HEALTH INFORMATION EXCHANGE IN EMS GRANT ADVISORY COMMITTEE

Funded by Cooperative Agreement Grant #90IX0006/01-00
U.S. Department of Health and Human Services,
Office of the National Coordinator for Health Information Technology
Welcome and Phone Introductions  
Dan Smiley

EMSA Report  
Dan Smiley

ONC Grant Status Update  
Jim Switzgable

CAHIE Report  
Dr. Robert Cothren

Sub-Committee Reports
• Consumable Data and Transport  
  David Minch & Dr. Jay Goldman
• Data Governance and Contracts  
  Andrea Leeb and Scott Christman

HIE Summit  
Adam Davis

Closing Comments

Questions
INTRODUCTIONS

DAN SMILEY
PULSE +EMS PROJECT DIRECTOR
EMSA REPORT

DAN SMILEY
PULSE +EMS PROJECT DIRECTOR

- Staffing changes
- New Statutes related to EMS Data Systems
- +EMS Grant Applications expected Jan 28 at 5 pm
- PULSE Grant expected soon
- Next Advisory Committee Mtg on April 18
- HIE in EMS Summit
A local EMS agency may give mandate that a provider use a specific EHR system, but the EMS provider must use a system that can be "integrated" with the LEAMS system. Therefore, the local EMS agency may require the EMS provider to demonstrate, test, and ensure that the proposed system is compatible with the local EMS agency system at the provider's cost without it being reliance on mapping. The specific system mandate prohibition does not affect agreements in place by January 1, 2016.

Compliance with CEMIS is determined by meeting any additional requirements by EMSA or California specific criteria that expand or limit the responses for any NEMIS elements. These will be specified in a subsequent memo or guidance anticipated to be released by April 1, 2016.

NEMIS Version 3.4

All EMS systems must have a NEMIS 3.4 compliant system in operation no later than midnight on December 31, 2016. California will use the NEMIS Version 3.4 as our base data standard effective January 1, 2017. This will allow California to be consistent with the most current version of the national data standard and with AB 1129.

The National Highway Traffic Safety Administration (NHTSA) and University of Utah have put a final sunset date on the use of NEMIS Version 2.5. The submission of NEMIS Version 2.5 will concludes at midnight on December 31, 2016 with no further time extensions allowed.

Implementation of AB 503 -- Health and Safety Code 1797.122

This bill authorizes a health facility to share patient-identifiable information with a defined EMS provider, local EMS agency, and EMSA. This clarifies the California health information privacy law to be consistent with HIPAA, which already allows sharing of treatment, payment, and operations information between covered entities, and also specifies that local EMS agencies and EMSA may receive this information for quality improvement. The intent is to share outcome information on patients to support quality evaluation and performance improvement and the use of health information exchange. This will also enhance the annual EMS Core Measure recording.

As allowed in the bill, EMSA will set the "minimum standards for the implementation of data collection, including system operation, patient outcome, and performance quality improvement." These standards will be incorporated into revisions of Chapter 12.
ONC GRANT STATUS UPDATE

JIM SWITZGABLE

- + EMS Procurement
- PULSE Procurement
- Interoperability Broker Services Procurement
- HIO Procurement
- Disaster Healthcare Volunteers
PULSE +EMS is not a State IT Project

• It will be locally operated using existing health information exchange programs.
• It will allow for Peer-to-Peer connection, consistent with ONC grant goals.
• EMSA will only define functional endpoints.
• EMSA will not define specific software development requirements except to ensure connectivity with hospital-based EHRs and the Disaster HealthCare Volunteers system.
• CAHIE PULSE Workgroup
PULSE

- Multiple data sources
- Interoperability broker
- SEARCH function
- Federated directory services
- Enabled by the California Trusted Exchange Network (CTEN) – Query Member
- Integrating the Healthcare Enterprise (IHE) standards
Access to web portal with CCD information on patients being treated in an alternate care site, shelter or field hospital

Access to EHRs on relocated patients from within existing hospital EHR system

Statewide

Intended for use during disaster response
PULSE High Level Gantt Flow

EMSA Staff
- Draft SOW
- Fine Tune Scoring Criteria
- Update CalDURSA, as needed
- CAHIE Convene the PULSE Workgroup
- Proposal Responses
- Local PULSE contract

Technical Advisor
- Final Review and Approval
- Local PULSE SOW Feedback to CAHIE
- Fine Tune Scoring Criteria

Local PULSE Interoperability

DHV Interoperability Broker Services

HIOs

Year 2016
- 1/1
- 2/1
- 3/1
- 4/1
- 5/1

Event Timeline
- Advisory Committee
- HIE Summit

Tasks
- Complete DHV Renewal with Appendix for PULSE Portal Support (SOW + Exclusivity Argument + DGS Approval)
- ONC Review
- DGS Review
SUB-COMMITTEE REPORTS

DAVID MINCH AND DR. JAY GOLDMAN

ANDREA LEEB AND SCOTT CHRISTMAN

- Consumable Data and Transport
- Data Governance and Contracts
HIE IN EMS SUMMIT

ADAM DAVIS

Details

April 18 Advisory Committee Meeting 10am – 3 pm

Lunch Included

Grant will Pay for Advisory Committee Member Travel Expenses for Meeting and Summit

Speakers – Dr. Karen DeSalvo Invited for Keynote
Save the Date
April 19-20, 2016

3rd California HIE in EMS Summit
Hyatt Regency Garden Grove
www.HIEinEMSinCA.com

Hosted by the California Emergency Medical Services Authority
Funded by the Office of the National Coordinator for Health Information Technology,
U.S. Department of Health and Human Services Cooperative Agreement Grant #90IX0006/01-00
Other items?
Questions?

And maybe answers . . .
Contact Information

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Ryan.Stanfield@emsa.ca.gov
(916) 431-3730

Website: www.emsa.ca.gov/HIE
Blog: hieinemspsinca.wordpress.com
CALIFORNIA PULSE+EMS INITIATIVE TO ADVANCE HIE IN EMS

Funded by Cooperative Agreement Grant #90IX0006/01-00
U.S. Department of Health and Human Services,
Office of the National Coordinator for Health Information Technology
ONC GRANT STATUS UPDATE

Dan Smiley
Project Director

Jim Switzgable
Project Manager

Ryan Stanfield
Project Assistant

Eventually everything connects – people, ideas, objects

~Charles Eames
Contractual Services

- 1 Contract for Technical Advisor services (CAHIE)
- 2+ Contracts with LEMSA coalitions (local – SAFR)
- Minimum of 4 HIO Contracts for PULSE Interoperability and Exchange
- 1 Contract for DHV Interface (SSO, SAML2)
- 1 Contract for Interoperability Broker Services

*All contracts will follow federal and state procurement policies and requirements*
# +EMS Procurement: Key Action Dates

<table>
<thead>
<tr>
<th>Key Actions</th>
<th>Dates</th>
<th>Time</th>
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<tbody>
<tr>
<td>Application Released to Prospective Applicants</td>
<td>December 11, 2015</td>
<td>5:00 p.m.</td>
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<tr>
<td>Bidders’ Conference</td>
<td>December 18, 2015</td>
<td>10:00 a.m.</td>
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<td>Written Questions Submittal Deadline</td>
<td>December 21, 2015</td>
<td>3:00 p.m.</td>
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<td>Final Date for Proposal Submittal</td>
<td>January 28, 2016</td>
<td>5:00 p.m.</td>
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<td>Notice of Intent to Award</td>
<td>February 9, 2016</td>
<td>TBD</td>
</tr>
<tr>
<td>Protest Period</td>
<td>February 10 – February 16, 2016</td>
<td>NA</td>
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<tr>
<td>Proposal Award Date</td>
<td>February 17, 2016</td>
<td>NA</td>
</tr>
<tr>
<td>Anticipated Contract Date</td>
<td>March 1, 2016</td>
<td>NA</td>
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## PULSE Procurement: Key Action Dates

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<thead>
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<tr>
<td>RFO Available to Prospective Offerors</td>
<td>February 1, 2016</td>
<td>10:00 a.m.</td>
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<tr>
<td>Written Questions Submittal Deadline</td>
<td>February 12, 2016</td>
<td>2:00 p.m.</td>
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<td>Response to Written Questions</td>
<td>February 19, 2016</td>
<td>2:00 p.m.</td>
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<tr>
<td>Final Date for Offer Submittal</td>
<td>February 26, 2016</td>
<td>2:00 p.m.</td>
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<td>Evaluation Process</td>
<td>February 26, 2016 – March 8, 2016</td>
<td>2:00 p.m.</td>
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<td>Notice of Intent to Award</td>
<td>March 8, 2016</td>
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<td>March 9 – March 15, 2016</td>
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<tr>
<td>Proposal Award Date</td>
<td>March 16, 2016</td>
<td>NA</td>
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<tr>
<td>Anticipated Contract Date</td>
<td>April 1, 2016</td>
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## HIO Procurement: Key Action Dates

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<td>Application Released to Prospective Applicants</td>
<td>July 1, 2016</td>
<td>10:00 a.m.</td>
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<tr>
<td>Written Questions Submittal Deadline</td>
<td>July 15, 2016</td>
<td>2:00 p.m.</td>
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<tr>
<td>Response to Written Questions</td>
<td>July 22, 2016</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td>Final Date for Offer Submittal</td>
<td>August 1, 2016</td>
<td>2:00 p.m.</td>
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<tr>
<td>Evaluation Process</td>
<td>August 1, 2016 – September 15, 2016</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td>Notice of Intent to Award</td>
<td>September 15, 2016</td>
<td>TBD</td>
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<tr>
<td>Protest Period</td>
<td>September 16 – September 22, 2016</td>
<td>NA</td>
</tr>
<tr>
<td>Proposal Award Date</td>
<td>September 23, 2016</td>
<td>NA</td>
</tr>
<tr>
<td>Anticipated Contract Date</td>
<td>October 1, 2016</td>
<td>NA</td>
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* Subject to modification
# Interop Broker Services Procurement: Key Action Dates

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<tr>
<th>Key Actions</th>
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<th>Time</th>
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<td>Application Released to Prospective Applicants</td>
<td>August 5, 2016</td>
<td>10:00 a.m.</td>
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<tr>
<td>Written Questions Submittal Deadline</td>
<td>August 17, 2016</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td>Response To Written Questions</td>
<td>August 24, 2016</td>
<td>2:00 p.m.</td>
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<td>Final Date for Proposal Submittal</td>
<td>September 2, 2016</td>
<td>2:00 p.m.</td>
</tr>
<tr>
<td>Notice of Intent to Award</td>
<td>September 15, 2016</td>
<td>TBD</td>
</tr>
<tr>
<td>Protest Period</td>
<td>September 16 – September 23, 2016</td>
<td>NA</td>
</tr>
<tr>
<td>Proposal Award Date</td>
<td>September 24, 2016</td>
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</tr>
<tr>
<td>Anticipated Contract Date</td>
<td>October 1, 2016</td>
<td>NA</td>
</tr>
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</table>

* Subject to modification
PULSE High Level Gantt Flow (2)

5/1

6/1

7/1

8/1

9/1

10/1

11/1

12/1

HIO SOW feedback to CAHIE + Create HIO RFP
Fine Tune Scoring Criteria

Final Review and Approval

Review Proposals Select at least 4 HIOs
ONC Review
DGS Review
HIO (4) Contract Approval

Final Review and Approval

Fine Tune Scoring Criteria

Interop Broker SOW development (CMAS)

Final Review and Approval

Provision review and selection
ONC Review
Interop Broker Contract Approval

Interop Broker SOW development
Confirms HIO signed CCHPSA/ MMRS

PULSE Requirements & Design Documentation (including meetings with Local PULSE Interoperability contractor) (incorporate feedback from PULSE Workgroup)
PULSE User Acceptance Testing Criteria

Interoperability Engine Development (also includes support system – documentation, training materials)

Transition Interoperability Broker into running PULSE. Begin the transition of all users using PULSE

Respond with Proposal

Contract Approval

Interoperability Broker transition in to Operations

Intermedia / Contract Approval

Web Portal SSO Development

DHV User Acceptance Testing

Adoption Milestone

Respond with Proposal

HIO (4) Contract Approval

HIO PULSE Interface Development

California Emergency Medical Services Authority

PULSE+EMS Project to Advance HIE in EMS
Contact Information

Dan.Smiley@emsa.ca.gov
Jim.Switzgable@emsa.ca.gov
Ryan.Stanfield@emsa.ca.gov
(916) 431-3730

Website: www.emsa.ca.gov/HIE
Blog: hieinemsinca.wordpress.com
HIE in EMS Advisory Committee
CAHIE Update

Robert Cothren, PhD, Executive Director
January 26, 2016
What we’ve done...

- Established a working definition of HIO and HIE for the PULSE +EMS project
- Identified the activities for +EMS participants, and how they lead to achieving ONC milestones
- Worked with Patient Identification Workgroup to expand its charter to address patient matching requirements for EMS
- Developed the timeline for PULSE development, deployment, and the PULSE drill
- Reviewed and performed preliminary analysis of the CalDURSA to issues related to PULSE
- Convened the CalDURSA Workgroup to finalize changes
- Reviewed the architecture and standards for PULSE in the Ai Report
- Identified the activities for the PULSE system developer
- Convened the PULSE Workgroup to make recommendations on architecture and standards for PULSE
- Coordinated with CalOHII project to revise the MMPA to provide PULSE +EMS requirements
What we will be doing in the next quarter...

- Finalize changes to the CalDURSA to support PULSE, if necessary
- Provide input into the MMPA revision
- Begin to develop recommendations for patient matching for +EMS
- Develop recommendations for PULSE architecture and standards
- Identify the activities for HIOs interested in participating in PULSE
For more information...

- Patient Identification: http://wiki.ca-hie.org/Patient+Identification
- CalDURSA: http://wiki.ca-hie.org/Data+Sharing+PULSE
- PULSE architecture and standards: http://wiki.ca-hie.org/PULSE
Consumable Data Content and Transport Workgroup

Co-Chairs:
Dr. Jay Goldman, MD, FACEP, Medical Director of EMS and Ambulance, Kaiser Permanente NCAL
David Minch, Executive Director, HealthShare Bay Area
Agenda

I. Call to Order
II. Introduction of Participants
III. Review of Workgroup Mission and Deliverables
IV. Introduction and Brief Discussion of Strawman Deliverable (a place to start from)
V. Suggestions and discussion of a “divide and conquer” approach to the deliverables
VI. Suggested timeline
VII. Scheduling of a Time Certain each week for workgroup / sub-workgroup meetings
Workgroup Mission Statement

The mission of the Consumable Data Content and Transport Workgroup is to identify the appropriate transmittable and display / consumable data content that coincides with California Emergency Medical Services Authority SAFR Model for EMS participation in Health Information Exchange and The Office of the National Coordinator priorities, requirements, and Interoperability Roadmap. HL7 and NEMSIS 3 standards will be utilized when possible.
Project Use Cases (SAFR)

• **Search**
  - Identify the Recommended Elements from the ePCRB that will result in the patient’s unique identification when searched
  - Identify Recommended Elements that are returned from an EHR in a query for patient data which are useful to the paramedics in treatment of the patient, including such concepts as problem list, medications, allergies, and POLST decisions.

• **Alert**
  - Identify the Recommended Elements from the ePCRB that will transmit the patient’s health status to a receiving hospital emergency department’s dashboard prior to the patient’s arrival.
Project Use Cases (SAFR)

• **File**
  • Identify the Recommended Elements from the ePCR that will provide value to treatment of the patient or evaluation of treatment provided to a patient and which are appropriate to be stored in association with a patient’s EHR.

• **Reconcile**
  • Recommended Elements from the EHR will be identified that will provide value to the EMS provider and EMS agencies in evaluating quality of care provided and that should be transmitted from the EHR at the treating facility back to the EMS transport service for consumption into that patient’s encounter record in the ePCR.
## Constructing the Deliverables

<table>
<thead>
<tr>
<th>Content Area:</th>
<th>Search</th>
<th>Alert</th>
<th>File</th>
<th>Reconcile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work Product:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identify Data Set to be Transported</strong></td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
</tr>
<tr>
<td></td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
</tr>
<tr>
<td><strong>Identify Data to be Displayed</strong></td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
</tr>
<tr>
<td></td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
</tr>
<tr>
<td><strong>Identify Data to be Discretely Stored</strong></td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
</tr>
<tr>
<td></td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
</tr>
<tr>
<td><strong>Identify Appropriate Protocols and Transport(s)</strong></td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
<td>Query:</td>
</tr>
<tr>
<td></td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
<td>Result:</td>
</tr>
</tbody>
</table>
Workgroup Strawman Deliverable

- Distributed with the agenda and presentation
- Compiled from materials developed through meetings and discussions prior to the actual launch of the +EMS project
- Contains suggested material for each cell for the “SFR” functions, but not for the “A” function which needs a clear use case before development
- Based on Use Cases described in the +EMS Functionality SAFR Chart with use cases.doc document (presentation at the first Advisory Committee Meeting) and copied into the beginning of the strawman deliverables document
Workgroup Strawman Deliverable (cont’d)

• Data rows broken into the following subsets:
  • Dataset Transported
    • Query
    • Response / Result
  • Dataset Displayed
  • Dataset Discretely Stored

• Technology rows broken into the following:
  • IHE Profiles or Equivalent Data Exchange Standard
  • Transports
  • Security
Making the Workgroup Efficient

• Divide and Conquer:
  • Possible Data vs Needed Data
    • **Possible Data:** determine what data is possible to acquire or transmit – for example, in Search, there is a wealth of possible data in a patient’s EHR, but the CCD has been defined by the EHR industry as being the pertinent summary document for these types of encounters. Likewise, for File, while the EMS industry has defined the universe of data as being the NEMSIS v3.x specification, much of that data is not usually completed by EMS limiting the data that is possible.
    • **Needed Data:** defining the data that will actually be useful or needed from the larger set of data that is possible. Using the examples above, EMS / EMT need to define from the large amount of data in the CCD Demographic, Problem, Allergy, Prescriptions segments which data will actually be useful to them. Likewise, from the set of data actually coded into the ePCR, what data is useful to delivery of care in the ED and hospital (and discharge?).
Making the Workgroup Efficient

<table>
<thead>
<tr>
<th>Function</th>
<th>Possible Data</th>
<th>Needed Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Search</td>
<td>EHR Specialists (CCD)</td>
<td>EMS / EMT</td>
</tr>
<tr>
<td>Alert</td>
<td>ePCR Specialists + EMS</td>
<td>ED (MD + Triage?)</td>
</tr>
<tr>
<td>File</td>
<td>ePCR Specialists + EMS</td>
<td>ED (MD, QC) + Other Hospital Depts (may need use cases)</td>
</tr>
<tr>
<td>Reconcile</td>
<td>EHR Report Specialists + Legal</td>
<td>EMSA, LEMSA, FICEMS</td>
</tr>
</tbody>
</table>
Suggested Sub-Workgroups

• Possible Data Sub-Workgroup (1 group):
  • Vendors,
  • EMS Specialists (to provide information about what is typically coded into the ePCR and when),
  • Hospital EHR Reporting Specialists / Legal (determine what data is covered under the new CA law AB503 - Health and Safety Code 1797.122)

• Technical Standards Sub-Workgroup (1 group):
  • CAHIE
  • ePCR Vendors
  • EHR Vendors
  • Hospital EHR Technical Specialists
Suggested Sub-Workgroups

• Needed / Useful Data Sub-Workgroups (4 groups):
  • SEARCH: EMS Specialists and ePCR Vendors: focus on what data can be displayed in an ePCR window at the scene
  • ALERT: ED Specialists / Triage / Registration: Data that can be incorporated into the EHR and immediately used for registration/treatment planning in the ED
  • FILE: ED and Hospital QC Specialists and other Hospital Departments (e.g. Discharge Planning, Trauma, others)
  • RECONCILE: EMSA, LEMSA, FICEMS (Federal Interagency Committee on EMS)
Timeline

• Most of the sub-Workgroup work will be completed by email discussions – meetings will focus on gaining consensus on the content

• February:
  • Possible Sub-Workgroup completes work on all 4 functional areas (2 calls)
  • Technical Sub-Workgroup completes work on all 4 functional areas (2 calls)
  • S and A Sub-Workgroups kick off work (1 call)

• March:
  • S and A Sub-Workgroups complete first pass on Deliverables (3 calls)
  • F and R Sub-Workgroups kick off work (2 calls)

• April:
  • F and R Sub-Workgroups complete first pass on Deliverables (2 calls)
  • All Sub-Workgroups complete first pass on Deliverables by Friday, April 15 for presentation at the HIE in EMS Summit on 4/19-4/20.
Meeting Day/Time Selection – have your calendars ready – we will be counting “NO” votes!!

• Monday: 10-11 ( ), 11-12 ( ), 3-4 ( ), 4-5 ( )
• Tuesday: 10-11 ( ), 11-12 ( ), 3-4 ( ), 4-5 ( )
• Wednesday: 10-11 ( ), 11-12 ( ), 3-4 ( ), 4-5 ( )
• Thursday: 10-11 ( ), 11-12 ( ), 3-4 ( ), 4-5 ( )
• Friday: 10-11 ( ), 11-12 ( ), 3-4 ( ), 4-5 ( )
Suggested Sub-Workgroups

• Possible Data Sub-Workgroup (1 group):
  • Vendors, EMS Specialists (to provide information about what is typically coded into the ePCR and when), Hospital EHR Reporting Specialists / Legal (determine what data is covered under the new CA law AB503 - Health and Safety Code 1797.122)

• Technical Standards Sub-Workgroup (1 group):
  • CAHIE, ePCR Vendors, EHR Vendors, Hospital EHR Technical Specialists

• Needed / Useful Data Sub-Workgroups (4 groups):
  • One group focusing on each of the 4 SAFR Functional Areas