EMS Opportunities and Data Needs

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Agenda

• Who is ONC?
• USCDI/USCDI+
  • Interoperability Standards Advisory (ISA)
• FHIR (Fast Healthcare Interoperability Resources)
• TEFCA (Trusted Exchange Framework and Common Agreement)
• How can EMS Participate?
Office of the National Coordinator for Health IT

- Founded in 2004 by executive order, established in statute in 2009
- ONC is charged with formulating the federal government’s health IT strategy to advance national goals for better and safer health care through an interoperable nationwide health IT infrastructure

Laying the foundation of EHRs across the industry
- $40B CMS investment to subsidize EHRs for hospitals and ambulatory providers
- ONC certification of EHR systems to support CMS and CDC programs

Leveraging EHRs to drive value
- Information blocking: Prohibits providers, technology developers, and health information networks from interfering with access, exchange, and use of electronic health information
- Standards: Requires access to information through APIs “without special effort”
- TEFCA: Requires nationwide governance for health information exchange networks – Trusted Exchange Framework and Common Agreement
New Data Standards and Policies are Transforming Digital Health Data
Create a Core Set of Standardized Data Elements for Health

US Core Data for Interoperability (USCDI)

Common core of standardized data to support treatment, payment, healthcare operations, requests from patients, post-market surveillance, research, public health, and other authorized uses.

https://www.healthit.gov/topic/interoperability/uscdi-plus
Certified EHR Currently Adopting USCDI V1

- ONC standard for minimum dataset required for interoperability
  - Defines required data elements and vocabulary standards
  - Agnostic to format

- Updated on annual cycle with federal agency and industry input
  - Updates based on multiple criteria including standards maturity and public/industry priority
## USCDI Version 3

### Allergies and Intolerances
- Substance (Medication)
- Substance (Drug Class)
- Reaction

### Assessment and Plan of Treatment
- Assessment and Plan of Treatment
- SDOH Assessment

### Clinical Tests
- Clinical Test
- Clinical Test Result/Report

### Diagnostic Imaging
- Diagnostic Imaging Test
- Diagnostic Imaging Report

### Health Status/Assessments
- Health Concerns
- Functional Status
- Disability Status
- Mental Function
- Pregnancy Status
- Smoking Status

### Patient Demographics/Information
- First Name
- Last Name
- Middle Name (Including middle initial)
- Name Suffix
- Previous Name
- Date of Birth
- Date of Death
- Race
- Ethnicity
- Tribal Affiliation
- Sex
- Sexual Orientation
- Gender Identity
- Preferred Language
- Current Address
- Previous Address
- Phone Number
- Phone Number Type
- Email Address
- Related Person’s Name
- Related Person’s Relationship
- Occupation
- Occupation Industry

### Procedures
- Procedures
- SDOH Interventions
- Reason for Referral

### Provenance
- Author Organization
- Author Time Stamp

### Unique Device Identifier(s) for a Patient’s Implantable Device(s)
- Unique Device Identifier(s) for a patient’s implantable device(s)

### Vital Signs
- Systolic blood pressure
- Diastolic blood pressure
- Heart Rate
- Respiratory rate
- Body temperature
- Body height
- Body weight
- Pulse oximetry
- Inhaled oxygen concentration
- BMI Percentile (Birth - 24 Months)
- Weight-for-length Percentile
- Head Circumference Percentile (Birth - 36 Months)

### Care Team Member(s)
- Care Team Member Name
- Care Team Member Identifier
- Care Team Role
- Care Team Location
- Care Team Telecom

### Encounter Information
- Encounter Type
- Encounter Diagnosis
- Encounter Time
- Encounter Location
- Encounter Disposition

### Immunizations
- Immunizations

### Clinical Notes
- Consultation Note
- Discharge Summary Note
- History & Physical
- Procedure Note
- Progress Note

### Goals
- Patient Goals
- SDOH Goals

### Laboratory
- Test
- Values/Results
- Specimen Type
- Result Status

### Medications
- Medications
- Dose
- Dose Units of Measure
- Indication
- Fill Status

### Problems
- Problems
- SDOH Problems/Health Concerns
- Date of Diagnosis
- Date of Resolution

### New Data Classes and Elements
- Data Element Reclassified
- Name and Other Changes to Existing Data Classes/Elements
USCDI Continues to Evolve

2021
- Public Submission & ONC Review – v3
  - HITAC v2
  - Public Feedback v2
  - ONC Preps Final v2
- Draft USCDI v2

2022
- Public Submission & ONC Review – v4
  - ONC Preps Draft v3
  - Public Review & Feedback Draft v3
- Draft USCDI v3

2023
- Public Submission & ONC Review – v5
  - ONC Preps Draft v4
  - Public Review & Feedback Draft v4
- Draft USCDI v4

SVAP
- USCDI v2 Considered for 2022 SVAP
  - Open Comment Period
  - USCDI v2 Review
  - ONC SVAP Review
  - USCDI v2 Considered for 2023 SVAP
    - Open Comment Period
    - ONC SVAP Review
  - USCDI v2 Considered for 2024 SVAP
    - Open Comment Period

ONC Approved Standards for 2020
Available for Certification
(60 days after release of SVAP 2020)

ONC Approved Standards for 2022
Available for Certification
(60 days after release of SVAP 2022)

ONC Approved Standards for 2023
Available for Certification
(60 days after release of SVAP 2023)
USCDI+: Extending Beyond the USCDI

• Unique agency or program-specific data systems and requirements sometimes not fully met by USCDI

• ONC USCDI+ initiative helps federal partners build on USCDI to support specific program needs

• Allows ONC to better serve federal partners, assures that extensions build from the same foundation, and creates the opportunity for aligning similar data needs across agency programs
What is the Interoperability Standards Advisory (ISA)?

• Single, public list of the standards and implementation specifications that can best be used to address specific interoperability needs.

• Reflects the results of ongoing dialogue, debate, and consensus among industry stakeholders.

• Documents known limitations, preconditions, and dependencies as well as other helpful information.

• Serves as an informational resource, is non-binding and does not create or confer any rights or obligations for or on any person or entity.

• [www.healthit.gov/ISA](http://www.healthit.gov/ISA)
How is the ISA used and by whom?

• Informs policy and implementation efforts, including limitations, dependencies or preconditions for use.
• Stakeholders who administer government and non-governmental procurements
• Developers of health IT
• Implementers and users of health IT products
# ISA Interoperability Need

## Vocabulary/Code Set/Terminology

**Representing Health Care Data for Emergency Medical Services**

<table>
<thead>
<tr>
<th>Type</th>
<th>Standard / Implementation Specification</th>
<th>Standards Process Maturity</th>
<th>Implementation Maturity</th>
<th>Adoption Level</th>
<th>Federally required</th>
<th>Cost</th>
<th>Test Tool Availability</th>
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<tr>
<td>Standard</td>
<td>NEMSIS Version 3.4</td>
<td>Final</td>
<td>Production</td>
<td>Feedback Requested</td>
<td>No</td>
<td>Free</td>
<td>Yes</td>
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<td>Standard</td>
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<td>Feedback Requested</td>
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<tr>
<td>Standard</td>
<td>RxNorm</td>
<td>Final</td>
<td>Production</td>
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</tbody>
</table>

**Limitations, Dependencies, and Preconditions for Consideration**

- The National Emergency Medical Services Information System (NEMSIS) administered by the National Highway Traffic Safety Administration's Office of Emergency Medical Services provides a universal standard for the collection and transmission of emergency medical services (EMS) operations and patient care data. Using NEMSIS-compliant electronic patient care record (ePCR).

**Applicable Value Set(s) and Starter Set(s)**

- CPT 99281 - 99285: patient evaluation, examination, and medical decision making for emergency department services
- CPT 99288: direction of emergency care to EMS personnel by a physician or other qualified health care professional

Access and Share Health Information Seamlessly

Fast Healthcare Interoperability Resources (FHIR)

Set of best practices and open standards being developed and adopted by a global community to make data sharing more flexible and effective.

https://www.cdc.gov/surveillance/pdfs/20_319521-D_DataMod- Initiative
Open “application programming interfaces” (APIs) and apps are what make it easy to check your bank account or buy stocks or order meal delivery on your smartphone

- We want providers and patients to have that same experience the health care system

21st Century Cures Act requires availability of APIs that can be accessed “without special effort”

- ONC rule takes steps to prevent business and technical barriers to information-sharing

By December 31, 2022, all certified technology developers required to deploy a standard FHIR API across their entire customer base

- Will create a climate for innovation as apps can now be developed that will work across all EHR systems
“[T]he National Coordinator shall convene appropriate public and private stakeholders to develop or support a trusted exchange framework for trust policies and practices and for a common agreement for exchange between health information networks.”

[emphasis added]
TEFCA Will Simplify Health Data Exchange

• Proliferation of Agreements

• While there has been growth in national networks, many organizations must join multiple Health Information Networks (HINs)*, and many HINs do not share data with each other.

• The COVID pandemic also underscored the need to share information for care and public health purposes.

• Health data exchange must be simplified in order to scale.

*Capitalized terms have the definitions set forth in the Common Agreement Version 1.
TEFCA Timeline

2021
- Public engagement
- Common Agreement Work Group sessions
- RCE and ONC use feedback to finalize TEFCA

Q1 of 2022
- Publish Common Agreement Version 1
- Publish QHIN Technical Framework (QTF) Version 1 and FHIR Roadmap
- Initiate work to enable FHIR-based exchange
- Public education and engagement

Q2 of 2022
- QHINs begin signing Common Agreement and applying for designation

Q3 and Q4 of 2022
- Onboarding of initial QHINs
- Additional QHIN applications processed
- RCE establishes Transitional Council
- RCE begins designating QHINs to share data
- Prepare for TEFCA FHIR exchange pilots

2023
- Establish Governing Council
- Follow change management process to iterate Common Agreement, SOPs, and QTF, including to support FHIR-based exchange
Specifically, the secretary has directed ONC to establish and oversee a consistent HHS-wide approach for: 1) incorporating standard health IT requirements language in all applicable HHS funding programs, contracts, and policies; and 2) providing direct ONC assistance to HHS agencies to maximize the use of HHS-approved standards and authorities (such as Section 3004 of the Public Health Service Act) in their agency programs.
How Can EMS Participate?

**USCDI/USCDI+**—ONC is accepting submissions for new data elements through the ONDEC system and comments on existing data elements until September 30, 2022. ONC plans on releasing Draft USCDI v4 in January 2023: [https://www.healthit.gov/uscdi](https://www.healthit.gov/uscdi)

**ISA**—Continue to learn about and contribute additional standards it is open on a rolling basis: [https://www.healthit.gov/isa/](https://www.healthit.gov/isa/)

**FHIR**—Various active HL7 Workgroups that affect EMS: [https://confluence.hl7.org/pages/viewpage.action?pageId=4489802](https://confluence.hl7.org/pages/viewpage.action?pageId=4489802)

**TEFCA**—The Recognized Coordinating Entity—The Sequoia Project—has regular public meetings: [https://rce.sequoiaproject.org/community-engagement/](https://rce.sequoiaproject.org/community-engagement/)

Contact ONC

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Health IT Feedback Form:
https://www.healthit.gov/form/
healthit-feedback-form

Twitter: @onc_healthIT

LinkedIn: Office of the National Coordinator for Health Information Technology

Youtube: https://www.youtube.com/user/HHSONC

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