I. PURPOSE

To establish requirements for the collection and submission of data to the ICEMA Data System by EMS providers using their own electronic health record (EHR) system as required by State regulations and ICEMA policy.

II. POLICY

All EMS providers shall utilize an EHR system that is compliant with CEMSIS and NEMSIS and contain any additional data elements required by ICEMA. EMS providers must submit data to the ICEMA Data System in real-time in order to maintain compliance with medical control to ensure the continuity of patient care within the ICEMA region.

The ICEMA Data System is the primary system for the collection and submission of EMS data in the ICEMA region and is the only authorized data system for the submission of data for reporting to the California Emergency Medical System (CEMSIS) and National Emergency Medical Information System (NEMSIS).

III. RESPONSIBILITIES OF EMS PROVIDERS

• EMS providers shall utilize an EHR system that:
  
  ➢ Exports data to the ICEMA Data System in a format that is compliant with the current version of CEMSIS/NEMSIS standards.
  
  ➢ Includes all additional data elements required by ICEMA, including field values and information required to identify EMS field personnel (name, identification number, etc.).
  
  ➢ Includes all attachments that documents patient care, such as echocardiograms (ECGs), capnography waveforms and PDF copies of the electronic patient care report (ePCR).

• EMS providers using their own EHR system and their vendor(s) must maintain a system that:
  
  ➢ Contain provisions for the electronic transfer of the patient care between EMS providers and hospitals at the time of transfer of care that:
    • Ensures that the process that is created for the transfer of patient care between EMS providers can be used by the ICEMA Data System, and
Ensures that the process that is created for the transfer of patient care is functionally and operationally consistent with the transfer of care procedures in the ICEMA Data System.

Ensures all required data is submitted to the ICEMA Data System concurrently with transfer of patient care to a subsequent EMS provider or hospital.

Ensures all required data is submitted to the ICEMA Data System when the record is completed and/or locked.

Resubmits all records, if opened and changed for any reason, at the time of the next scheduled submission of data.

EMS providers using their own EHR system must:

- Transmit all data elements in the Demographic Dataset as required in the NEMSIS V3 Requisite National Elements and ensure that the Demographic Dataset is updated on the ICEMA Data System with changes in the EMS provider’s submitted data.
- Notify ICEMA of any system outages in excess of 60 minutes by e-mailing the ICEMA Duty Officer.
- Use an EHR system that exports data to the ICEMA Data System in real-time and in a format that is compliant with the current versions of the CEMSIS and NEMSIS standards that:
  - Includes all supplementary documentation and field assessment detail, such as capnography waveforms and ECGs, in a format approved by ICEMA.
  - Include EMS provider refusal of care documentation.
  - Include all signatures required by ICEMA.
- Use the same version of CEMSIS and NEMSIS used by ICEMA.
- Coordinate any updates to the current versions of CEMSIS and NEMSIS when implemented by ICEMA to coincide with the upgrade implementation date.
- Include validation rules that ensure that all required data elements are captured in the ePCR.
- Ensure that their EMS field personnel only document assessments, procedures and medications performed by EMS field personnel within their own organization.
- Ensure that their EMS field personnel do not document assessments, procedures and medications performed by EMS field personnel from another EMS provider.
- Use an EHR system that includes all ICEMA approved data elements and field values.
- Allow the California Hospital Hub to access their EHR system.

EMS providers using their own EHR system must submit a screen shot of all proposed input forms to ICEMA for approval at least 90 days prior to implementation. All changes to an approved input form(s), other than those
requested by ICEMA as noted below, must be submitted at least 10 days prior to implementation for approval.

- Screen shots must include all field titles and corresponding NEMSIS data element numbers/names and field values.
- All data elements or field values with defaulted, auto-computed or auto-filled values must be described and highlighted.

- EMS providers using their own EHR system must provide ICEMA with a detailed list of all:
  - Data elements and field values currently active in the EMS provider’s EHR system.
    - Documentation must show relationship between data elements and field values in the EMS provider’s EHR system with those on the ICEMA Data System.
  - Validation rules implemented on the EMS provider’s EHR system.

- EMS providers using their own EHR system must submit and demonstrate a process for the electronic transfer of patient care between sending and receiving EMS field personnel at the time of transfer of patient care to ICEMA for approval 90 days prior to implementation that includes:
  - A process that creates a unified record between the sending and receiving EMS providers.
  - The ability to upload an ePCR for transfer to the other responding EMS providers that:
    - Is available for use by EMS Providers using the ICEMA Data System at the time of transfer of patient care, and
    - Allows EMS field personnel utilizing the ICEMA Data System to use the standard user interface (Transfer-Upload/Download functions), and
    - Is functionally and operationally consistent with the transfer of care procedures in the ICEMA Data System.

- EMS providers using their own EHR system must submit a printed copy of the ePCR (PDF) to ICEMA for approval at least 90 days prior to implementation. This may be the same form used by ICEMA but generated from the EMS provider’s EHR system. ICEMA will provide a template upon request. The printed form must include:
  - All elements included on the current ICEMA ePCR output form.
    - Indicate all fields on EMS provider’s printed form that are equal to those on the ICEMA form.
  - All supplementary documentation and field assessment detail, such as capnography waveforms and ECGs.
EMS providers using their own EHR system and their vendor(s) must demonstrate that all ICEMA required data elements and field values are included in the datasets submitted to the ICEMA Data System that:

- Ensures that data element numbers match those in the ICEMA Data System.
- Provides a detailed report from the EMS provider’s EHR system for all data elements and values showing element descriptions/IDs, and provide a detailed document demonstrating the process used to verify values with those in the ICEMA Data System.
- Demonstrates the accuracy and validity of all submitted data and demonstrates real-time integration with the ICEMA Data System.
- Ensures that all ICEMA required data elements and field values are included in the EMS provider’s input/output form.

EMS providers using their own EHR system must make any ICEMA requested changes or additions to their data sets and input forms and maintain the ability to integrate real-time data with the ICEMA Data System within the time periods specified below:

- Make any changes or additions in priority data elements and/or values within 24 hours of notification (weekdays only). Priority items are defined as those that are necessary to comply with State regulations or medical control.
- Make any changes or additions of non-priority data elements and/or values within 5 days of notification.
- Ensure that all changes in either priority and non-priority data sets are implemented in the EMS provider’s input/output forms at the time of the change and provide a copy of the EMS provider’s revised input/output forms to ICEMA.

EMS providers using their own EHR system and their vendor(s) must ensure that the EMS provider’s EHR system is compatible with the ICEMA Data System at their own cost, and:

- Develop and implement processes that demonstrate and test compatibility between their EHR system and the ICEMA Data System.
- Submit a document that demonstrates the mapping of all required data elements from the EMS provider’s data elements to the ICEMA data elements to ICEMA for approval at least 90 days prior to implementation of the EMS provider’s EHR system (mapping that is equal between systems must be noted).

EMS providers using their own EHR system and their vendor(s) are responsible for ensuring that all data submitted to the State or national data
Requirements for Collection and Submission of EMS Data

Repositories, via the ICEMA Data System, meet minimum validation rules for inclusion.

- EMS providers whose data is not accepted by the State or national data repositories will be excluded from further data submissions until the EMS provider can demonstrate that it is compliant with CEMSIS and/or NEMSIS standards or as required by State and/or federal regulations.

- Data submitted to the ICEMA Data System by EMS providers using their own EHR system may not be used or included:
  - In ICEMA EMS Health Information Exchange or other projects designed to facilitate the exchange of health information.
  - On the California Hospital Hub unless provisions are made for direct access to the EMS provider’s EHR system by the California Hospital Hub.
  - As notification to the County Coroner through the California Hospital Hub unless provisions are made for direct access to the EMS provider’s EHR system by the California Hospital Hub.

- EMS providers using their own EHR system shall reimburse ICEMA or other associated San Bernardino County departments for:
  - All costs associated with the review of EMS provider’s data mapping schemas necessary for integration with the ICEMA Data System.
  - All costs necessary to monitor or verify the demonstration, testing, and/or validation of the integration of data elements and field values into the ICEMA Data System.
  - All costs for processes necessary to ensure continuity of patient care, including but not limited to:
    - Transfer of care between EMS providers and hospitals in real-time.
    - Integration of documents related to the inclusion criteria for STEMI, Stroke, and/or Trauma patients.
    - Integration of patient care information in the ICEMA specialty care registries.
    - Software enhancements to the ICEMA Data System, related to the EMS provider’s EHR system, that are required to maintain current functionality for users of the ICEMA Data System.
  - All costs necessary for the processing of data or the submission of data required for State or federal data reporting.
  - All costs necessary to demonstrate, test, and or ensure that the EMS Provider’s EHR system, can be integrated with the ICEMA Data System.
IV. RESPONSIBILITIES OF DISPATCH CENTERS USING COMPUTER AIDED DISPATCH (CAD)

- When CAD data is used to populate the ePCR, all dispatch centers that dispatch EMS providers using their own EHR system must submit CAD data to ICEMA in an electronic format that will:
  
  - Include all data elements as described in the current NEMSIS CAD Data Standard and submitted in a format that is compatible with the ICEMA Data System.
  - Be submitted concurrently with the medical aid request or the initiation of the response.
  - Include required data for all emergency and non-emergency medical aid requests.