



County of Sacramento

October 3, 2019

David Duncan, MD
Director
Emergency Medical Services Authority (EMSA)
109601 Gold Center Drive, Suite 400
Rancho Cordova, CA 95670

**RE: Sacramento County 2019 STEMI Program Plan
Sent via Email on October 3, 2019**

Dear Dr. Duncan:

In accordance with Title 22, Chapter 7.1, Article 2, Section 100270.121 of the CA Code of Regulation, *Local EMS Agency STEMI Critical Care System Plan*, Sacramento County submits its STEMI Critical Care Program (STEMI) Plan. The submission of this STEMI Plan meets the regulation's requirement to submit a STEMI Plan within 180 days of the regulation's effective date (July 1, 2019). The annual update to this STEMI Plan will be included in the 2019 Sacramento County EMS Plan Update due in late 2020.

This STEMI Plan underwent a significant stakeholder review process, resulting in a better product. Sacramento County EMS Agency looks forward to implementing the many elements of the plan to improve the County's EMS System.

Please do not hesitate to contact me if you have any questions or concerns at (916) 875-9708 or magninod@saccounty.net.

Sincerely,

A handwritten signature in blue ink that reads "David M. Magnino".

David M. Magnino, B.S. / EMT-P
EMS Administrator
County of Sacramento

Attachment

c.c'd: Tom McGinnis, Chief, EMS Systems Division



Sacramento County EMS Agency STEMI Receiving Center (SRC) Application Packet

Contents:

Application for Designation Instructions
Application for Printing
Application Fillable PDF

**This plan was prepared for the
California Emergency Medical Services Authority
July 2019**

Plan prepared by:

County of Sacramento
Department of Health Services
Emergency Medical Services Agency
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Hernando Garzon, MD
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Executive Summary

California statute mandates the Emergency Medical Services Authority (EMSA) to adopt necessary regulations to carry out the coordination and integration of all state activities concerning EMS (Health and Safety Code §1797.107).

In addition, State statute allows the EMS Authority to establish guidelines for hospital facilities, in cooperation with affected medical organizations, according to critical care capabilities (Health and Safety Code §1798.150).

As a result of these statutes, the EMS Authority established a multidisciplinary ST-Elevation Myocardial Infarction (STEMI) Care Committee for the development of STEMI System of Care Regulations for California.¹

California's Statewide STEMI Critical Care System is described in the California Code of Regulations; Title 22, Division 9, Chapter 7.1. These regulations outline the requirements of all components of the STEMI Critical Care System including the Local EMS Agency, prehospital providers, and hospitals.

Because data management, quality improvement and the evaluation process all have a vital role in providing high quality care to the cardiac patient, these items have also been identified in the regulations. The overall goal of the regulations is to reduce morbidity and mortality from acute heart disease by improving the delivery of emergency medical care within the communities of California.

The Sacramento County EMS Agency (SCEMSA) has been involved with the regulation development process alongside state and hospital system representatives. Sacramento County already has many of the regulations in place, including prehospital care policies to identify STEMI patients, designated STEMI receiving hospitals, and destination policies.

As a requirement of the California Regulations, this document is to serve as a formal written plan for the Sacramento County STEMI Critical Care System.

Sacramento County Emergency Medical Services Agency's (SCEMSA) STEMI Critical Care System Plan has been written in accordance with Title 22, Division 9, Chapter 7.1 of the California Code of Regulations.

¹ <https://emsa.ca.gov/stemi/>

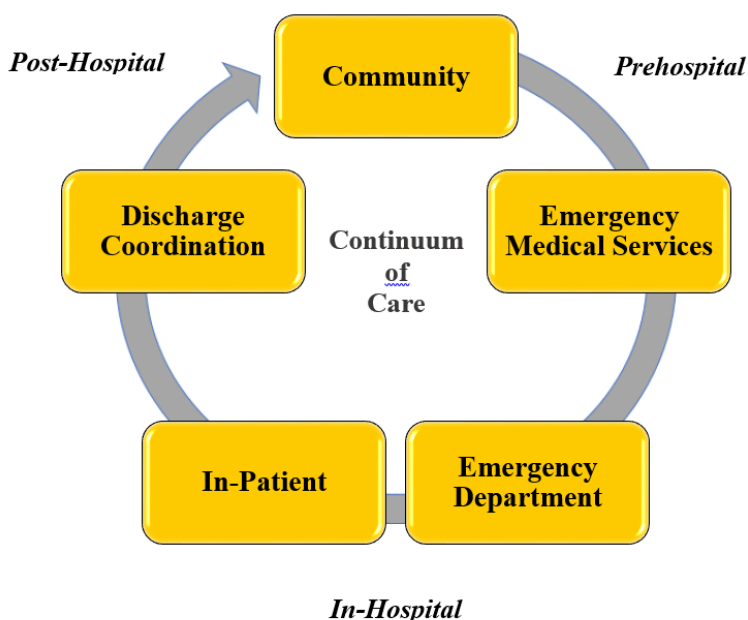
STEMI Critical Care System

About 610,000 people die of heart disease in the United States every year. Heart disease is the leading cause of death for both men and women. Coronary heart disease (CHD) is the most common type of heart disease, killing over 370,000 people annually. Every year approximately 735,000 adult Americans have a heart attack. Of these cases, 525,000 are a first-time heart attack and the other 210,000 happen to people who have already had a first-time heart attack.² A heart attack, also known as Myocardial Infarction (MI), is a life-changing event that places heavy burden on patients, families, and caregivers. When a patient is suffering from a cardiac event, timely intervention is critical to reverse the damage, reduce mortality, morbidity, and disability and improve survivor quality of life.

Although many EMS agencies in California have developed STEMI systems of care, there have been no standardized statewide requirements for the development and implementation of a STEMI critical care system until now.

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. More specifically, standardized statewide requirements will lead to the consistent application of standardized care, thus protecting the health and safety of the public.³

Sacramento's STEMI Critical Care System is a subspecialty care component of the EMS system that was developed by the Sacramento County EMS Agency. This critical care system links prehospital and hospital care to deliver treatment to STEMI patients who potentially require immediate medical or surgical intervention.



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

³ https://emsa.ca.gov/wp-content/uploads/sites/47/2018/04/STEMI_ISOR.pdf

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 practice guidelines were introduced, 30-50% of patients do not 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 health system comprise of approximately 4,750 acute care hospitals and more than 15,000 emergency medical service (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 care.⁴

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 mortality.⁵ STEMI systems of care improve care and support for cardiac patients throughout their health care journey from Prehospital care to In-Hospital care throughout Post-Hospital care. This collaboration and standardization across the continuum of care is paramount to improve outcomes.

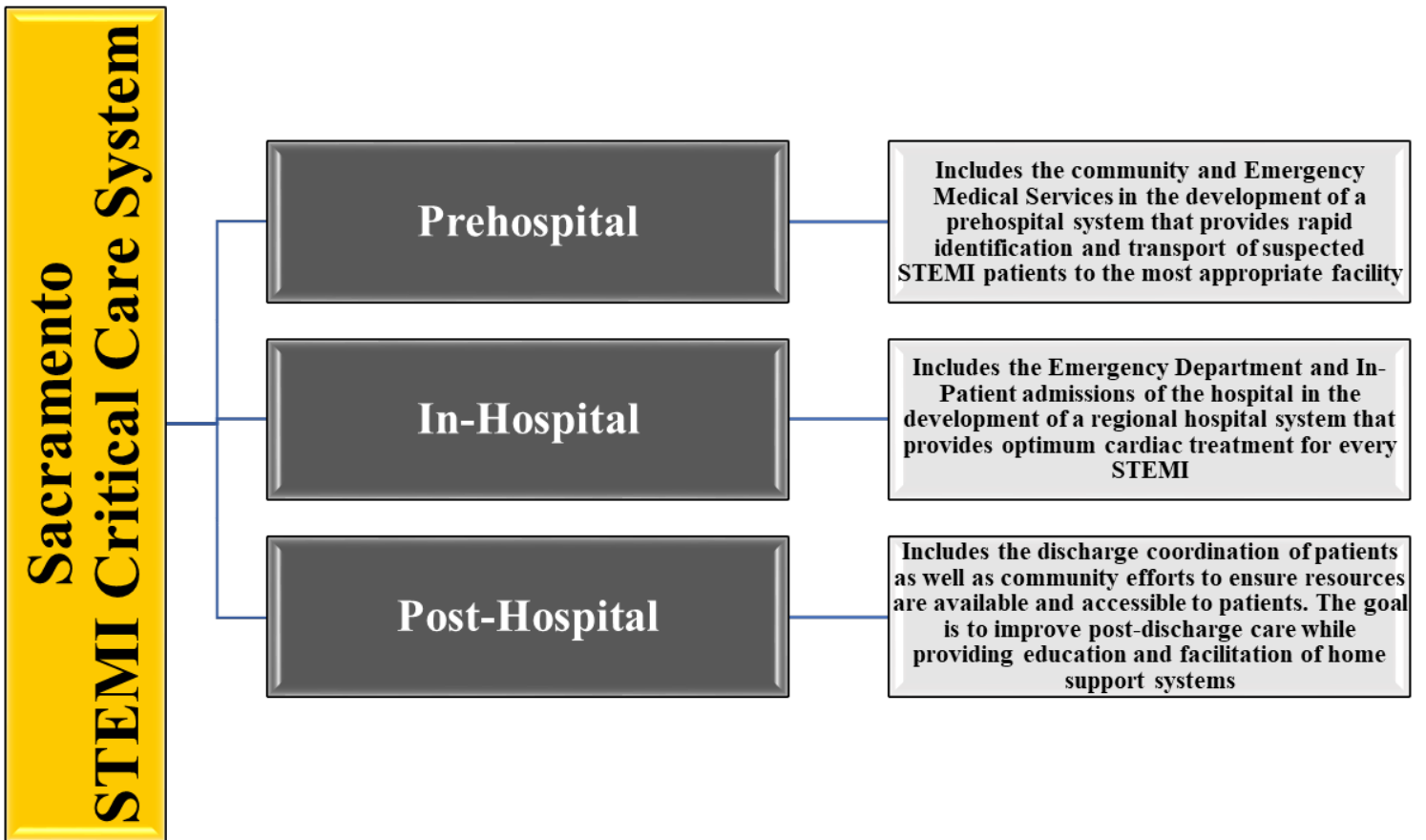
The continuum of care is important to caregivers and patients alike. It leads to an improvement of patient satisfaction levels, reduces costs, and improves health. Keeping up the continuum of care is especially significant for specific patient populations such as those patients who are more dependent on the health services, elderly patients, patients suffering from complex medical conditions, mentally vulnerable patients and patients with chronic diseases.⁶ Due to the aforementioned examples, continuum of care is particularly beneficial to the cardiac patient population. STEMI systems of care depend on robust collaboration to ensure that the continuum of care is optimally exercised.

⁴ <http://circ.ahajournals.org/content/134/5/365>

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

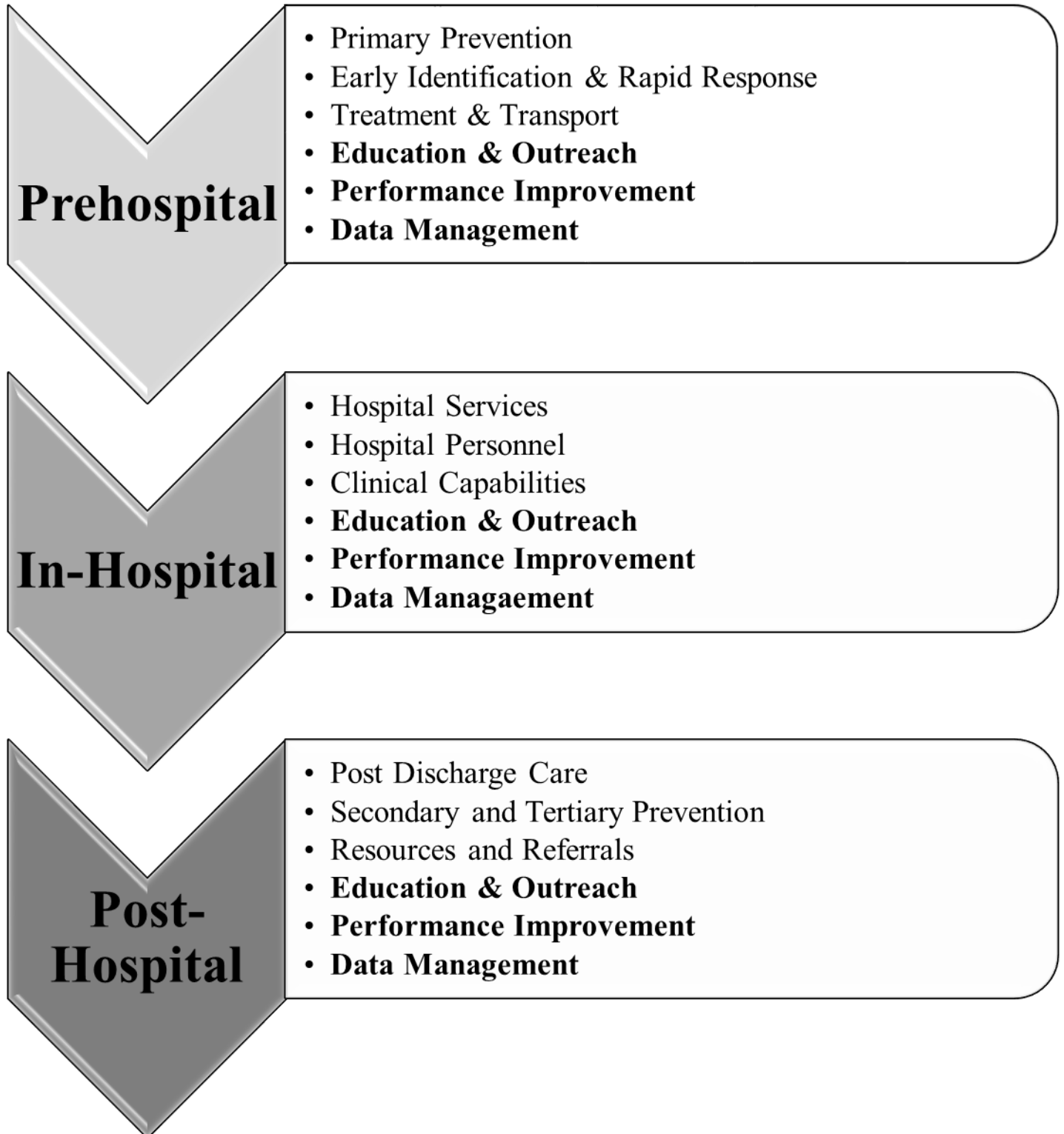
⁶ <http://circ.ahajournals.org/content/134/5/365>

The Sacramento STEMI continuum of care can be broken down and evaluated at three levels:



Goals Within the Continuum of Care

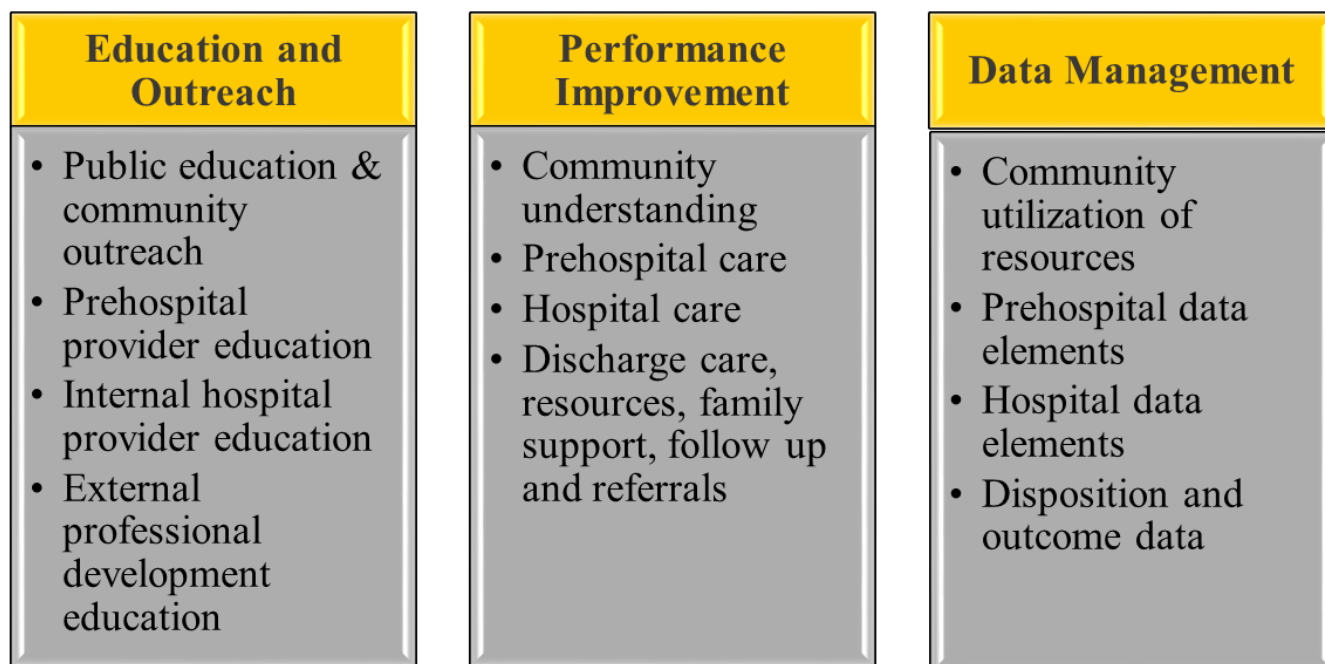
Within each level of the continuum of care, there are identified goals designed to build safety into the STEMI system of care, ensuring that patients receive the safest and most reliable care across the continuum.



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 Sacramento providers to work in collaboration with a team approach wherever possible. Common themes span across the Prehospital, In-Hospital and Post-Hospital levels that identify opportunities to maximize the team approach to care of the cardiac patient.

- Education of the community, EMS and other healthcare professionals promotes and supports 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. SCEMSA'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 advantage of the strengths and resources brought by each organization and provider to protect the health and wellness of individuals and communities.

Stakeholders

Sacramento County EMS Agency

Serving 1,458 people per square mile, the Sacramento EMS Agency works diligently to ensure that the communities which are spread over its approximate 994 square-miles, have access to emergency cardiac treatment and services that provide quality care based on best practice guidelines and evidence-based research.

The Sacramento County EMS Agency's specialty care programs are further refined by the agency's commitment to excellence as defined in the Vision, Mission, Values and Principles:

Vision

To be an exceptional, outcome-focused Emergency Medical Services (EMS) leader.

Mission Statement

To assure the timely delivery of high quality, outcome-based, compassionate, and cost-effective emergency medical services to the people of Sacramento County and to optimize these services through a balance of community collaboration and regulatory leadership.

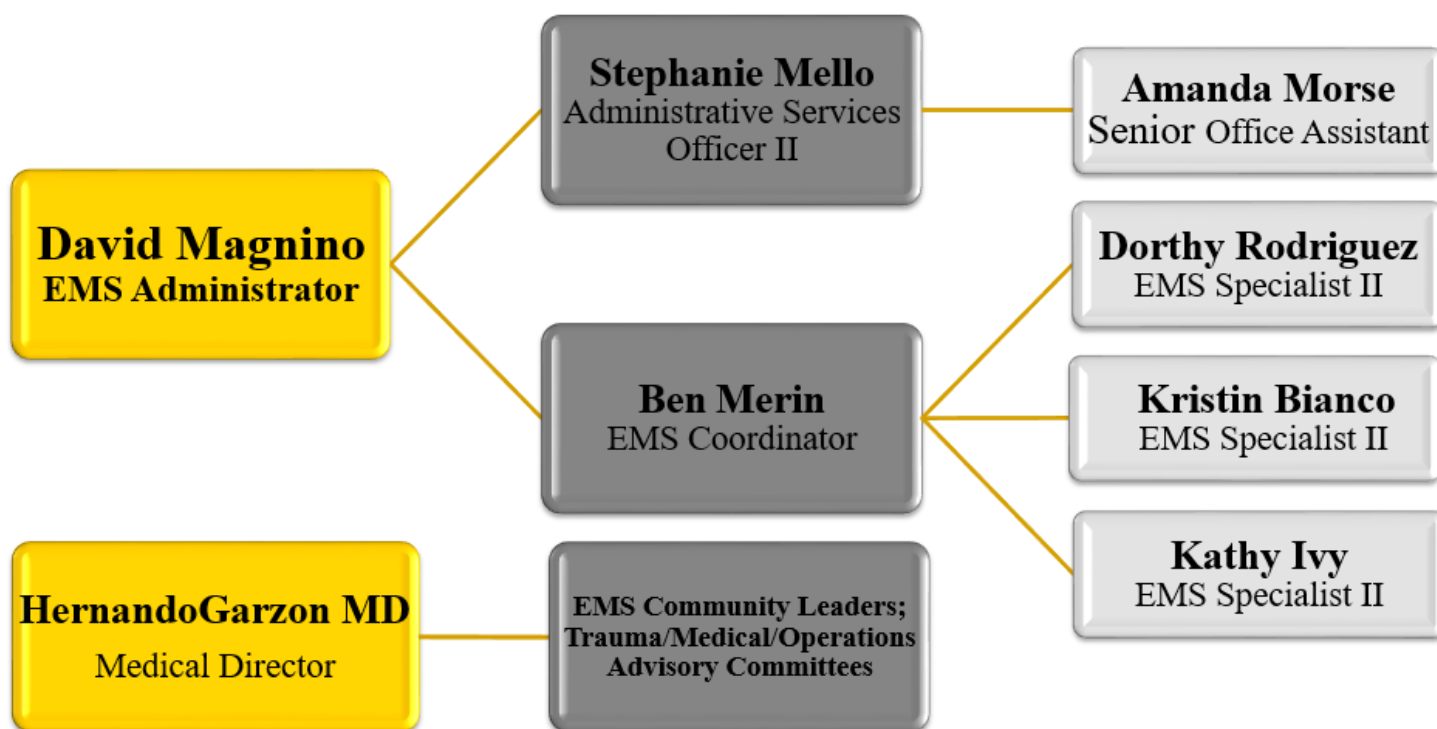
Values

- Patient centered care
- Dignity and respect
- Honesty and integrity
- Personal and organizational accountability
- Collaboration in our endeavors
- Inclusive decision-making
- Evidence-based change as an avenue to excellence

Principles

- System success is measured in the patient care outcomes of the community we serve.
- Each interaction brings value to us and the EMS system.
- The success of the organization is success for all.
- Our duty is to lead effectively and regulate with consistency.

The Sacramento County EMS Agency is comprised of an EMS Administrator, EMS Medical Director (part-time contracted), EMS Coordinator, three (3) EMS Specialists, one (1) Administrative Services Officer, and one (1) Senior Office Assistant. Although each staff member has a different role in the STEMI Critical Care System, it is through the work that is managed collectively as a group that the STEMI System of Care exhibits optimal performance.



Sacramento County STEMI Receiving Centers

Sacramento County has a total of eleven prehospital receiving hospitals. Nine of these hospitals are within Sacramento County and two hospitals are physically located just outside of the Sacramento County line in Placer County. Seven of the eleven receiving hospitals are currently designated by the Sacramento County EMS Agency as a 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).”

Sacramento County EMS Agency has written agreements with hospitals that are designated STEMI receiving centers. To be considered for STEMI receiving center designation, hospitals must hold current Chest Pain Certification by The Joint Commission and fill out a SCEMSA STEMI Center Designation Application packet. The application packet contains an evaluation tool that SCEMSA uses to ensure that the facility meets the requirements to receive STEMI Center Designation.

STEMI Centers must also maintain compliance with Sacramento County EMS Agency designation criteria outlined in Policy document 2526 - *STEMI Center Designation*.



SCEMSA STEMI Center Designation Application Packet see Attachment APP.

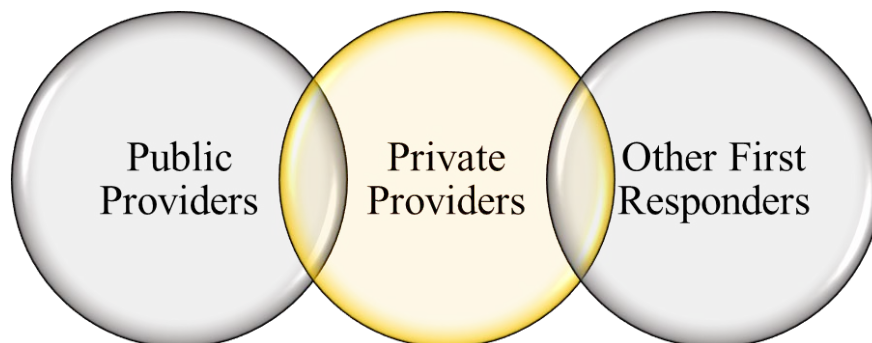
Sacramento County Prehospital Providers

The Sacramento County EMS System includes 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. ALS first responder ambulance services are also available from private providers via a ten-digit number.

Once on scene, the first responder and ambulance transport crews coordinate their efforts to rapidly identify, treat and transport STEMI patients to a STEMI Receiving Center. A critical component in the continuum of care is the transfer of 12-Lead electrocardiogram (ECG) findings. Providers electronically transmit a 12-Lead ECG to the receiving hospital and when needed, prehospital providers can contact base hospital personnel for On-Line Medical Direction (OLMD). Field crews notify the STEMI Receiving Center 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 hospital staff to ensure that all pertinent information is relayed for a seamless transition within the continuum of care.

Sacramento County EMS Agency has a policy in place to describe the process for 12-Lead ECG transmission. Policy document 8827, 12-Lead ECG, serves as an advanced life support skill guideline for obtaining, utilizing, and transmitting 12-Lead ECGs.



The ACS /STEMI Patient

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 occlusion. 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 necrotic.

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 therapy.⁷

It is imperative that field personnel are well trained and STEMI receiving centers are well prepared for the patient that presents with ST Elevation. Sacramento County EMS Agency has a policy in place to assist field providers in the rapid identification of a patient who may be suffering an ST Elevation MI. Policy document 8030, *Discomfort-Pain of Suspected Cardiac Origin*, describes signs and symptoms of a suspected STEMI patient and is a protocol for treatment in Sacramento County.

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's is a critical determinant of patient outcomes. Reducing delays relies on a robust emergency medical system that can transport a patient directly to a percutaneous coronary intervention-capable hospital, even if it means driving past a closer hospital.⁸

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 STEMI receiving center.

Sacramento County EMS Agency has a policy in place to assist field providers in determining destination for a STEMI patient. Policy document 5050 *Destination*, outlines the destination facilities for patient populations requiring specialty systems of care.

⁷ https://www.heart.org/idc/groups/heart-public/@wcm/@mwa/documents/downloadable/ucm_487492.pdf

⁸ <http://circinterventions.ahajournals.org/content/11/5/e005706>

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 time.⁹

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 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.

Sacramento County Prehospital providers have two ways to make prehospital notification. In addition to the 800 MHz radio system available to transporting units in Sacramento, providers have a phone number that is assigned to each receiving hospital for the purposes of receiving radio reports. Either method of communication is reliable and is utilized frequently among field crews.

Sacramento County EMS Agency has a policy in place to give direction on administering a notification report to receiving hospitals. Policy document 2525, *EMS Radio Report Format*, addresses the minimum acceptable information to be communicated and provides a standardized and consistent approach to prehospital notifications.

⁹ [https://www.ajemjournal.com/article/S0735-6757\(16\)30234-0/pdf](https://www.ajemjournal.com/article/S0735-6757(16)30234-0/pdf)

Inter-Facility Transfers

In Sacramento County, seven (7) out of eleven (11) receiving hospitals are currently designated as STEMI receiving centers. Due to the geographic distribution of the STEMI Receiving Centers in relationship to the EMS response boundaries in Sacramento, field providers can transport identified STEMI patients directly to a STEMI receiving center without extended transport times. STEMI patients seen at non-SCRs occasionally require emergent transfer to SRC. For this reason, Sacramento STEMI receiving centers have developed plans that include:

- Pre-arranged agreements with STEMI receiving centers for transfer of patients
- Pre-arranged agreements with EMS providers for rapid transport of patients who are eligible for time-sensitive treatments

Sacramento County EMS Agency has a policy in place to provide guidelines for ambulance transport of patients between acute care hospitals. Policy document 5102, *Inter-facility Transfers*, outlines transfer agreements, medical control and levels of care to ensure that we are meeting patient needs while providing quality rapid transport to definitive treatment.

Data Collection

STEMI system of care monitoring and evaluation is conducted through SCEMSA Quality Improvement Program.

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 outcomes.¹⁰

Sacramento County EMS Agency has a policy in place to standardize data elements collected from designated STEMI receiving centers and EMS providers to monitor, review, evaluate, and improve the delivery of prehospital advanced life support and hospital cardiac care services. Policy document 2527, *STEMI System Data Elements*, defines the data elements that are required from Prehospital and Hospital providers on a monthly basis.

¹⁰ <https://emsa.ca.gov/wp-content/uploads/sites/47/2017/12/Core-Measure-Report-for-2016-Data.pdf>

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:

- 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 SCEMSA'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.¹¹

Sacramento County EMS Agency has a policy in place to ensure continued high quality of patient care in emergency medical services provided in our community. Policy document 7600, *Quality Improvement Program*, 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 the cardiac patient. The program has active members from all system partners and includes Prospective/Concurrent/Retrospective reviews as well as a feedback system.

¹¹ Stroup, Craig, *Fundamentals of Emergency Medical Services System Evaluation and Quality Improvement* (Pinecrest Publishing House, 2015), 5.

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.

Sacramento County EMS Agency convenes a STEMI Care Committee that includes representation from each of the STEMI receiving centers as well as members that represent the Prehospital Providers in the area. The STEMI Care Committee meets regularly 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. Committee members 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.

Sacramento County EMS Agency has a policy in place that describes the scope of work and the role in membership on the STEMI Care Committee. Policy document 2028, *STEMI Care Committee*, provides the context in which our interprofessional collaboration across the continuum of care meets quality improvement.

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 actually start working. Interdisciplinary education will lead to more effective communication across disciplines and, ultimately, safer, more affordable, and higher quality care.¹²

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. Educational and community-based programs play a key role in:

- Preventing disease and injury
- Improving health
- Enhancing quality of life

Health status and related health behaviors are determined by influence at multiple levels. Because significant and dynamic interrelationships exist among these different levels of health determinants, educational and community-based programs are most likely to succeed in improving health and wellness when they address influences at all levels and in a variety of environments/settings.¹³

Cardiac care public education and outreach will continue to contribute to the improvement of health outcomes in the United States and is a component of the Sacramento STEMI Critical Care System.¹⁴

Understanding the critical role that cardiac education and outreach has in healthcare, Sacramento County EMS Agency has developed a reporting process for STEMI centers as well as Prehospital Providers to identify education and outreach efforts within our community. The reporting matrix includes four elements of education and outreach.

Internal Education is driven towards “in-house” educational efforts on STEMI care. This would include mandatory staff training, in-service training and any other educational opportunities that are offered only to the staff members within that STEMI center system.

¹² <https://www.rwjf.org/en/library/articles-and-news/2010/11/interdisciplinary-collaboration-improves-safety-quality-of-care-.html>

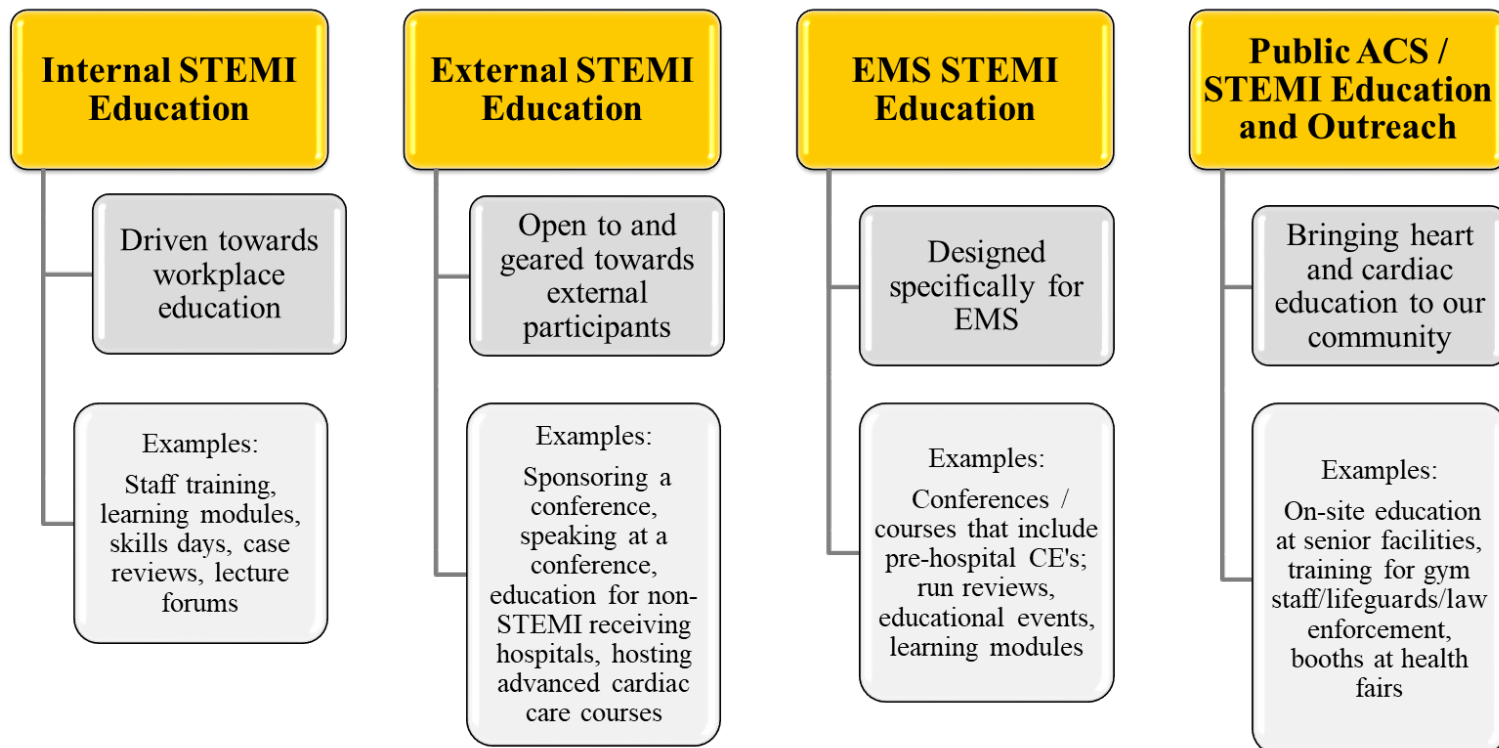
¹³ <https://www.healthypeople.gov/2020/topics-objectives/topic/educational-and-community-based-programs>

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

External Education is geared towards “external” participants and may include sponsoring a conference or speaking at a conference, STEMI education for non-STEMI receiving center hospitals, Lunch and Learn activities that are open to outside facilities and similar events.

EMS Education is education that is designed specifically for the EMS providers. This may include station visits by STEMI teams to review cardiac care and assessments or on-line learning management systems created to give a lecture with pre and post quizzes to evaluate learning. In addition, it may include run reviews or protocol updates.

Public Education and Outreach is specific to bringing cardiac and heart health education to our community members. This area of education provides the greatest opportunity for the EMS Agency to partner with both prehospital providers and our STEMI receiving centers to deliver a comprehensive message of heart and vascular health to the members of our community.



Sacramento County EMS Agency has started the collection of STEMI education and outreach efforts of our partners. This information is presented in the *STEMI Education and Outreach* table.

This document can be found as Attachment A.

Neighboring EMS Agencies

Due to the complex nature of an EMS System with multiple agencies that provide local operational oversight, it is imperative to have processes in place to ensure patients' care is uninterrupted despite crossing county line. A Memorandum of Understanding (MOU) is beneficial to alleviate the fragmentation, improve coordination of services and enhance quality of care.

MOUs can be tailored to the specific needs of each agency and ensure in advance that there is seamless access and transition to and from out-of-county destinations.

Sacramento County EMS Agency has established STEMI Critical Care System MOU's with each of the Local EMS Agencies that boarder Sacramento County.



Individual Memorandums of Understanding can be found in attachments B through H

Index
Attachments

Attachment	Document Type	Document Name
APP	application	STEMI Center Application for Designation
A	table	Education and Outreach
B	MOU	MOU: Yolo County EMS Agency
C	MOU	MOU: Sierra Sacramento Valley EMS Agency
D	MOU	MOU: El Dorado County EMS Agency
E	MOU	MOU: San Joaquin County EMS Agency
F	MOU	MOU: Solano County EMS Agency
G	MOU	MOU: Contra Costa County EMS Agency
H	MOU	MOU: Mountain Valley EMS Agency

INSERT Application Packet (APP) Here



Sacramento County EMS Agency STEMI Receiving Center (SRC) Application Packet

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Application for Printing
Application Fillable PDF



Emergency Medical Services Agency

9616 Micron Ave, Suite 960
Sacramento, California 95827
916.875.9753

<http://www.dhs.saccounty.net/PRI/EMS/Pages/EMS-Home.aspx>

Sacramento County EMS Agency STEMI Receiving Center (SRC) Application for Designation Instructions

Thank you for your interest in applying to be designated as a STEMI Receiving Center for Sacramento County. Please carefully review the application instructions prior to submitting your application packet.

As part of our STEMI Critical Care System in Sacramento County, we offer hospitals a designation process which identifies the hospital as a “STEMI receiving center”. A STEMI receiving center is a hospital that receives prehospital patients from Sacramento County and has Chest Pain Certification by The Joint Commission on Accreditation of Healthcare Organizations (JCAHO). Patient meeting STEMI alert criteria will be triaged to the appropriate STEMI-receiving center.

The process for application as a STEMI Receiving Center in Sacramento County includes:

Step 1:

- ❖ Completion of the STEMI Receiving Center Designation Application (attached)
- ❖ Documentation of Chest Pain Certification by The Joint Commission (TJC)

Step 2. Once SCEMSA receives and reviews the application the following will be sent to the appropriate personnel for review and signatures:

- ❖ Agreement to abide by the Sacramento County STEMI Designation Policy
- ❖ Documentation of all items listed as required in the STEMI Designation Policy
- ❖ Signed contracts that define roles and responsibilities of stakeholders, confidentiality, data access and management as well as the CQI processes
- ❖ Informational site visits by EMS Agency staff
- ❖ Payment of annual fees by each designated STEMI center for supporting STEMI system oversight, data management, and community educational efforts. Fees will be collected by Sacramento County EMS with the first installment due with signed contract.
- ❖ For Fiscal Year 2019/20, the fee is **13,000** per designated STEMI center located in Sacramento County and **\$6,500** for each designated STEMI Center located out of county.

A completed application including all supporting documents can be submitted via mail to:

Sacramento County EMS Agency
9616 Micron Ave, Suite 960
Sacramento, California 95827
916.875.9753

Or can be emailed to: SCEMSAINFO@saccounty.net



Sacramento County Emergency Medical Services Agency (SCEMSA)
9616 Micron Avenue, Suite 960
Sacramento CA 95827
Tel: (916) 875-9753 / Fax: (916) 854-9211
Email: SCEMSAInfo@saccounty.net

STEMI RECEIVING CENTER DESIGNATION APPLICATION

Please check one:

Initial In County Designation \$13,000

Re-Designation In County \$13,000

Initial Out of County Designation \$6,500

Re-Designation Out of County \$6,500

*Application processing requires a minimum of **30 business days** once all materials are received.*

Hospital Name:

Physical Address:

City:

State:

Zip:

Mailing Address:

City:

State:

Zip:

Phone:

Completion Date:

Name and Credentials of Person Completing the Form:

Title:

Hospital Department:

E-mail:

Phone:

Hospital STEMI Program Medical Director Name:

Phone:

Email:

Hospital STEMI Program Coordinator Name:

Phone:

Email:

Does your Hospital currently possess a Chest Pain Certification from The Joint Commission (TJC)? Yes No

- If yes, what was the most recent date of certification? _____
- Attach Documentation of TJC Certification
- Please list the expected date of your next Joint Commission evaluation for Cardiac Care Center re-certification: _____

If no, are you in the process of applying or planning to apply for certification? Yes No

- If yes, when do you anticipate certification completion? _____

FOR SCEMSA USE ONLY

EMS Site Visit to STEMI Receiving Center:
 Written Contract in place:

Staff initials _____ Date of visit _____
 Staff initials _____ Expiration _____

*Application will be considered complete once all documents are received and SCEMSA receives payment of the annual designation fee. Please email completed application and all required documents to SCEMSAInfo@saccounty.net



Sacramento County Emergency Medical Services Agency (SCEMSA)
9616 Micron Avenue, Suite 960
Sacramento CA 95827
Tel: (916) 875-9753 / Fax: (916) 854-9211
Email: SCEMSAInfo@saccounty.net

STEMI RECEIVING CENTER DESIGNATION APPLICATION

Please check one:

Initial In County Designation \$13,000

Re-Designation In County \$13,000

Initial Out of County Designation \$6,500

Re-Designation Out of County \$6,500

*Application processing requires a minimum of **30 business days** once all materials are received.*

Hospital Name:

Physical Address:

City:

State:

Zip:

Mailing Address:

City:

State:

Zip:

Phone:

Completion Date:

Name and Credentials of Person Completing the Form:

Title:

Hospital Department:

E-mail:

Phone:

Hospital STEMI Program Medical Director Name:

Phone:

Email:

Hospital STEMI Program Coordinator Name:

Phone:

Email:

Does your Hospital currently possess a Chest Pain Certification from The Joint Commission (TJC)? Yes No

- If yes, what was the most recent date of certification? _____
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Attachment
A
Table
Education and Outreach


Hospital / Hospital System	Type of Education / Outreach	Title of Event	Target Audience	Date	Time	CEU's / CME's	Location	~Attendance	Brief Description of Event with names and titles of facility educators
Dignity Health	Internal	Current Strategies in ACS Care	RN	03.25.18	0800-1600			15	Overview of risk factors, Signs and Symptoms, diagnostics, initial treatment, Interventions, education on lifestyle modification, medications and treatments and discharge needs.; Roberta Stewart, RN Patty Garrity, RN Cindy Myas,RN
		GSSA Annual Skills Day Testing	RN	April-June				All RN's	Annual modules and testing to show competency in the care of patients with chest pain/ACS. Additional modules for Atrial Fibrillation. Includes review of ACS signs/symptoms, risk factors, and treatment. Also includes module for dysrhythmia recognition and testing; Online Modules
		MGH Monthly Skills Day	RN ED Staff	Monthly					All clinical staff attend a Skills Day Lab during their month of hire. Stations include EKG, LVAD, and Pacemakers; Hospital Educators and Managers
		Chest Pain/STEMI lecture	New Graduate RN's	Monthly				5-10 Monthly	Risk factors/diagnostics/treatment, hospital policies; Rachel Cannariato,RN
		12 Lead EKG/STEMI Skills Day Station	Mandatory for all RNs/ ED Techs/ CNAs	Monthly				50+ Monthly	Skills station in EKG acquisition for all, RNs have additional rhythm recognition station; Sarah Mee, RN
		Current Strategies in ACS Care	RN	10.25.18	0800-1600			15	Overview of risk factors, Signs and Symptoms, diagnostics, initial treatment, Interventions, education on lifestyle modification, medications and treatments and discharge needs.;




									Roberta Stewart, RN Patty Garrity, RN Cindy Myas,RN
	Heart Failure & LVAD	Dignity Health Carmichael MD's	04.05.18			Carmichael Dignity	30		Education on care of the Heart Failure and LVAD patient; Dr. Janmohamed
	ESI Training	ED RN's	Multiple dates 2017/2018			MSJ	146		Training to the ESI Triage 5 level system. Discuss the signs and symptoms of CP, risk factors, and how to prioritize treatment; Susan Orozco, RN ED Educator
	Skills Day	ED RN's ED Staff	Multiple dates 2017/2018			MSJ	150		ACS pathophysiology, tests, treatments, care plans for patients; Susan Orozco, RN ED Educator
	Critical Care Orientation	ED Nurses	Multiple dates 2017/2018			MSJ	12		In depth pathophysiology of cardiac events, heart failure, and arrhythmias. Treatment, medications, and cardiac alert process reviewed. ; Susan Orozco, RN ED Educator
	Advances in CPR	RN MD	02.23.18	1230-1330		MSJ	100		Key changes in AHA guidelines to CPR and emergency cardiovascular care were made in 2017. This presentation addresses new guidelines for cardiac resuscitation, chest compression only CPR, and immediate coronary angiography in the post arrest patient. ; Dr Karl Kern, University of Arizona
External	Heart Failure & LVAD	Rideout MD's	02.27.18			Rideout, Yuba City	10		Education on care of the Heart Failure and LVAD patient; Dr. Janmohamed
	Heart Failure & LVAD	Renown MD's	03.02.18			Renown, Reno	5		Education on care of the Heart Failure and LVAD patient; Drs. Janmohamed & Slachman
EMS	EMS Newsletter	EMS	Monthly			Regional	200+		Monthly newsletter that will address an individual topic related to the cardiovascular patient. ; Collaboration of specialist/subject matter experts based on topic



	EMS Appreciation Activities	EMS	05.22.18 through 05.24.18			MGH, Methodist, Woodland EDs	220	Education provided to EMS. Topics included updates on HF, LVAD, A-fib, Chest Pain Clinic, Women and Heart Disease; DHHVI Staff & ED Staff
	Run Review	EMS ED RN	06.24.18			MSJ	28	Cardiac Review
	Run Review	EMS ED RN	12.06.18			MSJ	14	Cardiac cases reviewed and Impalla device; Scott Baron MD
Public Education / Outreach	National Wear Red Day	Dignity Health Employees	02.02.18			Rancho Cordova	10	Women's and Heart Disease; Tracy Toms
	The best things in life never miss a beat - Hands only CPR	Public	02.03.18			Sacramento Hilton Hotel	175	Education provided on optimal heart health, history of CPR and hands only CPR. Demonstration and practice sessions on hands only CPR; Dr. Munir Janmohamed, Morgan Stonefelt (AHA), Joyce Higley, Roberta Stewart
	The best things in life never miss a beat - Hands only CPR	Public	02.08.18			Davis	140	Education provided on optimal heart health, history of CPR and hands only CPR. Demonstration and practice sessions on hands only CPR; Dr. Christopher Swales, Dr. Sarada Mylavarapu, Dr Kathy Glatter, Morgan Stonefelt (AHA), Doris Frazier
	Faith Community Support Group - Hands Only CPR presentation	Public	02.28.18			Carmichael	10	Education on hands only CPR; Tracy Toms
	At the Heart of A-Fib	Public: Seniors	04.04.18			Sun City Lincoln Hills	145	Education on the latest a-fib research and treatment options; Dr. Arash Aryana, Nathanael White, Doris Frazier
	Working Together to Prevent Heart Disease	Cal Trans State Employees	04.26.18			Folsom	15	Education on cardiovascular disease, management, prevention, women and heart disease, and advanced heart disease options; Joyce Higley
	Health & Wellness Carnival	Elementary	04.28.18			Earl Warren Elementary School, Sacramento	200	Provided hands only CPR demonstration/practice and prevention of heart disease; DHHVI, Neuro Institute, Cancer Institute, CLC

STEMI Education and Outreach 2018

		Heart and Stroke Walk	State Employees	09.27.18			State Capital South Steps	TBD	Will provide a village theme with education and risk assessments; DHHVI
		Heart and Stroke Walk	Public	09.29.18			William Land Park, Sacramento	TBD	Will provide education on heart disease in women, prevention and hands only CPR demonstration/practice; DHHVI
		Hands Only CPR	Public	11.01.18			Elk grove Falls Event Center	TBD	Education on hands only CPR; DHHVI
		Hands Only CPR	Public	11.03.18			Lake Natoma Inn Folsom	TBD	Education on hands only CPR; DHHVI
Sutter Health	Internal								
	External	ICU Conference 2018	RN MD	02.07.18	0800-1600		SRMC Conference Rooms A and B	70	Discuss current management of patient with Therapeutic Hypothermia therapy. Describe at least two goals of palliative care. Describe at least two clinical situations in which the provider needs to be notified post PCI Review current organ donation patient management processes at SRMC. Discuss at least current care strategies for complex ICU patients. Describe current disaster management plan at SRMC.; Dr. Bellucci – Therapeutic Hypothermia Dr. Walker – Palliative Care Dr. Sepehrdad – Percutaneous Coronary Intervention (PCI) Dr. Mohammed – Interesting ICU Case Studies Sierra Donor Services – Organ Donation Management and T4 Protocol Erik Angle RN, MICN, MEP, KJ6YJD – Disaster Management
		EMS-a Palooza	RN MD EDT	12.03.18			TBD	80	8 hour educational opportunity provided to all pre-hospital and hospital staff. 6-7 content expert lecturers will present information on a variety of

			Cath Lab Staff						topics. Topics will include one lecture on cardiac/STEMI and one lecture on stroke care.	
	EMS	EMS-a Palooza	EMS	12.03.18			TBD	80	8 hour educational opportunity provided to all pre-hospital and hospital staff. 6-7 content expert lecturers will present information on a variety of topics. Topics will include one lecture on cardiac/STEMI and one lecture on stroke care.	
	Public Education / Outreach									
UCD	Internal									
	External									
	EMS									
	Public Education / Outreach									
Kaiser	Internal	MICN Meeting/Training	MICNs	03.15.17 07.19.17 11.15.17 06.5.18				Varies	Includes STEMI education/updates for Sac. County EMS and SSC policy/protocol	
		12 Lead Transmission Training	MICNs	varies			Online	Varies	http://www.dhs.saccounty.net/PRI/EMS/Pages/EMS-Pre-Hospital-Continuing-Education.aspx	
		Cath Lab Nurse & Tech Symposium	CCL RN & Tech, Open to all ED/Hospital staff that care for Cardiac Cath Patients	10.13.18				45	 2018 CCL Symposium Save the	

		STEMI drills with simulation	All RN's in MS/TELE/ICU Skills class	03-08.18.18				303	 2018 KFHS PCS ANNUAL SKILLS UNIT
		Abrupt Closure causing STEMI	TELE/ICU/PACU RN	02.15/ 04.12/ 06.20/ 08.5.18				35	 Tele PACU PCI Flyer.docx Pre-hospital ROSC & Survival
	External								
	EMS	Run Review & Trauma Video Review	Hospital and prehospital	08.21.18				35	Pre-hospital ROSC & Survival  RUN Review & Trauma Video Review
	Public Education / Outreach	AHA Heart Ball	Community and business leaders, elected	04.29.18					Annual fundraising for American Heart Assoc.
		Running of the Elk	Elk Grove Community	04.29.18				2000	Annual marathon, half marathon and 5K. KP is the title sponsor. Stroke awareness education provided within the KP pavilion. KP medical team
		Walk to Thrive	Downtown State Employees/residents	1 st Thursday of each month 05-09				30-400/Thursday	KP walking program for attendees of the Downtown Farmers Market. Attendees are encouraged to participate in a one-mile walk with a KP physician each Thursday, May-Sept. and can earn prizes. BMI screens available first Thursday of each month.
		Women's Fitness Festival	Women in Sacramento community	06.03.18				4000	Annual 10K and 5K for women. KP is the title sponsor, providing several health and wellness activities within the KP pavilion. Blood pressure screens Heart health/stroke awareness Cardiology and interventional services KP medical team

		AHA Heart Walk	KP Employees/ community members	09.29.18					Annual fundraising community walk for AHA; blood pressure screens and stroke/heart attack awareness information provided at KP booth
									  HSMagnet.image.pdf HSMagnet_SPANISH.image_EUS.pdf
		EGUSD	High School Students/ teachers	Fall 2019					Opportunity to provide heart health or other outreach

Attachment
B
MOU
Yolo County EMS Agency

Sacramento County is currently in the process to establish an Inter-Agency Contract with Yolo County which when approved by the Board of Supervisors and executed will be added to the 2019 STEMI Annual Update.

Attachment**C**MOUSierra-Sacramento Valley EMS Agency

Sacramento County is currently in the process to updating the previous 1994 Inter-Agency Contract with Sierra Sacramento Valley EMS Agency. When approved by the Board of Supervisors and executed the new contract will be added to the 2019 STEMI Annual Update.

Included for reference is the current 1994 agreement.

INSERT SSV MOU from 1994 HERE IN PDF FORMAT

Attachment**D**MOUEl Dorado County EMS Agency

Sacramento County is currently in the process to establish an Inter-Agency Contract with El Dorado County which when approved by the Board of Supervisors and executed will be added to the 2019 STEMI Annual Update.

Attachment**E**MOUSan Joaquin County EMS Agency

Sacramento County is currently in the process to updating the previous 1994 Inter-Agency Contract with San Joaquin County. When approved by the Board of Supervisors and executed the new contract will be added to the 2019 STEMI Annual Update.

Included for reference is the current 1994 agreement.

INSERT San Joaquin County MOU from 1994 HERE IN PDF FORMAT

Attachment
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MOU
Solano County EMS Agency

Sacramento County is currently in the process to updating the previous 1996 Inter-Agency Contract with Solano County. When approved by the Board of Supervisors and executed the new contract will be added to the 2019 STEMI Annual Update.

Included for reference is the current 1996 agreement.

INSERT Solano County MOU from 1996 HERE IN PDF FORMAT

Attachment**G**MOUContra Costa County EMS Agency

Sacramento County is currently in the process to updating the previous 1995 Inter-Agency Contract with Contra Costa County. When approved by the Board of Supervisors and executed the new contract will be added to the 2019 STEMI Annual Update.

Included for reference is the current 1995 agreement.

INSERT Contra Costa County MOU from 1995 HERE IN PDF FORMAT

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H
MOU
Mountain Valley EMS Agency

Sacramento County is currently in the process to updating the previous 1994 Inter-Agency Contract with Amador County and Mountain Valley EMS Agency. When approved by the Board of Supervisors and executed the new contract will be added to the 2019 STEMI Annual Update.

Included for reference is the current 1994 agreement.

INSERT Mountain Valley EMS MOU from 1994 HERE IN PDF FORMAT