- C. EMS personnel will identify themselves with their identification number and transporting unit number when making contact with a base hospital.
- D. MICNs will confirm the base hospital name and state their identification number when receiving the base station report.
- E. Once contacted, the SLO Base Hospital, if not receiving the patient, must notify the receiving hospital of the incoming patient and provide that hospital with the prehospital care patient information.

V. PROCEDURE

- A. When initiating a Base Hospital contact include:
 - 1. Type of Base Hospital contact i.e. “Notification”, “Medication Request” “Step 1 Trauma Alert”, etc.
 - 2. Transport Code
 - 3. Estimated time of arrival (ETA)
- B. “*NOTIFICATIONS*” – contact the intended Receiving Base Hospital
 - 1. Age, gender
 - 2. Brief description of the chief complaint/mechanism of injury
 - 3. Protocol followed
 - 4. Base Hospital should refrain from further questioning
- C. “*ALERTS*”- contact the appropriate intended receiving hospital
Include the information above and the following information as it pertains to the specific call:
 - a. Vital Signs
 - b. Medications and procedures
 - c. Response to treatments
 - d. Pertinent positives and negatives
 - 1. “*STEMI ALERT*” – Contact intended receiving STEMI base (FHMC or MMC) for:
 - a. Patients positive for STEMI per EMS Agency Policy STEMI Triage and Destination #152
 - 2. “*TRAUMA ALERT*” – Contact intended receiving Trauma Center (SVRMC or MMC) for:
 - a. Patients meeting Step 1 or 2 of the trauma triage criteria per EMS Agency Trauma Patient Triage and Destination Policy #153

- b. Additional MIVT information to be included in the radio report
 1. M – Mechanism of injury
 2. I – Injuries identified and/or chief complaint
 3. V – Vital signs and symptoms:
 - (a) Blood pressure – communicate ANY episode of hypotension (BP < 90) that occurs at any time during the call
 - (b) Pulse rate
 - (c) Respiratory rate
 - (d) Glasgow Coma Scale (GCS)
 4. T – Treatments
3. “*STROKE ALERT*” – Contact intended Receiving Base Hospital for:
 - a. Patients meeting Stroke Alert criteria per EMS Agency Policy Suspected Stroke/TIA # 621
 - b. Include additional stroke specific information in the report:
 1. Any *BEFAST* information that was positive:
 - (a) B - Balance (changes or problems from normal)
 - (b) E - Eyes (sudden change in vision or double vision)
 - (c) F - Facial droop
 - (d) A - Arm drift
 - (e) S - Speech abnormalities
 - (f) T - Time last seen normal (not time of symptoms noticed)
- D. “*ROSC*” (Return of Spontaneous Circulation) – Contact nearest STEMI BASE HOSPITAL (FHMC or MMC) for:
 - a. Patients with ROSC per EMS Agency Pulseless Cardiac Arrest (Atraumatic) Policy #641
- E. “*MEDICATION REQUEST*” - contact the SLO Receiving Base Hospital
- F. “*CONSULTATION*” - contact the SLO Receiving Base Hospital except as noted below:
 1. *DESTINATION CONSULTATION* - contact appropriate receiving SLO BASE HOSPITAL or SPECIALITY CARE CENTER
 - a. *TRAUMA DESTINATION CONSULT* - Contact the SLO Trauma Center (SVRMC) per Trauma Triage and Destination Policy #153
 1. Use MIVT format.
 2. ETA to destination options
 - b. *12-LEAD CONSULT* – Contact the SLO STEMI Base Hospital (FHMC) per STEMI Triage and Destination Policy #152
- G. *PHYSICIAN CONSULTATION* – contact appropriate SLO Base Hospital or Specialty Care Center

- H. "AMA" – contact the SLO Receiving Base Hospital per AMA Policy #203
- I. "TERMINATION"- refer to Prehospital Determination of Death/ Do Not Resuscitate (DNR)/End of Life Care Policy #125
 - a. Adult Atraumatic Arrest of Cardiac Origin - contact the SLO STEMI Base Hospital (FHMC) if the patient has not responded to resuscitative measures
 - b. Traumatic Arrest – contact the SLO Trauma Center (SVRMC)
 - c. All other terminations - contact closest receiving SLO base hospital
- J. "MCI Level I and Level II" – initiate an MCI notification per EMS Agency MCI Policy #210

VI. AUTHORITY

- Health and Safety Code, Division 2.5, Sections 1798 &1798

VII. ATTACHMENTS

- A. Base Hospital notification list

POLICY #152: STEMI TRIAGE AND DESTINATION (Telemetry Trial)

I. PURPOSE

- A. To establish guidelines for Emergency Medical Services (EMS) personnel to identify and transport patients with acute ST-segment Elevation Myocardial Infarction (STEMI) who could benefit from the rapid response and specialized services of a STEMI Receiving Center (SRC).

II. SCOPE

- A. This policy applies to adult patients with chest pain or other symptoms indicative of Acute Coronary Syndrome (ACS) with a 12-lead ECG demonstrating elevated ST-segments indicating a specific type of myocardial infarction.

III. DEFINITIONS/GLOSSARY

- Percutaneous Coronary Intervention (PCI): A broad group of percutaneous techniques utilized for the diagnosis and treatment of patients with STEMI.
- Return of Spontaneous Circulation (ROSC): The return of a palpable pulse after cardiac arrest.
- STEMI: An acute myocardial infarction that generates a specific type of ST-segment elevation on a 12-lead ECG.
- “STEMI Alert”: A report from EMS personnel that notifies a STEMI Receiving Center as early as possible that a patient has a specific computer-interpreted prehospital 12-lead ECG indicating a STEMI, allowing the SRC to initiate the internal procedures to provide appropriate and rapid treatment interventions.
- “12-Lead Consultation” – Contact SLO County STEMI Receiving Hospital (French Hospital Medical Center) when the patient does not meet a STEMI ALERT Criteria and transmitting the 12-lead ECG would benefit the consultation.
- STEMI Receiving Center (SRC): A facility licensed for cardiac catheterization laboratory and recognized as an SRC by the County of San Luis Obispo Emergency Medical Services Agency (EMS Agency).
- STEMI Referral Hospital (SRH): An acute care hospital in the County of San Luis Obispo (SLO) that is not designated as a STEMI Receiving Center.
- SLO STEMI Receiving Center (SLO SRC) – refers to the STEMI Receiving Center in San Luis Obispo County (French Hospital Medical Center) to be used for medical direction and or destination decisions.

IV. POLICY

- A. Determine if patient condition meets STEMI Patient Triage Criteria.
- B. “STEMI Alert” notifications - contact the nearest SRC (**French or Marian**) as soon as possible

- C. "12- Lead ECG Consultations" and/or "Destination" consultations - contact the SLO SRC (**French**)

V. PROCEDURE

- A. Determine if patient condition meets STEMI Patient Triage criteria:

1. Patients meeting EMS Agency Protocol Adult Chest Pain #640: or with indications for 12-lead ECG per EMS Agency 12-lead ECG Policy #707 with computerized interpretation of an accurately performed pre-hospital 12-lead ECG indicating *****STEMI***** (or equivalent computerized interpretation).

- B. Destination and Notification

1. Transport to nearest SRC (French or Marian) or as directed by a SLO SRC (French).

a. Patients meeting the STEMI Patient Triage Criteria are considered a "STEMI Alert" and must be transported to the nearest SRC.

b. Patients with ROSC regardless of 12-lead ECG reading

c. The SRC Emergency Department must be notified as early as possible of the incoming "STEMI Alert" and /or ROSC to activate the SRC's internal STEMI/PCI system.

2. An Emergency Department physician at the SLO SRC (**French**) must be consulted to determine patient destination in the following:

a. "STEMI Alert":

(1) The patient is unstable with a SBP<90mmHg and transport time to the SRC would add more than 30 minutes to the transport time to a STEMI Referral Hospital (SRH).

(2) Patient is uncooperative with the procedure and/or expresses a personal preference for destination other than the SRC; see EMS Agency Policy #203: Patient Refusal of Treatment or Transport.

b. Questionable 12-Lead ECG

c. Patients who, while enroute, develop unmanageable airway or cardiac arrest without ROSC must be transported to the closest hospital, with the transporting provider notifying the intended SRC of the change in destination.

d. When a patient is diverted to another hospital the SLO SRC (French) shall notify the receiving hospital and provide information regarding the destination decision.

- C. Contact the nearest SRC as soon as possible with "STEMI Alert" Notification

1. For patients with identified STEMI, destination must be promptly determined after the prehospital 12-lead ECG is completed and read. The SRC must be notified as soon as possible.

2. The "STEMI Alert" notification must contain the following information:

a. Call identified as a "STEMI Alert".

- b. ETA to SRC.
 - c. Patient age and gender.
 - d. Confirmation of ECG reading and whether it appears to be free of significant artifact.
 - e. Confirmation that the appropriate treatment protocol is being followed.
 - f. Results of any medications given.
 - g. Additional information if required:
 - (1) Any confusion regarding chief complaint or treatment.
 - (2) Destination decision assistance.
3. ECG Transmission:
- a. With a STEMI Alert or ROSC and the equipment is available, the ALS provider shall transmit a 12-lead ECG to a SRC (French or Marian);
 - (1) Notify the SRC that you are capable of 12-lead ECG transmission and that you have transmitted, or are about to transmit the 12-lead ECG previously obtained.
 - (2) Include on the transmitted 12-lead ECG the patient age and sex required for the ECG monitor to accomplish its interpretation and be used as an identifier for the SRC.
 - (3) Do not include the name of the patient with the transmission of the 12-lead ECG.
 - b. When “Consulting” with a SLO SRC (French) and transmitting the 12-lead ECG would benefit the consultation:
 - (1) Notify the SLO SRC (French) that you are capable of 12-lead ECG transmission and that you have transmitted, or are about to transmit the 12-lead ECG.
 - (2) Include on the transmitted 12-lead ECG the patient age and sex required for the ECG monitor to accomplish its interpretation and be used as an identifier for the SRC
 - (3) Do not include the name of the patient with the transmission of the 12-lead ECG.
4. Documentation
- a. Findings of prehospital 12-lead ECGs, the time of the “STEMI Alert,” and patient identification must be documented on the 12-lead ECG and the prehospital PCR.
 - b. Two copies of the prehospital 12-lead ECG (multiple if performed) must be made, with one delivered to the receiving hospital responsible for the continued care of the patient, and one included with the prehospital PCR.

VI. AUTHORITY

- California Health and Safety Code, Division 2.5, Sections 1797.67, 1798, 1798.170.

POLICY #400: STEMI RECEIVING CENTER DESIGNATION

I. PURPOSE

- A. To define requirements for designation as a STEMI Receiving Center in the County of San Luis Obispo (SLO).

II. SCOPE

- A. This policy applies to all hospitals in the County of SLO seeking designation as a STEMI Receiving Center.

III. DEFINITIONS/GLOSSARY

- Percutaneous Coronary Intervention (PCI): A broad group of percutaneous techniques utilized for the diagnosis and treatment of patients with STEMI.
- STEMI: An acute myocardial infarction that generates a specific type of ST-segment elevation on a 12-lead ECG.
- “STEMI Alert”: A report from prehospital personnel that notifies a STEMI Receiving Center as early as possible that a patient has a specific computer-interpreted prehospital 12-lead ECG indicating a STEMI, allowing the SRC to initiate the internal procedures to provide appropriate and rapid treatment interventions.
- STEMI Receiving Center (SRC): A facility licensed for cardiac catheterization laboratory and approved to operate as an SRC by the County of SLO Emergency Medical Services Agency (EMS Agency).
- STEMI Referral Hospital (SRH): An acute care hospital in the County of SLO that is not designated as a STEMI Receiving Center.

IV. POLICY

- A. To be designated as a SRC in the County of SLO, a hospital must meet the following requirements:
 1. Possess current California licensure as an acute care facility providing Basic Emergency Medical Services.
 2. Hold current status as a Base Hospital in the County of SLO.
 3. Have the ability to enter into a written agreement with the County of SLO identifying SRC and County roles and responsibilities.
 4. Agree to accept all EMS patients meeting STEMI patient triage criteria and all “STEMI Alert” patients transferred from other County of SLO hospitals (except when on diversion due to a declared hospital in-house internal disaster), and provide a plan for the triage and treatment of simultaneously presenting STEMI patients regardless of ICU/CCU or ED saturation status.

5. Meet SRC designation requirements as defined in the County of SLO EMS Agency SRC Designation Criteria Application and Evaluation matrix (Attachment A) which includes:
 - a. Hospital Services including:
 - (1) Special permit for cardiac catheterization laboratory pursuant to the provisions of Title 22, Division 5, of the California Code of Regulations.
 - (2) Intra-aortic balloon pump capability with necessary staff available 24 hours a day 7 days a week 365 days a year.
 - (3) California permit for cardiovascular surgery or a written plan for emergency transport to a facility with cardiovascular surgery available with timely (within 1 hour) transfer steps and agreements.
 - (4) Continuous availability of PCI resources 24 hours a day 7 days a week 365 days a year.
 - (5) Dedicated priority "Specialty Care" phone line available 24 hours a day 7 days a week 365 days a year to be used for pre-hospital communication regarding "STEMI Alert" patients and for notifications of "STEMI Alert" transfers from other hospitals.
 - b. Hospital Personnel including:
 - (1) SRC Medical Director who must be board-certified in Internal Medicine with a sub-specialty in cardiovascular disease.
 - (2) SRC Program Manager who must be an RN.
 - (3) Cardiac Catheterization Lab Manager/Coordinator who must be an RN if not directly reporting to the SRC Program Manager.
 - (4) A daily roster of interventional cardiologists who must:
 - (a) Be available and present in the SRC within 30 minutes of the activation of the SRC's internal STEMI/PCI system.
 - (b) Have privileges in PCI.
 - (5) A daily roster of cardiovascular surgeons who must be available and present in the SRC within 30 minutes of documented request, or SRCs without cardiovascular surgery capability must have written transfer guidelines and a plan for emergency transfer within 1 hour if medically necessary.
 - (6) Other personnel who must be promptly available and present in the SRC within 30 minutes of the activation of the SRC's internal STEMI/PCI system including:
 - (a) Appropriate cardiac catheterization nursing and support personnel.
 - (b) RN or CV Perfusionist trained in intra-aortic balloon pump management.
 - c. Clinical Requirements including:

- (1) ACC/AHA guidelines for activity levels of facilities and practitioners for both primary PCI and total PCI events are adopted herein and may require period updating:
 - (a) Interventionalist must perform a minimum of 11 primary PCI procedures and 75 PCI procedures per year.
 - (b) SRC must perform a minimum of 36 primary PCI procedures and 200 total PCI procedures annually.
 - (2) Performance (timeliness) and outcome measures will be assessed initially in the survey process, and will be monitored closely on an ongoing basis by the SRC and the EMS Agency through a Performance Improvement Program for EMS Patients (Item 5.e below).
- d. Policies and Procedures including:
- (1) Cardiac interventionalist activation
 - (2) Cardiac catheterization lab team activation
 - (3) STEMI contingency plans for personnel and equipment
 - (4) Coronary angiography
 - (5) PCI and use of fibrinolytics
 - (6) Inter-facility transfer policies/protocols for STEMI
 - (7) Transfer agreements for cardiac surgery, as appropriate
 - (8) STEMI patient triage
- e. Performance Improvement Program for EMS Patients including:
- (1) An SRC must provide two representatives to participate in the EMS Agency STEMI Quality Improvement (QI) Committee:
 - (a) A QI representative
 - (b) A cardiologist
 - (2) An SRC will hold routine multidisciplinary meetings that must include representatives from SRHs, County of SLO prehospital providers and the EMS Agency.
 - (3) An SRC must implement a written internal SRC QI plan/program with an internal review process that includes:
 - (a) Door-to Balloon times
 - (b) Death rate (within 30 days, related to procedure regardless of mechanism)
 - (c) Compliance
 - (d) Emergency CABG rate (result of procedure failure or complication)
 - (e) Vascular complications (access site, transfusion, coronary perforation or operative intervention required)
 - (f) Cerebrovascular accident rate (peri-procedure)
 - (g) Post-procedure nephrotoxicity (increase in serum

creatinine of >0.5)

(h) Sentinel event, system and organization issue review and resolution processes

(4) A SRC must participate in prehospital STEMI-related educational activities as may be required by the EMS Agency

f. Data Collection, Submission and Analysis including:

(1) A SRC must participate in the National Cardiac Data Registry (NCDR).

(2) A SRC must participate in EMS Agency data collection as defined in Attachment B: Data Requirements for STEMI Receiving Centers.

B. A hospital may lose its designation as an SRC for one or more of the following reasons:

1. Inability to meet and maintain SRC Designation Criteria
2. Failure to provide required data
3. Failure to participate in STEMI System QI activities
4. Other criteria as defined and reviewed by the EMS Agency STEMI QI Committee

V. PROCEDURE

- A. To apply for designation as a SRC in the County of SLO, a Base Hospital must pay the initial application fee and submit an application for designation to the EMS Agency.
- B. SRC designation may be awarded to a hospital following a satisfactory review of written documentation, an initial site survey by EMS Agency staff and a cardiologist from out of the area, and designation approval by the EMS Agency.
- C. The SRC designation period will coincide with the period covered in a written agreement between the SRC and the County of San Luis Obispo.

VI. AUTHORITY

- Health and Safety Code, Division 2.5, Sections 1798, 1798.101, 1798.105, 1798.2
- California Code of Regulations, Title 22, Section 100175

VII. ATTACHMENTS

- A. Application and Evaluation Matrix
- B. Data Requirements for STEMI Receiving Center

ADULT CARDIAC CHEST PAIN/ACUTE CORONARY SYNDROME**FOR USE IN ADULT PATIENTS****BLS**

- Universal Protocol #601 Pulse Oximetry
 - O₂ administration per Airway Management Protocol #602
- **Aspirin** 162 mg PO (non-enteric coated) chewable tablets
- May assist with administration of patient's prescribed **Nitroglycerin** with SBP ≥ 100 mmHg

ALS Standing Orders

- Obtain 12-lead ECG early
- **Nitroglycerin** 0.4 mg SL tablet or spray
 - Repeat every 5 min
- **Nitroglycerin Paste** 1 inch (1 Gm) may be considered after initial dose(s) of SL Nitroglycerin
- **HOLD NITROGLYCERIN** and consult base if:
 - SBP is trending towards or drops < 100 mmHg or in the presence of other signs/symptoms of hemodynamic instability
 - Evidence of Right Ventricular Infarction (RVI) – see Notes

MODERATE or SEVERE PAIN

- **Refractory to Nitroglycerin**
 - **Fentanyl** 25-50 mcg SLOW IV (over 1 min), titrated to pain improvement, maintain SBP ≥ 100 mmHg
 - May repeat after 5 min if needed (not to exceed 200 mcg total)

If difficulty obtaining IV

- **Fentanyl** 50-100 mcg IM/IN (use 1 mcg/kg as guideline)
 - May repeat after 15 min if needed (not to exceed 200 mcg total)

Base Hospital Orders Only

- **Nitroglycerin** with
 - Significant decrease in SBP after administration
 - Patients taking erectile dysfunction medications
 - Atrial fibrillation with RVR
 - Evidence of RVI
- Additional **Fentanyl**
 - **Persistent hypotension**
- **Normal Saline** bolus up to 500 mL
- **Push-Dose Epinephrine 10 mcg/mL** 1mL IV/IO every 1-3 min
 - Repeat as needed to maintain SBP >90 mmHg
 - See notes for mixing instructions
- OR**
- **Epinephrine Drip** start at 10 mcg/min IV/IO infusion
 - Consider for extended transport
 - See formulary for mixing instructions
- As needed

Notes

- Acute Coronary Syndrome – a group of conditions resulting from acute myocardial ischemia – including: chest/upper body discomfort, shortness of breath, nausea/vomiting, or diaphoresis
- Evidence for RVI: All inferior STEMI should be evaluated for ST elevation in V4R

- Atrial fibrillation with RVR is atrial fibrillation with a ventricular rate > 100
- Early notification of the SRC with "STEMI Alert" with a 12-lead ECG reading of ***Acute MI Suspected*** or equivalent based on monitor type.
- "STEMI Alerts" consider a secondary IV with NS lock to assist the Cath Lab in tubing changes
- **Mixing Push-Dose Epinephrine 10 mcg/mL (1:100,000): Mix 9 mL of Normal Saline with 1 mL of Cardiac Epinephrine 1:10,000 (0.1 mg/mL), mix well**

**County of San Luis Obispo
Emergency Medical Services Agency**

Continuous Quality Improvement Plan

April 2023

Table of Contents

1. Introduction	3
Vision Statement	
Philosophical Statement of Professional Ethics and Values	
Authority	
Purpose	
2. Structure and Organization	5
EMS Agency Organizational Chart	
CQI Committee Membership	
CQI Process	
CQI Procedures	
CQI Review Process	
Committee membership	
Responsibilities of the CQI Committee	
Flow of Information	
Interagency Responsibilities	
County of SLO EMS Agency	
Base Hospitals	
Emergency Medical Dispatch	
First Responders - BLS	
ALS Responder	
3. Data Collection, Evaluation and Reporting	13
4. Action to Improve	14
5. Training and Education.....	17
6. Annual Update	17
7. Attachments	18

Attachments

- Policy 100 - Continuous Quality Improvement Policy
- Attachment A – CQI Plan
- Attachment B - CQI Process Algorithm
- Attachment C - Opportunity for Improvement Form
- Trauma QI Indicators
- Tri-TAC Dashboard
- STEMI CQI Indicators
- Cardiac Arrest Indicators

1. INTRODUCTION

The County of San Luis Obispo EMS Division is comprised of the Emergency Medical Services (EMS) Agency and the Public Health Emergency Preparedness Program. As a division of the Public Health Department, the County of SLO EMS Agency provides system guidance and oversight through pre-hospital provider and public comment-driven policy development and a comprehensive quality improvement program. We support medical disaster preparedness through the disaster response planning process, and support the appropriate use of 911, CPR, AEDs and First Aid through public education. We ensure excellent pre-hospital personnel through training, certification, accreditation, authorization and continuing education program review. We participate with the Public Health Department, in the management and coordination of public health emergencies, such as: Natural Disasters, Pandemic Flu and Bioterrorism incidents.

The County of San Luis Obispo is both geographically and demographically diverse. The county covers 3,200 square miles and includes urban areas along the Highway 101 corridor, coastal recreational areas, and remote areas on the eastern side of the county. EMS providers serve approximately 300,000 residents which can fluctuate at various times of the year with the Cal Poly student and the tourism populations. The EMS system responds to approximately 21,000 calls a year.

Vision

The EMS Agency is dedicated to the assurance of optimal prehospital care. Our goal is to continuously improve the quality of the emergency medical care delivery system.

The EMS Agency operates on three basic principles:

- Foster growth, continuous improvement, and professional development of our staff and members of the EMS community.
- Promote and utilize innovative approaches to prehospital care.
- Support a cooperative and collaborative working environment.

As a public benefit agency, we are responsive and responsible to the community. We value and encourage the individual contribution in the achievement of our goals.

Philosophical Statement of Professional Ethics and Values

As an agency dedicated to the assurance of optimal prehospital care in the County of San Luis Obispo, the EMS Agency has an obligation to ensure the emergency medical services community maintains the highest possible standards for professional medical treatment of the public. To this end, the EMS Agency supports the need for the emergency medical services community to demand of its employees the highest expectation for professional ethics and personal integrity. This extends from personal conduct as a representative of the emergency medical services community, to the emergency medical assistance provided through the course of their employment.

Recognizing the public's expectation for professional and ethical conduct of those in the medical services field, the EMS Agency will continue to assist the emergency medical services community through its philosophic support of professional ethics and values. Moreover, the EMS Agency will maintain an expectation of professional and ethical conduct of those members of the emergency medical services community whom the Agency supports through its program coordination, including certification, training, accreditation and continuing education

Authority

On January 1, 2006 the California Emergency Medical Services Authority (EMSA) implemented regulations related to quality improvement for emergency medical services throughout the state.

This program has been developed in accordance with California Code of Regulations Title 22, Chapter 12, Article 4 and utilizes the guidelines established by the EMSA documents # 163 "EMS System Quality Improvement Indicators", #166 "Emergency Medical Systems Quality Improvement Program Model Guidelines", the EMS Core Quality Measures Document and the guidelines established by the Emergency Medical Services Administrators Association of California (EMSAAC).

As defined in Title 22 "Emergency Medical Services Quality Improvement Program" or EMS CQI Program are methods of evaluation that are composed of structure, process and outcome evaluations which focus on improvement efforts to identify root causes of problems, intervene to reduce or eliminate the causes, and take steps to correct the process and recognize excellence in performance and delivery of care.

Purpose

The purpose of the EMS Agency Continuous Quality Improvement (CQI) Program is to establish a system-wide process for evaluating and improving the quality of pre-hospital care in the County of San Luis Obispo. This plan is designed with the intent to facilitate a consistent ability to attain key EMS quality objectives with the input and cooperation of the providers and customers of those served. The objectives include:

- Assuring that the level of patient care is consistent with the policies and field treatment guidelines
- Evaluation and improvements of system-wide performance
- Assignment of responsibility for monitoring and evaluating activities
- Delineation of scope of care
- Identification of important aspects of pre-hospital care
- Collection, analysis and dissemination of data from dispatch to discharge
- Promotion of appropriate utilization of EMS resources and services
- Cultivate standardization of the quality improvement process.

Fundamental to the program is the understanding that it will be developed over time and allows for individual variances based on available resources.

There is a focus on quality improvement of the overall local EMS system and how it interfaces with the statewide EMS system. Nine (9) focus areas identified in Section III and Appendix E of the Emergency Medical Services System Quality Improvement Program shall include but not be limited to:

- Personnel
- Equipment and Supplies
- Documentation
- Clinical Care and Patient Outcome
- Skills Maintenance/ Competency
- Transportation /Facilities
- Public Education and Prevention
- Risk Management

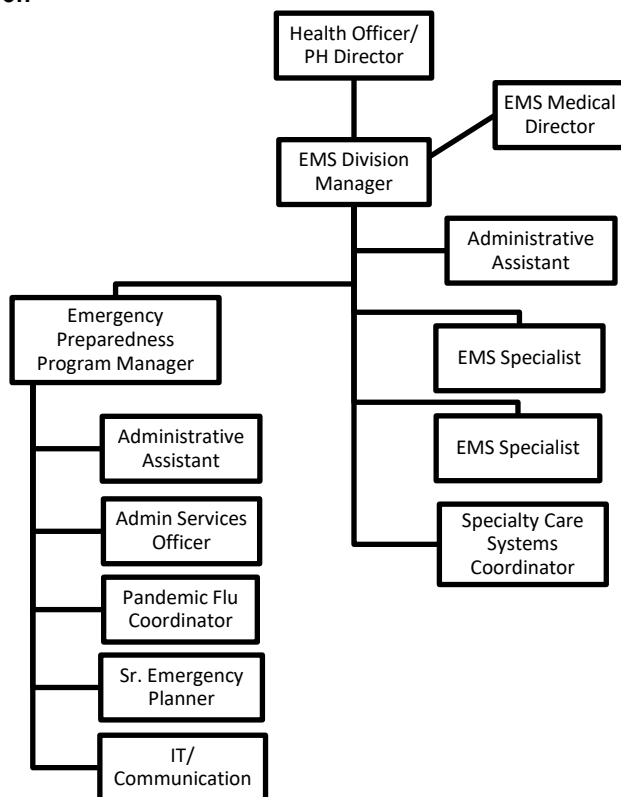
1. STRUCTURE AD ORGANIZATION

The County of San Luis Obispo Emergency Medical Services, a division of the County of San Luis Obispo Public Health Department, oversees a system of services organized to provide rapid response to serious medical emergencies, including immediate medical care and patient transport to definitive care in an appropriate hospital setting. The County the Board of Supervisors designated the Public Health Department as the Local EMS Agency (LEMSA). The County Health Officer/Public Health Department Director thus serves as the overall EMS Agency director, with the EMS Division Manager serving as the EMS Agency Administrator, and representative on EMSAAC. The Health Officer, who is appointed by the Board of Supervisors, reports administratively to the Health Agency Director, who in turn reports to the County Administrator and the Board of Supervisors. The Board is comprised of five elected Supervisors, each representing a distinct area of the County.

The EMS Medical Director oversees medical components of the EMS System and is responsible for prehospital medical control within the system. This includes protocol development, policies, procedures, equipment approval, medical dispatch, base station protocols, and continuous quality performance.

The Emergency Medical Care Committee (EMCC) is responsible for vetting local policies and procedures prior to implementation and acts as an advisory committee to the EMS Agency. The EMCC is a diverse board comprised of members representing the entire EMS system including: County Medical Association Physicians, Emergency Medicine Physicians, City Government, Consumers ,EMS Field Personnel, Sheriff’s Department, Public EMS Providers, Hospitals, Prehospital Transport Providers, and Mobile Intensive Care Nurses.

EMS Agency Organization



EMCC Membership

Representing	Number of Representatives	Appointing Authority
Prehospital Provider	1	Ambulance providers
Physicians	1	County Medical Society
City Government	1	City Managers
EMS Field Personnel	1	County Health Officer
Public Providers	1	County Fire Chiefs Association
Sheriff's Department	1	County Sheriff
Hospitals	1	Hospital Administrators
Emergency Medical Physician	1	County Health Officer
MICN or ED Nurse Manager	1	County Health Officer
Consumer Representative	2	County Health Officer

CQI Process

Quality improvement is a dynamic process that provides feedback and performance data on the EMS system. This information is based on indicators that reflect standards of care in the community, state and nation.

- Define a problem
- Measure data to validate and quantify the problem
- Analyze the data and indicators of the problem to determine the cause
- Develop and implement a plan of action through education or policy/procedure revision
- Measure and monitor results, providing feedback
- Continue monitoring to assure compliance

CQI Committee Procedures

- The EMS Medical Director shall oversee the CQI program
- The EMS CQI Coordinator shall ensure the coordination of the committee programs and activities
- The EMS CQI Committee shall meet on regular intervals
- All committee members shall sign a confidentially statement
- The EMS Agency shall maintain records in a confidential manner during the review process and shall destroy identifiable patient information directly following the review process

In addition to the EMS Agency CQI Committee, the following identifies a number of collaborative committees established to review specific areas of Quality Improvement. Each committee has at least one EMS Agency representative who assists in identifying the EMS system quality indicators that are reviewed.

- Trauma Committee
- STEMI Committee
- Regional Trauma Care Committee (RTCC)
- Tri-county Trauma Committee (Tri-TAC)
- Ambulance Performance and Operations Committee (APOC)
- County Fire Chiefs Association
- EMDAC/ EMSAAC
- Field Training Officer (FTO) Committee

CQI Committee Membership

The organizational structure of the EMS Agency CQI Committee shall be multidisciplinary and representative of the participating agencies. The EMS Agency is the receiving agency of the information collected by the participating agencies and shall provide guidance to the CQI Committee. The CQI Committee shall be an advisory body to the EMS Medical Director

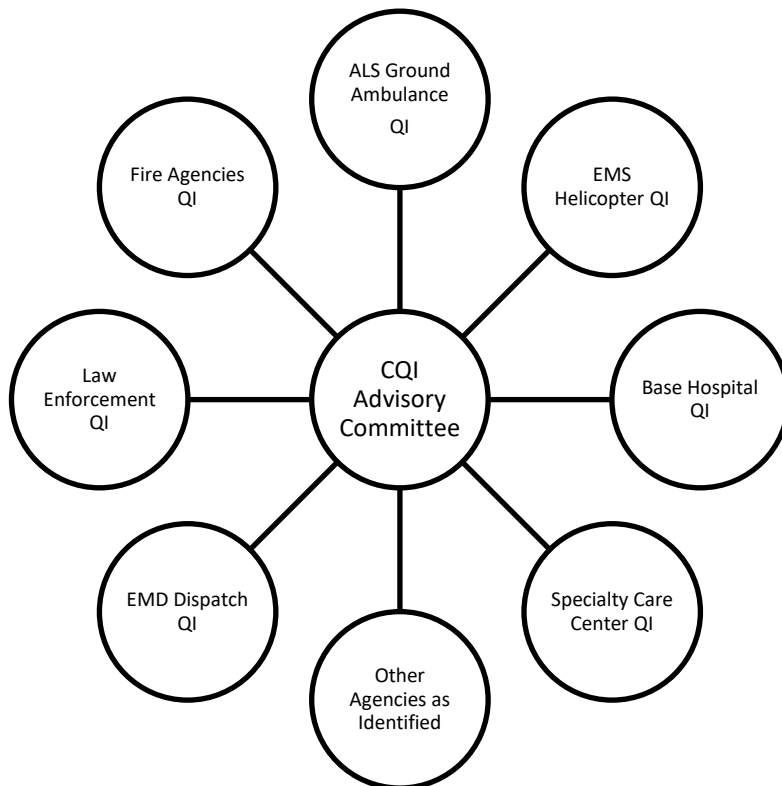
Agency	Number of Representatives	Appointing Authority
ALS Ground Ambulance Provider	1	EMCC Ambulance Provider Representative
EMS Helicopter - Public	1	EMCC/Operations Committee Representative
EMS Helicopter - Private	1	EMCC/Operations Committee Representative
Fire Service BLS	1	EMCC/Operations Committee - Fire Chiefs Assoc. Representative
Fire Service ALS	1	EMCC/Operations Committee - Fire Chiefs Assoc. Representative
Law Enforcement	1	EMCC/Operations Committee Representative County Criminal Justice Admin. Assoc.
EMS Dispatch	1	EMCC/County Sheriff Dept. Operations Committee Representative
Emergency Physician	1	EMCC Emergency Physician Representative
Base Hospital/MICN	1	EMCC -MICN Representative
Specialty Care Center	1	As Approved e.g. Trauma, STEMI Center

Responsibilities of the EMS CQI Committee

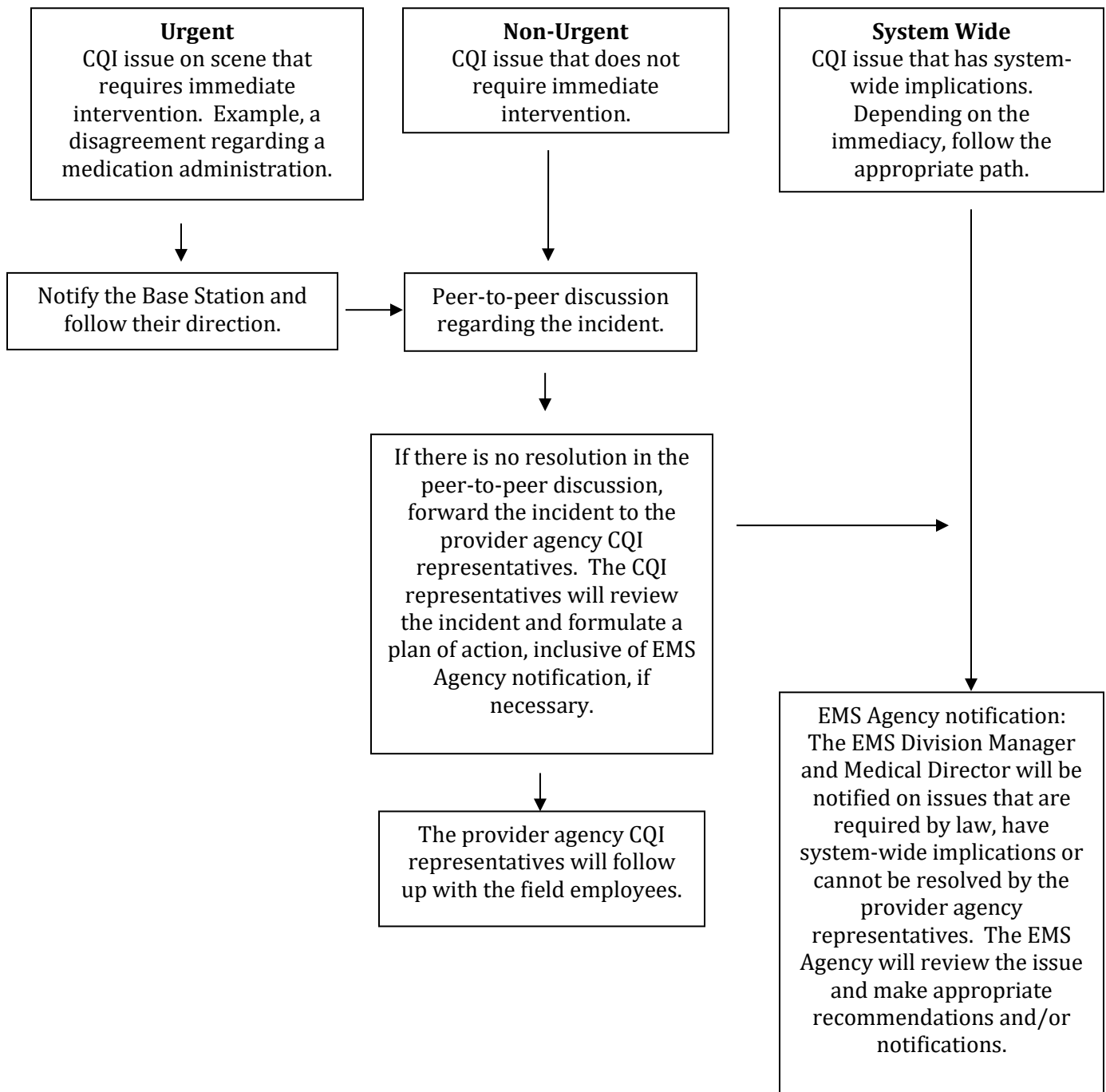
California Code of Regulations Title 22, Division 9, Chapter 12, Section 100400

- Develop and implement a system-wide EMS CQI program to include indicators addressing the nine (6) State ECQIP focus areas
- Annual evaluation of the system-wide EMS CQI Program for effectiveness and outcomes
- Provide for continuous input and feedback with EMS Provider groups
- Ensure availability of training and in-service education for EMS personnel
- Develop in cooperation with appropriate agencies/personnel a performance improvement plan to address identified improvement needs and provide technical and medical oversight for system and clinical issues
- Publish a summary of activity and plan implementation for periodic review
- Ensure that their respective agencies monitors, collects data on and evaluates information on the locally identified indicators

**CQI Committee
Organizational Structure
CQI Representatives from the Participating Agencies**

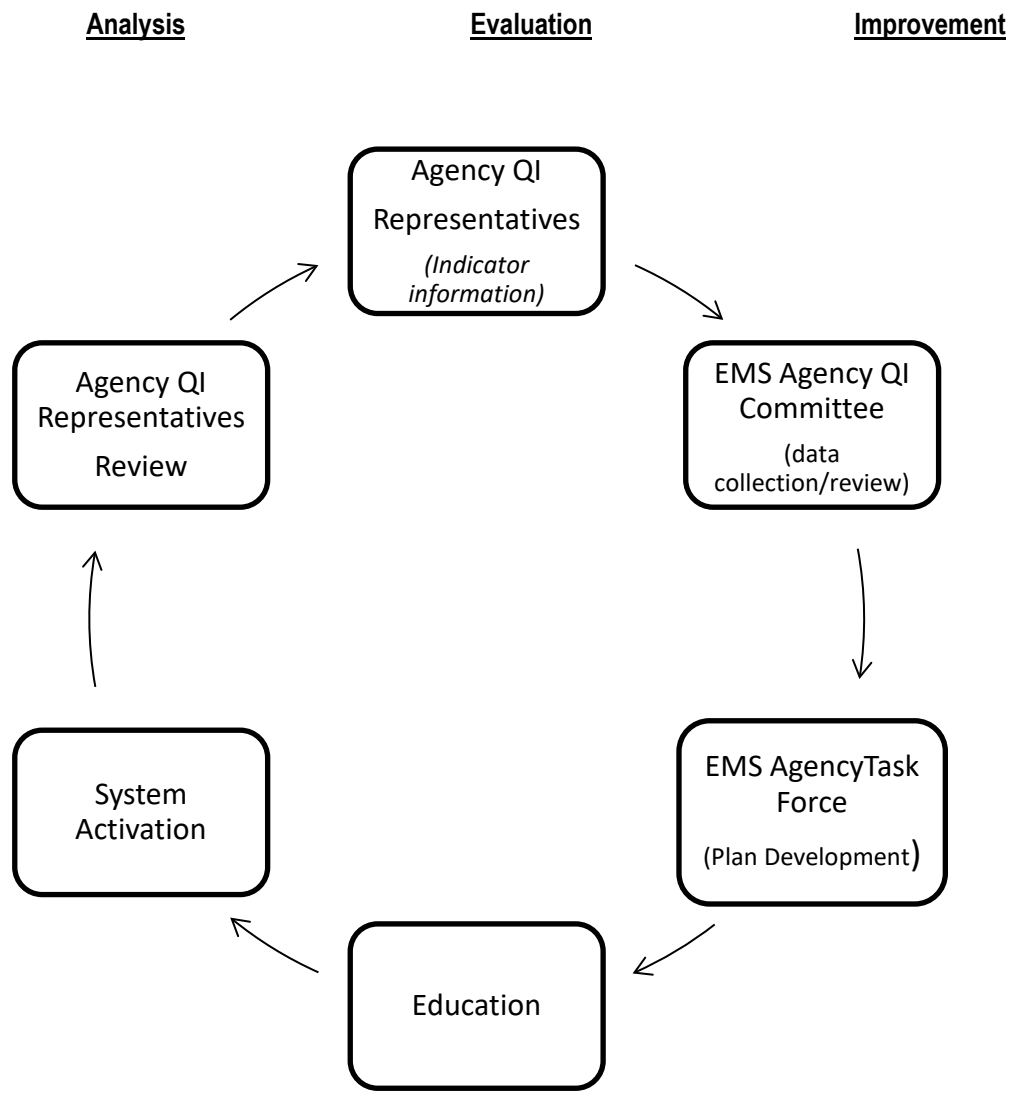


CQI Review Process:



- Depending on the issue, the CQI representative(s) may contact the EMS Agency as soon as necessary.

Flow of Information and Activity



Interagency CQI Responsibilities

Interagency CQI responsibilities listed below are based upon Title 22 California Code of regulations Chapter 12 EMS System Quality Improvement (EMSA Policy QI Program Guidelines #101)

County of SLO EMS Agency

- Provide a Medical Director to oversee the EMS system medical care
- Provide staff as needed to provide the coordination of the EMS CQI program
- Cooperate with the State EMSA with statewide CQI programs
- Provide for system-wide direction through the establishment of policies, procedures and guidelines
- Designate EMS Base Hospitals to provide on-line consultation and triage
- Provide for and coordinate retrospective evaluation of EMS system performance – both clinical and operational. Determine educational or other needs to improve system performance
- Credential and maintain records for EMT I, EMT P, MICN and EMD providers
- Approve primary and continuing education programs
- Conduct periodic review of policies, procedures and treatment guidelines.
- Ensure that all EMS personnel are notified of system changes
- Develop and distribute EMS System Plans/Updates, Hospital Resource guides and any other system reports as is appropriate
- Collect system data to evaluate system performance
- Process and review all incident review requests to assure evaluation and/or investigation
- Provide other contract compliance activities as warranted

Base Hospital Responsibilities

- Designate an Emergency Department Physician as a base hospital Medical Director
- Designate a Base Hospital MICN Liaison/CQI Nurse
- Assure the presence of a currently certified MICN or Base Hospital Physician in the ED at all times for radio consultation to the pre-hospital personnel
- Assure staff, MICNs and Base Physicians are familiar with EMS policies, procedures and treatment protocols
- Implement a Base Hospital CQI program to include:
 - Evaluation and education of performance
 - Assist pre-hospital providers and the EMS Agency in evaluating and improving EMS patient care
- Develop and implement CQI programs consistent with State regulations and local guidelines
- Provide for follow up on base-directed calls
- Provide education, in coordination with ALS Provider, through formal and informal classes
- Provide clinical setting for maintenance and remediation of skills, as available
- Provide statistical information for monitoring and evaluating EMS system as needed
- Assist in the coordination, training, and evaluation of new procedures and pilot programs
- Participate in EMS Agency CQI activities

Emergency Medical Dispatch Agency

- Provide dispatchers trained and certified as EMD
- Assure dispatchers follow EMD policies and procedures
- Establish a procedure to implement updates and system changes
- Assign a liaison/CQI representative to interface with EMS Agency
- Assist the EMS Agency in evaluating and improving EMS services
- Use EMD formal CQI plan to evaluate and improve performance
- Provide CQI summary and protocol compliance according to policy
- Participate in EMSA CQI activities

First Responder Agencies

- Provide first responder services with staff trained to minimum of first aid, CPR and AED
- Assure personnel are familiar with EMS policies and procedures
- Assign a liaison/CQI representative to interface with EMS Agency
- Establish a procedure to update agency personnel of EMS system changes and updates
- Participate in EMS Agency CQI and training activities
- Provide staff oversight, monitoring, data collection and feedback
- Submit all pre-hospital patient data to EMS Agency following AED use
- Monitor response times and identify ways to improve if deemed necessary

ALS /BLS Responding Agencies

- Assure EMS personnel are currently and appropriately credentialed per EMSA policy
- Assign a liaison/CQI representative to interface with EMS Agency
- Assure personnel are familiar with EMS policies and procedures
- Establish a procedure to update agency personnel of EMS system changes and updates
- Develop, implement and participate in CQI programs consistent with pertinent State regulations and local guidelines
- Provide the EMS Agency with data necessary for monitoring and evaluating the EMS system
- Provide dispatch data and clinical data as specified in County agreements
- Document accurately patient care information for each patient contact on an EMS Agency-approved electronic/paper patient care report
- Monitor and evaluate patient care issues, response times and other pertinent issues. Identify areas of improvement and steps to improve and re-evaluate
- Participate in EMS Agency CQI programs

Air Ambulance Agencies

- Assign a liaison/CQI representative to interface with EMS Agency
- Assure EMS personnel and pilots are currently and appropriately credentialed at all times
- Establish a procedure to update agency personnel of EMS system changes and updates
- Develop, implement and participate in CQI programs consistent with pertinent State regulations and local guidelines
- Provide the EMS Agency with data necessary for monitoring and evaluating the EMS system
- Document accurately patient care information for each patient contact on an EMS Agency-approved electronic/paper patient care report

- Monitor and evaluate patient care issues, response times and other pertinent issues. Identify areas of improvement and steps to improve and re-evaluate
- Participate in EMS Agency CQI programs

3. DATA COLLECTION , EVALUATION of INDICATORS AND REPORTING

Purpose: in order to effectively evaluate the EMS system the data must be valid, reliable and standardized.

Data Collection Programs:

Various data collection systems currently exist within the EMS Agency that are relevant to the CQI process. These include:

- ImageTrend Elite (all agencies including transport and non-transport)
- SLO EMS Agency ImageTrend repository
- Provider submitted study data – e.g. airway study forms
- Dispatch CAD data
- Trauma One – trauma registry
- National Cardiovascular Registry (NCDR)
- ReddiNet
- CARES

These data systems are used to evaluate performance in the following ways:

- Prospectively identify areas of potential improvement
- Answer questions about the EMS system
- Monitor changes once improvement plans are implemented
- Provide accurate information enabling data driven decisions
- Monitor individual performance within the EMS system
- Support research that will improve the system and potentially broaden EMS knowledge through publication

Evaluation of Indicators

The EMS Agency CQI coordinator will review and analyze the quality indicators on a regular basis (monthly/quarterly/annually) and create a report to be presented to the CQI Committee and any other committees as deemed appropriate.

Analysis shall be presented in a format that allows for rapid interpretation by the evaluators. Measurements may include:

- Statistical
 - Measures of central tendency
 - Measures of dispersion
 - Process analysis
 - Trending
 - Causation
 - Benchmarking
 - Best practices
 - Published references

Decision-Making Process – the following is a sample of a process used for evaluation, analysis and decision-making to be used by the EMS CQI Committee:

- Identify the objective
- Present the indicators and EMS information
- Compare performance with benchmarks or goals
- Discuss performance with peers/colleagues
- Determine if improvement or further evaluation needed
- Establish a plan
- Develop training/educational needs
- Assign follow-up for the plan of action

4. ACTION TO IMPROVE AND REPORTING

Once the need for improvement has been identified by the CQI Committee a number of approaches and models of problem solving and analysis are available. In each case the EMS CQI Committee should choose a method that is systematic, based on finding and measurable. The approach is a team-oriented process that is designed to be accomplishable and not overwhelm the system. Smaller sub-group of the EMS CQI Committee may be utilized in the design and oversight of such programs.

It is recommended that the CQI Committee choose a standardized approach and use the same process each time a project is undertaken. The following are traditional components of a standardized improvement process:

- Establish criteria for measurement and evaluation
- Evaluate the information
- Make decision to take action to improve
- Establish measurable criteria for improvement
- Establish an improvement plan
- Measure the results of the improvement plan
- Evaluate the need to standardize or integrate change into the system
- Establish a plan to monitor future activities

Specific CQI Indicators for County of SLO EMS Agency

It would be overwhelming to list each activity and quality indicator the system reviews. The following is a list of standard focus areas with a table to follow that identifies specific target areas. The target areas are identified and updated each year through input from the providers and other system activities.

- Approval of EMT and EMT-P Training Programs
- Approval of EMD program
- Approval of EMS CE programs
- Pharmaceutical inventory control
- Treatment protocol review and update
- Treatment protocol compliance
- Cardiac Arrest
- Trauma System
- STEMI System
- Intubation success rate

- Competency in infrequently used skills
- Air ambulance utilization
- EMS Authority Core Measures

Sample of CQI programs

Clinical Area	Element	CQI Indicator /performance Measure	CQI Status	Improvement Activities/Plan
Airway				
Airway	ETT	<ul style="list-style-type: none"> ▪ % Success by attempt ▪ % success by patient ▪ Success by type of device ▪ Success by location of patient (floor/gurney) 	Ongoing, Core Measure	<ul style="list-style-type: none"> ▪ Continue accreditation requirement of 2 tubes every 6 mos. ▪ Provide CE and advanced skill lab opportunities
Airway ETCO2	ETCO2	% patients with advanced airway placement utilizing ETCO2	Ongoing, Core Measure	<ul style="list-style-type: none"> ▪ Provide training on documentation ▪ ePCR improvements
Cardiac				
Cardiac Arrest	By-stander CPR	% Cardiac arrest receiving bystander CPR	Active	<ul style="list-style-type: none"> ▪ Hands-only CPR programs ▪ Public education
Cardiac Arrest	ROSC/ survival to discharge	% Survival to Hospital Discharge	Active, Core Measure	<ul style="list-style-type: none"> ▪ Implementation HPCPR training ▪ Update field P&P ▪ Add Mega Code training to Advance Protocol Review ▪ Investigate CARES
Cardiac Arrest	Time from 911 to defibrillation	Median time from 911 to defibrillation	Ongoing	<ul style="list-style-type: none"> ▪ Identify AED placement Inclusion into CADs ▪ Public education
STEMI	Times	<ul style="list-style-type: none"> ▪ % E2D <90 min ▪ % D2D < 90 min ▪ %ED 2D from SRF to SRC transfers <120 min 	Ongoing	<ul style="list-style-type: none"> ▪ ACTION participation ▪ Outcome data sharing
STEMI	ASA	% Patient meeting chest pain protocol receiving ASA	Ongoing Core Measure	<ul style="list-style-type: none"> ▪ Monthly monitoring
Trauma				
Trauma	Time	<ul style="list-style-type: none"> ▪ Time on scene without extrication < 15min ▪ # response times of > 20 min for transport unit without BLS on scene <10 min ▪ # transport to TC > 30 min 	Ongoing	<ul style="list-style-type: none"> ▪ PHTLS ▪ Helicopter utilization review committee

Trauma	Over/under triage	<ul style="list-style-type: none"> % patient transported to non-TC with subsequent transfer to TC from the ED ISS of >15 at a non-trauma center that was transferred to a TC 	Ongoing	<ul style="list-style-type: none"> Quarterly monitoring Tri—County TAC review
Trauma	PCR to trauma service <24 hrs.	<ul style="list-style-type: none"> % of PCRs that are missing after 24 hours 	Ongoing	<ul style="list-style-type: none"> Quarterly monitoring
Trauma	Documentation of Triage Step	<ul style="list-style-type: none"> % of PCRs with triage correctly documented 	Ongoing	<ul style="list-style-type: none"> Quarterly monitoring
Stroke				
Stroke	Glucose	% patients presenting with stroke symptom and have glucose test documented	Ongoing	<ul style="list-style-type: none"> Quarterly monitoring
Procedures				
IO	Success	% Success by device - adult and pediatric	Ongoing	<ul style="list-style-type: none"> Quarterly monitoring
Spinal Motion Restriction	Spinal Motion Restriction	% patients Meeting NEXIS criteria receiving Spinal Motion restriction	In process	
Operations				
Transportation	Ambulance Response times	% compliance to response time requirements by Zone, Urban reserve lines and city/area	Ongoing and in process	<ul style="list-style-type: none"> Annual monitoring
Transportation	Rate of transport	% of Code 3 responses that are transported	On going	<ul style="list-style-type: none"> Annual monitoring
Dispatch	Pre-arrival instructions	% pre-arrival instructions for cardiac arrest	In process	
Education				
CE Program	Compliance to CE program approval requirements	% CE records meet compliance standards for EMS CE program approval	In Process	<ul style="list-style-type: none"> Random annual audit
Public Health	Hands-Only CPR	<ul style="list-style-type: none"> # of citizens trained in Hands-only CPR # of cardiac arrest responses with by-stander CPR 	Ongoing	<ul style="list-style-type: none"> Annual monitoring

5. TRAINING AND EDUCATION

Once the CQI Committee has identified plans to address a need, education and training becomes a critical component of the process. The EMS Agency and EMS CQI Committee will make recommendations for educational needs/offerings throughout the system based upon their findings.

Any recommended changes in policy, procedure or practice go before the appropriate advisory committees and are signed by the County of San Luis Obispo Medical Director or EMS Division Manager. Once the plan has been implemented the EMS Agency will standardize the changes within the appropriate policies and procedures. The EMS Agency oversees all policy updates. The EMS Agency ensures and documents that the updates are available and completed by all affected EMS personnel. This can be accomplished via training classes, training memos, train-the trainer programs and other means as recommended. The providers are ultimately responsible for ensuring staff has met the training requirements. Rosters and records may be requested by the EMS Agency for verification.

Policy changes and training material are made available on the EMS Agency website with implementation.

www.sloemsa.org

6. ANNUAL UPDATE

Annual progress reports shall serve as the annual update of the CQI program. The EMS Agency is responsible for annually updating the EMS Plan and its compliance with the current strategic goals. The CQI Plan and the EMS Plan will be reflective of the common goals and objectives of the EMS Agency. The CQI Coordinator will complete a summary of the activity to include:

- Indicators monitored
- Key findings/priority issues identified
- Improvement actions plans
- Goals met or require follow-up

Any updates to the EMS CQI Plan shall be submitted to the State EMS Authority with the EMS Agency System Plan update.