

COUNTY OF VENTURA
HEALTH CARE AGENCY

EMERGENCY MEDICAL SERVICES
POLICIES AND PROCEDURES

Policy Title: Prehospital Emergency Medical Care Quality Improvement Program	Policy Number 120
APPROVED:  Administration: Steven L. Carroll, Paramedic	Date: December 1, 2023
APPROVED:  Medical Director: Daniel Shepherd, M.D.	Date: December 1, 2023
Origination Date: January 1996 Date Revised: November 29, 2023 Date Last Reviewed: November 29, 2023 Review Date: July 1, 2024	Effective Date: December 1, 2023

- I. PURPOSE: To define the process to identify areas for improvement in the VC EMS system.
- II. AUTHORITY: Reference: H&S Code Section 1798 Medical Control
- III. POLICY: The Ventura County EMS Agency shall assess and evaluate all aspects of the EMS System in Ventura County.
- IV. Each pre-hospital provider (hospital provider, ambulance provider and first responder agency) will use the Ventura County Continuous Quality Improvement Program (CQI) as a model for their CQI plan with respect to the EMS portion of their activities.

Ventura County
Emergency Medical Services Agency



Quality Improvement Plan

Table of Contents

- I. Organizational Overview and Program Description
- II. Data Collection and Reporting
- III. Personnel
- IV. Equipment and Supplies
- V. Documentation and Data Collection
- VI. Clinical Care
- VII. Clinical Competency and Provider Education
- VIII. Transportation and Facilities
- IX. Public Education and Prevention
- X. Safety Event Reporting Process
- XI. Plan Updates

I. Organizational Overview and Program Description

Ventura County is a geographically diverse region covering over 2200 square miles with a population of over 850,000. With 10 incorporated cities, a number of unincorporated communities, 43 miles of coastline, two offshore islands, two military installations, a variety of lakes and a large area of national forest and state park land, Ventura County offers a distinct mix of urban cities, rural sectors and wilderness.

A division of the Ventura County Public Health Department, the EMS Agency monitors and evaluates the quality of advanced life support (ALS) and basic life support (BLS) emergency medical care provided to the residents of and visitors to Ventura County by authorized pre-hospital personnel, provider agencies, and hospitals. In this role, and under the authority and responsibilities outlined in the California Health and Safety Code and The California Code of Regulations, the EMS Agency:

- Serves as the lead agency for the emergency medical services system in the county and coordinates all system participants in its jurisdiction, encompassing both public and private sectors.
- Provides system guidance and direction through provider and community driven policy development aimed at establishing and maintaining standards for care.
- Monitors patient care through a comprehensive quality improvement program.
- Ensures medical disaster preparedness through the emergency planning process and coordinates response to local disasters and incidents with multiple casualties.
- Ensures prehospital personnel excellence through training, certification, accreditation and continuing education program review.

The Ventura County EMS System is comprised of various disciplines, including fire departments, law enforcement, ambulance services, hospitals, and other provider agencies. These agencies respond to provide lifesaving care to those in need 24 hours a day, seven days a week. From the dispatchers who talk with 9-1-1 callers and the responders who provide care in the field and transport patients, to the emergency room staff and specialty care teams who receive the patients and provide definitive care in the hospital, the EMS Agency ensures the highest quality care for those in need of emergency medical services in Ventura County through an integrated and coordinated system of services.

The EMS Agency is staffed with 19 full-time personnel, a medical director and an assistant medical director. Positions include EMS Administrator, two Deputy Administrators, Senior Hospital Systems Coordinator, Clinical Quality Manager, four Program Administrators, Program Assistant, four Community Services Coordinators, EMS Logistics Specialist, two Administrative Assistants, EMS Certification Specialist and one Community Health Worker.

The EMS Agency is proud of its strong team of professionals that are called to action with every call for service. This team is made up of people who care about serving the community while maintaining high standards in a demanding career. No matter the uniform, all team members strive for excellence each and every time they respond. Through a state-of-the-art communication system, ongoing training and modern equipment, Ventura County EMS providers can respond quickly and efficiently to the needs of the community.

VCEMS Mission Statement

To promote the health and well-being of everyone in Ventura County through coordinated and collaborative policy-development, education, planning, and disaster medical response.

VCEMS Vision Statement

Through collaborative and people-centered planning and policy development, VCEMS will lead the way with respect to prehospital care and disaster medical coordination.

VCEMS Quality Improvement Program Purpose

The Ventura County EMS Quality Improvement Plan is intended to be an inclusive, multidisciplinary document that focuses on identification of system-wide opportunities for improvement. Continuous Quality Improvement (CQI) refers to methods of data evaluation that consider factors such as structure, process, and outcome. Improvement efforts focus on identification of the root causes of problems, interventions to reduce or eliminate these causes, and the development of steps to correct inadequate or faulty processes. The focus of the CQI Program is not disciplinary in nature, but rather to use the analysis of high-quality data for ongoing educational efforts.

The county requires that all EMS partners, both first responder BLS and ALS providers, as well as base hospital providers and specialty care centers, institute CQI programs within their organizations. Each ALS and BLS provider and hospital provides qualified personnel to coordinate their internal CQI program. These personnel are responsible for developing and maintaining their agencies internal CQI program including CQI processes related to personnel, equipment and supplies, safety, skills maintenance, and competency. This individual is responsible for representing their agency at the county CQI functions, specifically the CQI Committee groups.

Outline of Provider Agency Responsibilities related to CQI:

1. Designate personnel who manage the internal quality improvement process for that agency. The pre-hospital agency representative is responsible for internal CQI processes related to personnel, equipment and supplies, safety, skills maintenance, and competency.
2. In cooperation with VCEMS, implement an internal CQI plan and provide education to all personnel within the agency regarding CQI responsibilities.
3. Assist in the identification of indicators needed and ensure compliance with the county CQI plan.
4. Share results of internal CQI activities with the CQI committees, as well as disseminate appropriate information forwarded from the CQI committees to all EMS personnel within the agency.
5. Maintain records of CQI activities for review and action regarding exemplary practice, unanticipated events, and utilization management.
6. Review internal CQI efforts regularly for effectiveness in identifying and resolving provider related CQI issues, and revise as needed.

The provider agencies, through their internal CQI process and in conjunction with the CQI committee, are responsible for creating and monitoring programs for ongoing medical training & issue resolution, including individual performance improvement plans. Each provider agency will submit reports of clinical indicators based on the care that their personnel render to the patient. The clinical quality committee will review and validate the data and look for trends. Trends derived from the clinical indicators will be discussed at the committee meetings and also passed on to PSC for periodic review and discussion.

The CQI committees provide leadership for the clinical oversight and quality management of pre-hospital patient care in the county. The committees also discuss current trends and research in EMS care that has an impact on pre-hospital care as well as to review information developed through the use of clinical indicators. Continuous quality improvement is achieved through assessment of clinical care, research, evidence-based implementation of initiatives, monitoring the outcomes of the changes implemented, and the ongoing study of EMS practice for continued progress. The committees strive to use a multidisciplinary approach for issue resolution and to promote county-wide standardization of the quality improvement process with an emphasis on education.

Members of all CQI committees are required to sign a confidentiality agreement, in accordance with Federal and State regulations and/or Statute, stating a pledge to not divulge or discuss any information that would have been obtained solely through the CQI committee membership. It is agreed that no information will be disclosed to parties outside of these committees except as agreed to by attendees for the purposes of follow-up or resolution of system design change.

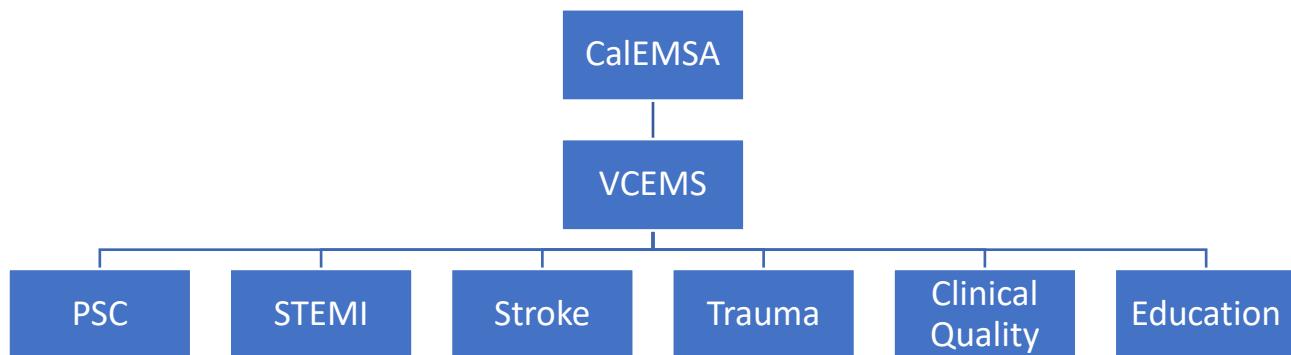
Indicators which are likely to result in the review of high risk/ low frequency or otherwise significant events are used to measure outcomes. The clinical indicator information is presented at each CQI committee meeting to generate discussion, evaluation, and responses to any trends that are recognized. The committee is expected to provide leadership on systemic issues and/or trends to develop a system-wide approach to quality improvement, and to develop information that will be disseminated to all personnel in the system based on identified issues.

Updates to the patient treatment protocols are reviewed by EMS system stakeholders at the prehospital services committee, who make recommendations to the EMS Medical Director before consensus is reached and final approval is made. All updates and changes are formulated into EMS update and delivered twice per year. All training materials are made available to each agency.

Specific specialties within the Ventura County EMS System have their own focused QI Committees to address quality improvement activities that are unique to their functions. These committees include the STEMI Committee, the Stroke Committee and the Trauma Committee which consists of the Trauma Operational Review Committee (TORC) and the Trauma Audit Committee (TAC). Each of these committees is

comprised of stakeholders with responsibility for and expertise in the specialty area. In addition, prehospital members of the system wide CQI Committee attend these specialty care committee meetings to provide continuity and consistency.

VC EMS System Quality Improvement Framework



Prehospital Services Committee (PSC)

A. Purpose

To provide input to the VC Emergency Medical Services (EMS) Medical Director and VC EMS administration on matters pertaining to emergency medical services, including, but not limited to, dispatch, first responders, ambulance services, communications, medical equipment, training, personnel, facilities, and disaster medical response. In terms of system-wide QI coordination and oversight, this committee serves in the capacity of the Technical Advisory Group (TAG).

B. Composition

Membership shall be comprised of representatives from base and receiving hospitals, first responder agencies, ambulance providers, air unit, ALS training programs, law enforcement and emergency medical dispatch.

C. Tasks

1. Review EMS policies and patient treatment protocols, make recommendations for edits, and approve changes made prior to documents being made ready for biannual EMS updates.
2. Discuss current events, issues, and trends that are impacting the local EMS system, in addition to impacts at a regional and statewide level.
3. Receive and file reports from committee members and their respective agencies and discuss related issues that may impact the broader EMS system

4. Make recommendations to the EMS Medical Director regarding the need for sub-committees and/or task forces for the purposes of addressing specific issues or initiatives.

STEMI Committee

- A. Purpose
To provide input to the VC Emergency Medical Services (EMS) Medical director and VC EMS administration on matters pertaining to the STEMI specialty care system.
- B. Composition
Representatives from each hospital in the county – including STEMI receiving centers and STEMI referral hospitals, in addition to clinical/QI manager and a senior administrator or agency medical director from each fire agency and ambulance provider agency. At a minimum, the EMS Agency medical director and specialty care program manager will participate.
- C. Tasks
 1. Reviews identification and management of STEMI patients
 2. Identify and measure preventable death and disability from a STEMI.
 3. Assure timely, optimal STEMI services in a cost-efficient manner through close coordination of prehospital, hospital and rehabilitation services.
 4. Match patient medical needs with resources of the SRC.
5. Review identification and management of cardiac arrest patients and system of care.

Stroke Committee

- A. Purpose
To provide input to the VC Emergency Medical Services (EMS) Medical director and VC EMS administration on matters pertaining to the stroke specialty care system.
- B. Composition
Representatives from each hospital in the county – including Acute Stroke Centers (ASC) and non-ASC facilities, in addition to clinical/QI manager and a senior administrator or agency medical director from each fire agency and ambulance provider agency. At a minimum, the EMS Agency medical director and specialty care program manager will participate.
- C. Tasks
 1. Reviews identification and management of stroke and Large Vessel Occlusion (LVO) patients.
 2. Identify and measure preventable death and disability from a stroke.
 3. Assure timely, optimal stroke services in a cost-efficient manner through close coordination of prehospital, hospital and rehabilitation services.
 4. Match patient medical needs with resources of the ASC or TCASC.

Trauma Committees

- A. Purpose
To advise the EMS Medical director on the establishment of trauma related policies, procedures, and treatment protocols. To advise the EMS Medical director on trauma related education, training, quality improvement, and data collection issues. To review

and improve trauma care in a collaborative manner among the trauma centers in Ventura County as well as trauma centers in neighboring counties.

B. Composition

Trauma Operational Review Committee (TORC)

The membership of TORC shall be broad based regionally and represent the participants in the Trauma Care System and the regional medical community. TORC shall be chaired by the Ventura County EMS Agency Trauma System Manager. The membership of TORC includes the following:

1. Ventura County EMS Agency
 - a. Medical Director
 - b. Administrator
 - c. Deputy Administrators
 - d. Trauma System Manager
 - e. Ventura County Medical Examiner
2. Ventura County Trauma Centers
 - a. Hospital Administrator
 - b. Trauma Medical Director
 - c. Trauma Manager
 - d. Emergency Department Medical Director
 - e. Emergency Department Nurse Manager
 - f. Prehospital Liaison Physician
 - g. Prehospital Care Coordinator
3. Ventura County Non-Trauma Base Hospitals
 - a. Hospital Administrator
 - b. Emergency Department Medical Director
 - c. Emergency Department Nurse Manager
 - d. Prehospital Liaison Physician
 - e. Prehospital Care Coordinator
4. Ventura County Receiving Hospitals
 - a. Hospital Administrator
 - b. Emergency Department Medical Director
 - c. Emergency Department Nurse manager
5. Transport Providers
One representative, to be selected by individual agency
6. First Responders
One representative, to be selected by individual agency
7. Other individuals who the EMS Medical Director deems necessary, on an ad-hoc or permanent basis, and appointed by the EMS Medical Director

Trauma Audit Committee (TAC)

The membership shall be limited to representatives of Local EMS Agencies and trauma centers from Ventura, Santa Barbara and San Luis Obispo counties. TAC shall be chaired by an EMS Medical Director from one of the three local EMS Agencies, and the membership of TAC will include the following:

1. Local EMS Agencies

- a. Medical Director
 - b. Administrator / Deputy Administrator(s)
 - c. Trauma System Manager
- 3. Trauma Centers
 - a. Trauma Medical Director
 - b. Trauma Program Manager
 - c. Prehospital Care Coordinator
- 4. Medical examiner, pathologist or physician designee from each represented county
- 5. Other individuals who the EMS Medical Director deems necessary, on an ad-hoc or permanent basis, and appointed by the EMS Medical Director

C. Committee Tasks

TORC

- 1. Reviews, analyzes and proposes corrective actions for operational issues that occur within Ventura County's inclusive trauma system. Identifies problems and problem resolutions (loop closure).
- 2. Based on trauma system maturation and needs, recommend development and/or revisions of policies that impact trauma care.
- 3. Reviews interfacility transport issues, particularly problematic or recurring themes, and occasionally, specific cases. Recommends improvement measures.
- 4. Reviews criteria for IFT for ongoing appropriateness and recommends policy revisions when needed.
- 5. Reviews prehospital trauma transport statistics for appropriateness of patient destinations, system trends and educational or other needs.
- 6. Reviews trauma registry reports.
- 7. Evaluates system needs and recommends trauma education or certification courses for emergency department personnel.
- 8. Recommends and collaborates with other Ventura County agencies and organizations on injury prevention projects.
- 9. Recommends and collaborates on research efforts.
- 10. Recommends and conducts educational programs toward the goal of enhancing an inclusive trauma system approach in Ventura County.

TAC

- 1. Monitors the process and outcome of trauma patient care and presents analysis of data for strategic planning of the trauma system.
- 2. Conducts review of cases that involve system issues or are regarded as having exceptional educational or scientific benefit.
- 3. For each case reviewed, provides finding of lessons learned, and when appropriate, makes recommendations regarding changes in the system to improve the process of trauma care.
- 4. Presents and reviews individual trauma center-specific issues with the goal of awareness, education and collaboration.
- 5. Identifies county and intra-county problems, issues and trends. Identifies and implements, or recommends implementation, of resolutions (loop closure).

D. Clinical Quality Committee

Purpose

To review, assess and analyze the delivery of prehospital care, and to improve the quality of services to those receiving emergency care in the County of Ventura.

Composition

1. Adventist Health Simi Valley
2. American Medical Response
3. Fillmore Fire Department
4. Gold Coast Ambulance
5. Los Robles Regional Medical Center
6. Oxnard Fire Department
7. St. John's Regional Medical Center
8. Ventura County Fire Department
9. Ventura County Medical Center
10. Ventura County Sheriff's Aviation Unit
11. Ventura Fire Department

Committee Tasks

1. Knowledge and acceptance of regulations guiding CQI performance indicators for local EMS Agencies.
2. Selecting and defining Key Performance Indicators (KPI)
3. Setting performance standards for KPIs.
4. Develop a system for process of improvement
5. Receives data for county wide projects from provider agencies
6. Reporting CQI updates to VCEMS and broader EMS system stakeholders through the prehospital services committee.

E. EMS Education Committee

Purpose

To promote high quality EMS education and training amongst ALS, BLS and continuing education training programs approved by the Ventura County EMS Agency. To collectively support the ongoing training of existing prehospital personnel and to support the success of students as they undertake their initial training and pathways into the EMS profession.

Composition

Membership of the EMS Education Committee will be comprised of, at a minimum, of the training program director and the clinical coordinator of each approved training program. For approved ALS training programs, the training program medical director will also attend.

Committee Tasks

1. Reviews, analyzes, and proposes corrective actions for issues occurring with the broader prehospital education framework that impact local training initiatives and goals.

2. Recommend development and/or revisions of policies that impact prehospital education and training.
3. Evaluates system needs and recommends education or certification courses for prehospital personnel.
4. Recommends and collaborates with other Ventura County agencies and organizations on various projects or initiatives.
5. Recommends and collaborates on research efforts.

II. Data Collection and Reporting

Prehospital patient care is documented through a single system-wide electronic patient care reporting system utilizing the ImageTrend Elite platform. This framework provides consistency in documentation and helps to ensure a certain degree of uniformity in patient care information that is collected, in accordance with the National EMS Information System (NEMSIS) and the California EMS Information System (CEMSIS). Additionally, specialty care centers are required to input data into data registries that are maintained at a system level. These registries are Get With the Guidelines (stroke), CAD (STEMI) and ImageTrend trauma registry. Cardiac arrest data is also compiled using the Cardiac Arrest Registry to Enhance Survival (CARES). Collectively, these individual components represent a broader initiative of data collection and analyzation with the purpose of ensuring patients cared for in Ventura County receive superior care, from the time of initial onset of symptoms through patient care provided by prehospital personnel, all the way through discharge from specialty care centers. EMS Agency personnel work with agencies, hospital administrators and clinical staff, as well as specialty care coordinators at each center to analyze data over a given timeframe and make informed decisions and adjustments to policy and programs.

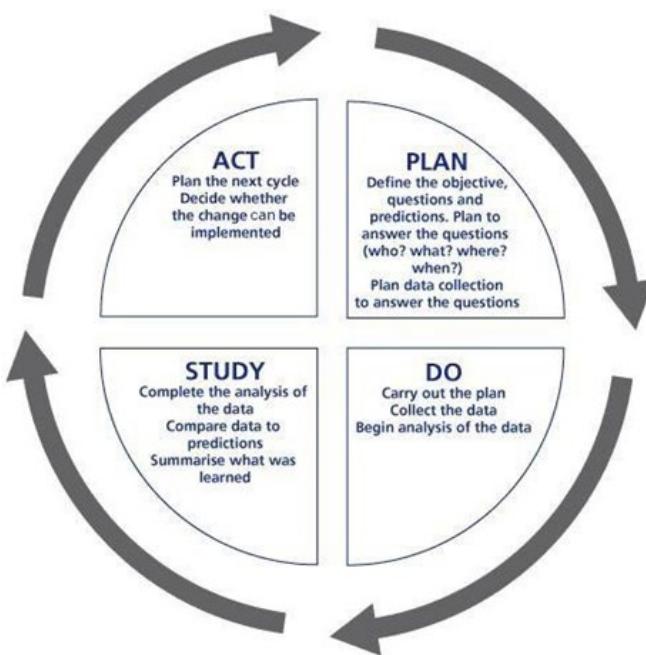
While there are many methodologies that can be utilized with the implementation of a quality improvement program, the method most often utilized in Ventura County is the Plan-Do-Study-Act (PDSA) cycle:

Plan – The change to be tested or implemented.

Do – carry out the test or change

Study – data before and after the change and reflect on what was learned.

Act – plan the next change cycle or full implementation



Utilizing benchmarks and key performance indicators that have been developed both locally and at a national level, reports are prepared and presented at standing specialty care meetings. Additional reports are generated in the ImageTrend System and sent to applicable stakeholders automatically at regularly scheduled intervals. Fall out cases are internally reviewed by prehospital agencies as well as applicable specialty care center staff, in collaboration with VCEMS Medical Director and specialty care manager.

KPIs currently utilized for the purposes this comprehensive quality improvement plan are as follows:

1. The California EMS Authority's Core Quality Measures
2. The measure set developed by the National EMS Quality Alliance (NEMSQA)
3. Key Performance Indicators utilized for trauma specialty care, as identified in the Ventura County trauma system status report
4. Key Performance Indicators utilized for trauma specialty care, as identified in the Ventura County STEMI system status report
5. Cardiac arrest resuscitation and survival metrics
6. Key Performance Indicators utilized for trauma specialty care, as identified in the Ventura County Stroke system status report

III. Personnel

Newly hired personnel are required to enter into a training program with their employer to ensure minimum competency in their respective roles. This is accomplished through a field training process with a field training officer (FTO). For a Paramedic, minimum requirements are set forth in VCEMS Policy 315 – Paramedic Accreditation to Practice, and in VCEMS Policy 318 – Independent Practice Paramedic. Agencies are required to report changes in personnel employment status and or certification/licensure status to the Ventura County EMS Agency. Additionally, individual EMTs, Paramedics and MICNs are required to notify

VCEMS of changes to their contact information. Additionally, mandatory training requirements are outlined in VCEMS Policy 334. These requirements are in place to ensure prehospital personnel maintain proficiency related to Cardiac Arrest Management, pediatric care, multi-casualty incident response and high-risk patient care procedures.

IV. Equipment and Supplies

Ventura County EMS Agency, in collaboration with EMS system stakeholders, maintains EMS Policy 504 – BLS and ALS equipment and supplies. The purpose of this policy to provide a standardized list of equipment and supplies for response and/or transport units in Ventura County. Additionally, this policy identifies a process in which an agency can request a deviation due to medication/equipment supply chain challenges.

Through the prehospital services Committee, or one of the other CQI committees listed above, new/additional equipment and/or medication may be presented to the EMS Agency Medical Director for consideration that it be added to the inventory list for prehospital personnel. This process is identified in EMS Policy 105 – Prehospital Services Committee Guidelines. New items may be added on an optional or mandatory basis, and some may only be added for a particular platform (ALS engine versus BLS ambulance, etc.).

Through the EMS Safety Event process, issues related to equipment and supplies – regardless of whether or not they impact patient care – are reported and reviewed for potential opportunities related to education and policy changes.

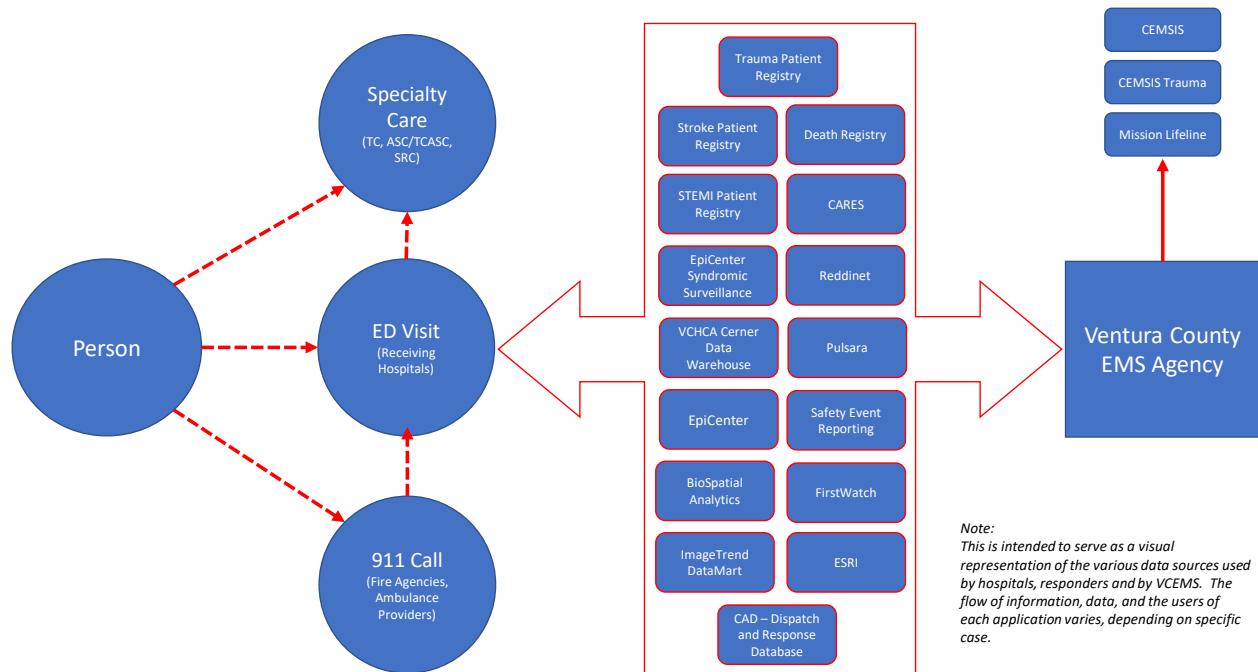
V. Documentation and Data Collection

As highlighted in Section II of this plan, prehospital patient care is documented through a single System-wide electronic patient care reporting system utilizing the ImageTrend Elite platform in accordance with the National EMS Information System (NEMSIS) and the California EMS Information System (CEMSIS). This framework provides consistency in documentation and helps to ensure a certain degree of uniformity in patient care information that is collected. Additionally, specialty care centers are required to input data into data registries that are maintained at a System level. These registries are Get With the Guidelines (stroke), CAD (STEMI) and ImageTrend trauma registry. Cardiac arrest data is also compiled using the Cardiac Arrest Registry to Enhance Survival (CARES). Collectively, these individual components represent a broader initiative of data collection and analyzation with the purpose of ensuring patients cared for in Ventura County receive superior care, from the time of initial onset of symptoms through patient care provided by prehospital personnel, all the way through discharge from specialty care centers. EMS personnel work with agencies, hospital administrators and Clinical staff, as well as specialty care coordinators at each center to analyze data over a given timeframe and make informed decisions and adjustments to policy and programs.

Several policies VCEMS policies are in place related to documentation of prehospital care, in addition to specialty care data collection and guidelines:

- Policy 430 – STEMI Receiving Center Standards
- Policy 450 – Acute Stroke Center Standards
- Policy 452 – Thrombectomy Capable Acute Stroke Center Standards
- Policy 1000 – Documentation of Prehospital Care
- Policy 1403 – Trauma Registry and Data

Data is sourced in a variety of ways/methods. The ImageTrend Elite platform is the main method of collecting prehospital patient care data. In addition to the Elite product, Ventura County EMS Agency also leverages ImageTrend technology in the form of its Patient Registry platform and the DataMart product. Computer Aided Dispatch data is collected through a connection with the Ventura County Fire Department's regional dispatch center. Other sources of data include BioSpatial, and ESRI's GIS platform. Pulsara is utilized for specialty care activation (STEMI and Stroke) from the field, and is verified/reviewed by base hospital and specialty care center for critical data related to ECG, patient condition, etc.



VI. Clinical Care

VCEMS Policy Sections 600 and 700 generally guide the BLS and ALS treatment of patient care in Ventura County, with patient treatment protocols specifically outlined in VCEMS Policy 705. These policies, under the guidance and oversight of the VCEMS Medical Director, are developed and monitored collaboratively through PSC, but also as part of the broader specialty care system (STEMI, Stroke, Trauma and Cardiac Arrest), in addition to the Safety Event reporting process as identified in VCEMS Policy 121. Changes to policies are developed and made primarily through consensus. In all cases, changes are informed through patient care data, patient care outcomes, findings reported by Ventura County

Medical Examiner during death investigation and/or autopsy, and broader evidence-based studies.

VII. Clinical Competency and Prehospital Education

There are currently five EMT training programs, two Paramedic training programs and 13 continuing education provider programs authorized by the Ventura County EMS Agency. These programs are responsible for the initial and ongoing training for individuals entering into the EMS field for the first time, or for veteran prehospital personnel that are in need of continuing education to satisfy requirements for their specific cert/licensure level. Through the education CQI committee, various projects and initiatives are discussed and implemented for the purposes of improving the quality of education that is delivered.

The Ventura County EMS Agency has established mandatory training requirements that are described in VCEMS Policy 334. Inclusive in this policy are requirements to maintain training in cardiac arrest management, advanced cardiac life support, pediatric life support training, MCI training. Additionally, Paramedic skills refresher training is required once per licensure year. This scenario-based training includes low-frequency higher risk procedures and affords prehospital personnel the opportunity to train in a low-stress team environment.

Agencies utilize a variety of methods to ensure clinical competency are maintained continuously. Methods of evaluation may include utilization of online education, psychomotor skills evaluations, individual competency sessions with Field Training Officers (FTOs) and specialty training with agency Medical Directors. Through the clinical quality committee, various metrics can be evaluated to identify any opportunities that might exist in the EMS system with regard to ongoing clinical competency and training.

VIII. Transportation and Facilities

In addition to the minimum mandatory equipment defined in EMS policy 504 – BLS and ALS Equipment and Supplies, agencies authorized to provide ground ambulance services in the County of Ventura are subject to inspections and a permitting process to ensure minimum expectations are met and maintained. These standards ensure that vehicles operating in the County of Ventura meet mileage or age requirements, are well maintained, and are equipped in accordance with established policies.

Receiving facilities, base hospitals, and specialty care centers are designated by the Ventura County EMS Agency, and standards related to these facilities are outlined in the following VCEMS policies:

0410: ALS Base Hospital Standards

0420: Receiving Hospitals Criteria

0430: STEMI Receiving Center Standards

0450: Acute Stroke Center (ASC) Standards

1401: Trauma Center Designation

1406: Trauma Center Standards

IX. Public Education and Prevention

EMS System stakeholders, in addition to specialty care centers are encouraged, and in some cases, required to engage in public education and prevention programs. Examples of these programs include hands-only CPR, Stop the Bleed, and an annual drowning prevention / water safety initiative. In all cases, these programs are intended to be collaborative and multi-disciplinary. Stop the Bleed, for example, offers a layered approach in which the trauma centers in Ventura County focus on community-based education utilizing the curriculum developed by the American College of Surgeons. Additional training is offered to various groups around the county in the form of a locally developed (Ventura County EMS, Ventura County Fire and Ventura County Sheriff's Office) stop the bleed curriculum that incorporates situational awareness training with bleeding control / trauma care education.

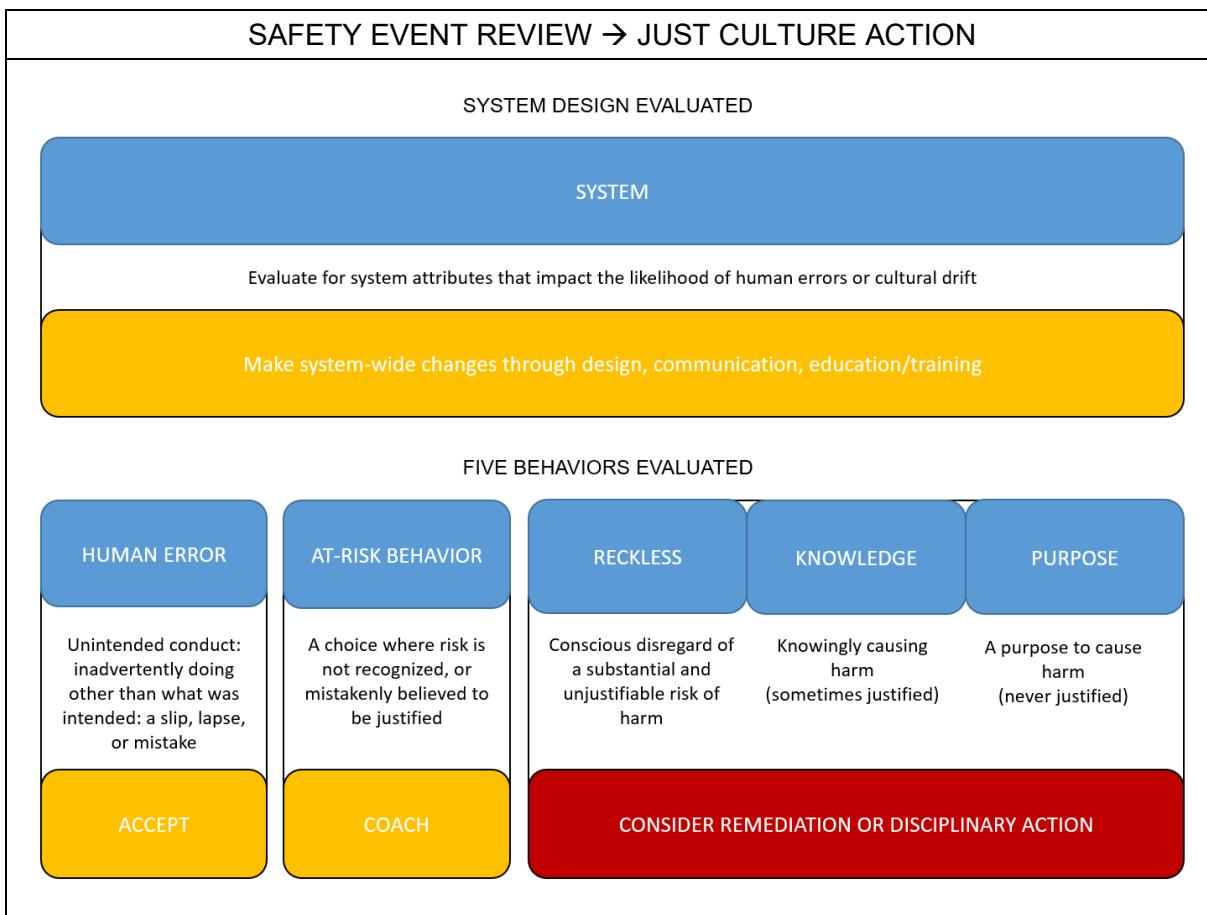
The drowning prevention and water safety initiative takes place annually (Springtime) and involves representatives from local first responder agencies, hospitals, non-profit organizations and local swim schools. The goal of this program is primarily to distribute educational material to families with the hopes of limiting drownings and near-drownings, and to promote safe and healthy behaviors ahead of the Summer months.

Metrics related to traumatic injuries, cardiac arrest, and drownings are monitored for the purpose of trending and situational awareness / monitoring.

X. Safety Event Reporting Process

A safety event is defined as any circumstance, error, or action, which causes an actual or potential risk to the safety of provider(s), patient(s), or the community. Reportable safety events include, but are not limited to, incorrect medication administration, deviation from policies and/or procedures, vehicle accidents involving EMS personnel, and events which may delay the response to an EMS incident. Reportable safety events are not limited to incidents that have already occurred and may include any observations of potential safety risks or other concerns. The intent of the review is to evaluate system design and individual behaviors with a focus on learning and improving safety and is not intended to be punitive in nature.

Safety event reviews will be conducted in accordance with VCEMS Policy 121. These reviews are conducted in accordance with BETA Healthcare's Just Culture algorithm, and reviews will be in collaboration with involved agencies, hospitals, etc.



XI. Plan Updates

This plan will be reviewed and updated annually, with major reviews and revisions conducted at least once per five years. Updates for each CQI committee's guidance policies will be conducted in accordance with established policy review cycles outlined on those documents. Reviews will be collaborative in nature and will involve a significant cross-section of committee membership.

Prehospital provider agencies will be required to provide annual updates on their respective CQI plans and projects, and that information will inform the broader system-wide plan update prior to submission to the California EMS Authority. Annual updates provided to CalEMSA, will include:

- QI Program Summary
- Changes to the QI Plan/Program in the previous twelve months
- Summary/Overview of the data collection process
- Audit of Critical Skills
- Summary/Overview of performance improvement activities
- Summary of changes to relevant policies that impact the broader QI program in a meaningful/significant way.
- Goals for the next twelve months