



EMS PATIENT CARE DATA SYSTEM OVERVIEW

Effective: January 1, 2020
Replaces: New
Review: January 1, 2023

I. Purpose

The purpose of this policy is to provide an overview of the Santa Clara County EMS Data System, authorization for use, and the submittal of data from peripheral components and/or external data systems, while ensuring compliance to the applicable Federal, State and County standards and requirements, which include but are not limited to:

California Health and Safety Code, Division 2.5, Chapter 4, Article 1, Section 1797.227
California EMS Information System (CEMSIS)
National EMS Information System (NEMSIS)
California Code of Regulations, Title 22, Division 9, Chapter 2, §100057.2
California Code of Regulations, Title 22, Division 9, Chapter 2, §100062(d)
California Code of Regulations, Title 22, Division 9, Chapter 4, §100170(a)(6)
California Code of Regulations, Title 22, Division 9, Chapter 4, §100171(e)
California Code of Regulations, Title 22, Division 9, Chapter 12, §100402(a)(1)(C)
California Code of Regulations, Title 22, Division 9, Chapter 12, §100404(a)(1)(C)

II. Definitions

- A. **National EMS Information System (NEMSIS):** The national data standard for emergency medical services as defined by the National Highway Traffic and Safety Administration (NHTSA) and the NEMSIS Technical Assistance Center (TAC).
- B. **California EMS Information System (CEMSIS):** The California data standard for emergency medical services as defined by the California Emergency Medical Services Authority (EMSA). The data standard includes the NEMSIS standards and state defined data elements.
- C. **Santa Clara County EMS Patient Care Data System:** The “EMS Data System” is the sum of all patient care data collection software and hardware, data transmittal and storage software and hardware, and data analysis tools provided, to varying degrees, by the EMS Agency to allied organizations within the Santa Clara County EMS System.

III. The EMS Data System Overview

- A. The EMS Data System is comprised of multiple interoperable components:
 - 1. **Image Trend Elite Online** – The main component of the EMS Data System which accepts patient care data from each of the provider’s patient care documentation solution(s) through a data exchange and makes it accessible to authorized users. This solution is also utilized by authorized users to access and view ePCR records provided by their agency.



2. **Image Trend Elite Field** – The County provided electronic patient care record (ePCR) solution provides a means to document patient care data from the scene of the call, where it immediately becomes accessible to authorized users.
3. **Hospital Hub** – Is a web based accessible software platform that provides access for authorized hospital staff to retrieve patient care reports (ePCR) of patients that have been transported to their approved acute care facilities from the 911 EMS System.
4. **Report Writer** – Within the Image Trend Elite Online this imbedded data analytic solution that may be utilized by authorized users for quality assurance, quality improvement tasks, simple or complex data reporting.
5. **License Management** – An electronic web-based solution providing certification and accreditation of EMS personnel, EMS vehicles, and EMS programs. Personnel records created allow authorized users to access Image Trend Elite Online and Elite Field. Vehicle records are synchronized with data elements in Image Trend Elite Field.
6. **Patient Registry** – A specialty center database (usually for trauma, stroke, or STEMI) that works in conjunction with Image Trend Elite allowing ePCR data to link the prehospital ePCR to the hospital EHR, thus allowing for analytics to be performed utilizing data from both the field care as well as in hospital care.

IV. Data Ownership

- A. All data submitted to the EMS Data System shall remain the property of and the responsibility of the submitting EMS provider agency.
- B. The County shall redirect all information requests, including subpoenas, to the applicable EMS provider agency upon receiving such a request.
- C. It shall remain the responsibility of each submitting EMS provider agency to ensure that all data submitted is accurate, precise, and of high quality.
- D. Each EMS provider agency submitting data to the EMS Data System shall be granted access to their own data.

V. EMS Data System Administration

- A. The Santa Clara County EMS Agency will provide a full-time System Administrator and at least one alternate.
 1. System Administrators will manage the daily operations and upkeep of the system at the county level, including:
 - a. Agency Administrator accounts
 - b. Data element administration
 - c. State/Federal data compliance
 - d. System-based settings management
 - e. System technical support management
 - f. System vendor contract administration



- B. Each EMS System provider agency shall maintain one Agency Administrator and up to two alternates (depending on the size of the agency) to manage the daily operations and upkeep of their own agency within the EMS Data System.
 - 1. The Agency Administrator will manage:
 - a. Agency-based settings
 - b. Agency-based user accounts
 - c. Agency technical support
 - d. CAD integration
 - e. Internet service provider maintenance
- C. Approved Acute Care Facilities (Hospitals and Specialty Centers) shall maintain one Facility Administrator and up to two alternates (depending on size of the facility) to manage the daily operations and upkeep of their Hospital Dashboard and Patient Registry systems.
 - 1. The Facility Administrator will manage:
 - a. Facility-based settings
 - b. Facility-based user accounts
 - c. Internet service provider maintenance

VI. Authorized use of the EMS Data System

- A. All Santa Clara County 911 EMS System first responder and emergency ambulance provider agencies shall utilize the Image Trend Elite Field as their primary ePCR solution. The following exemptions apply:
 - 1. Palo Alto Fire Department:
 - a. May utilize an ePCR solution of their choice, so long as it is certified to be compliant with the most current NEMSIS and CEMSIS standards; and is configured to meet all County specific standards.
 - b. Shall submit incident data to Image Trend Elite for every patient care report in near real time upon completion by the EMS provider.
 - 2. Permitted non-911 private ambulance providers:
 - a. May utilize an ePCR solution of their choice, so long as it is certified to be compliant with the most current NEMSIS and CEMSIS standards; and is configured to meet all County specific standards.
 - b. Shall submit incident data to Image trend Elite for every patient care report no less than 24 hours after the completion by the EMS provider.
- B. All permitted EMS provider agencies submitting ePCR data to the EMS Data System, shall utilize Image Trend Elite while performing Santa Clara County specific Quality Assurance / Quality Improvement data analysis and reporting.



- C. All approved acute care receiving facilities shall utilize the Hospital Hub to access ePCR data for a patient that has been transported to their facility from the 911 EMS System.
- D. The Santa Clara County Medical Examiner may utilize the Hospital Hub to access ePCR data for patients that were not transported and pronounced in the field by the Santa Clara County 911 EMS System.
- E. Upon written request from the Santa Clara County Medical Examiner, the EMS Agency shall provide any ePCR of which is under the direct jurisdictional or investigational purview of the Medical Examiner's office.
- F. All requests for access to the EMS Data System shall be approved in advance by the Santa Clara County EMS Agency prior to granting or delivery access.

VII. 911 Users of Image Trend Elite Field

- A. Users of Image Trend Elite Field shall utilize the functions of "In the Field Data Transfer". This transfer allows the data collected by one service to be transferred to another service, thus providing a combined chronologically integrated chart called an "Unified PCR".
- B. The Unified PCR shall be made available to the Hospital Hub upon selection of the destination name by the transport unit and when the chart is posted to the EMS Data System.

VIII. Data Security and Privacy

- A. Each person authorized to access any portion of the EMS Data System shall maintain a unique password which may not be shared with any other person.
- B. Each agency or organization which collects, utilizes, or transmits patient care data in any fashion shall comply with all local, State, and Federal laws pertaining to such activities, including but not limited to the Health Information Portability and Accountability Act (HIPAA) and the California Confidentiality Medical Information Act (CMIA). Each provider agency shall implement electronic security measures to protect the data from unauthorized access, including but not limited to the password protection and encryption of all electronic devices used to interface with EMS Data System.
- C. All employees accessing any device connected to the EMS Data System shall receive initial and annual training in data security and protection of patient health information.
- D. Each agency or organization utilizing any component of the County Data System shall immediately report any actual or suspected breach of data security or integrity by submitting a System Performance Variance Report immediately following the discovery. A breach includes but is not limited to:
 - 1. Suspected or actual unauthorized access of data systems.
 - 2. Theft or loss of electronic or non-electronic media containing information that could lead to unauthorized access of EMS Data Systems.



County of Santa Clara
Emergency Medical Services System

POLICY # 503

3. Theft or loss of electronic or non-electronic media containing protected health information as defined by HIPAA and/or CMIA.
4. Any other suspicious or unusual activity discovered on, in, or around hardware able to access the EMS Data System.