



Office of the National Coordinator
for Health Information Technology

Utah Partnerships for Catalyzing Data Into Action: Health Data Innovation Summit

Ryan Dempsey Argentieri, MBA, MA
National Coordinator for Health Information Technology
U.S. Department of Health and Human Services

June 21, 2023



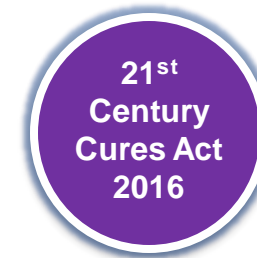
Office of the National Coordinator for Health IT

- 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

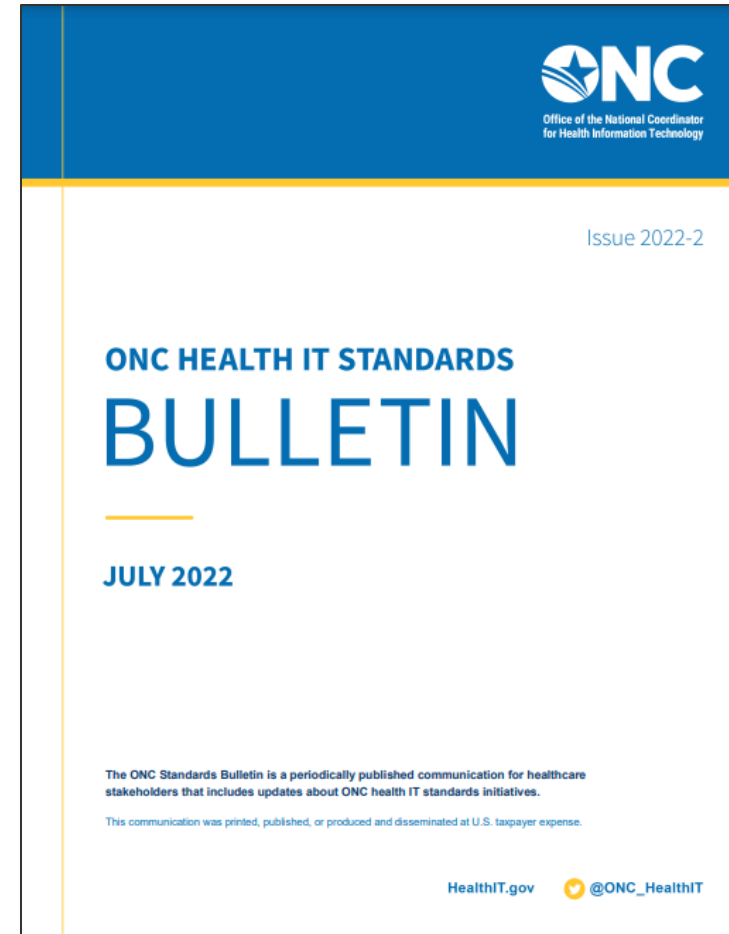
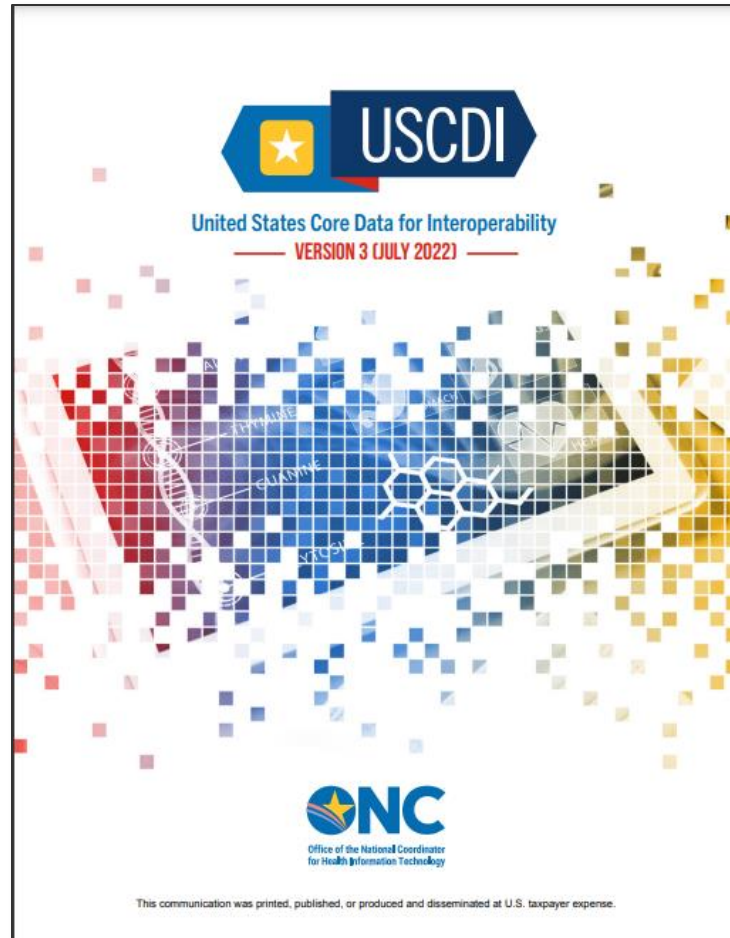
- \$40B CMS investment to subsidize EHRs for hospitals and ambulatory providers
- ONC certification of EHR systems to support CMS and CDC programs



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: Data and API standards for access “without special effort”
- TEFCA: Nationwide governance for health information exchange networks – Trusted Exchange Framework and Common Agreement

United States Core Data for Interoperability (USCDI)



USCDI is the minimum data set for key EHR functions, interoperability, and patient access

EHR functions requiring USCDI

USCDI is a required component for following 2015 Edition Cures Update Certification Criteria	
Standardized API for patient and population services (§170.315(g)(10))	Update to USCDI by December 31, 2022 (replacing Common Clinical Data Set)
Transitions of care (§170.315(b)(1))	
Clinical information reconciliation and incorporation (§170.315(b)(2))	
View, download, and transmit to 3rd party (§170.315(e)(1))	
Transmission to public health agencies –electronic case reporting (§170.315(f)(5))	
Consolidated CDA creation performance (§170.315(g)(6))	
Application access –all data request (§170.315(g)(9))	

CMS patient access rule requires USCDI

Medicare and Medicaid Programs; Patient Protection and Affordable Care Act; Interoperability and Patient Access for Medicare Advantage Organization and Medicaid Managed Care Plans, State Medicaid Agencies, CHIP Agencies and CHIP Managed Care Entities, Issuers of Qualified Health Plans on the Federally-Facilitated Exchanges, and Health Care Providers

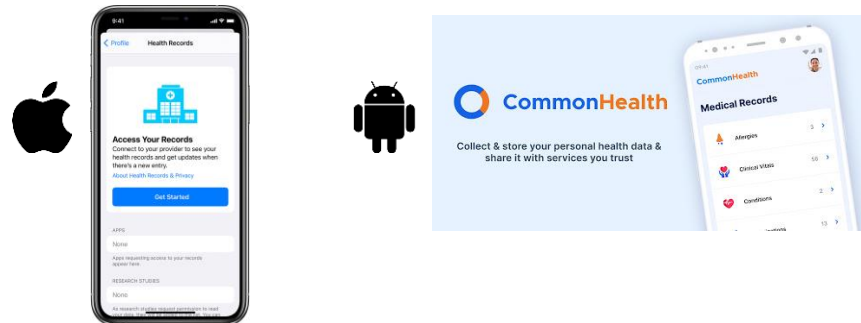
AGENCY: Centers for Medicare & Medicaid Services (CMS), HHS.

ACTION: Final rule.

Interoperability networks requiring USCDI



Mobile apps based on USCDI





Allergies and Intolerances <ul style="list-style-type: none"> • Substance (Medication) • Substance (Drug Class) • Reaction 	Clinical Tests <ul style="list-style-type: none"> • Clinical Test • Clinical Test Result/Report 	Health Status/ Assessments <ul style="list-style-type: none"> • Health Concerns → • Functional Status ★ • Disability Status ★ • Mental / Cognitive Status ★ • Pregnancy Status ★ • Smoking Status → 	Patient Demographics/ Information <ul style="list-style-type: none"> • First Name • Last Name • Middle Name (Including middle initial) • 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 <ul style="list-style-type: none"> • Procedures • SDOH Interventions • Reason for Referral ★
Assessment and Plan of Treatment <ul style="list-style-type: none"> • Assessment and Plan of Treatment • SDOH Assessment 	Diagnostic Imaging <ul style="list-style-type: none"> • Diagnostic Imaging Test • Diagnostic Imaging Report 	Immunizations <ul style="list-style-type: none"> • Immunizations 	Problems <ul style="list-style-type: none"> • Problems • SDOH Problems/Health Concerns • Date of Diagnosis • Date of Resolution 	Provenance <ul style="list-style-type: none"> • Author Organization • Author Time Stamp
Care Team Member(s) <ul style="list-style-type: none"> • Care Team Member Name • Care Team Member Identifier • Care Team Member Role • Care Team Member Location • Care Team Member Telecom 	Encounter Information <ul style="list-style-type: none"> • Encounter Type • Encounter Diagnosis • Encounter Time • Encounter Location • Encounter Disposition 	Laboratory <ul style="list-style-type: none"> • Test • Values/Results • Specimen Type ★ • Result Status ★ 	Medications <ul style="list-style-type: none"> • Medications • Dose ★ • Dose Unit of Measure ★ • Indication ★ • Fill Status ★ 	Unique Device Identifier(s) for a Patient's Implantable Device(s) <ul style="list-style-type: none"> • Unique Device Identifier(s) for a patient's implantable device(s)
Clinical Notes <ul style="list-style-type: none"> • Consultation Note • Discharge Summary Note • History & Physical • Procedure Note • Progress Note 	Goals <ul style="list-style-type: none"> • Patient Goals • SDOH Goals 	Health Insurance Information ★ <ul style="list-style-type: none"> • Coverage Status ★ • Coverage Type ★ • Relationship to Subscriber ★ • Member Identifier ★ • Subscriber Identifier ★ • Group Number ★ • Payer Identifier ★ 		Vital Signs <ul style="list-style-type: none"> • Systolic blood pressure • Diastolic blood pressure • Heart Rate • Respiratory rate • Body temperature • Body height • Body weight • Pulse oximetry • Inhaled oxygen concentration • BMI Percentile (2 - 20 years) • Weight-for-length Percentile (Birth - 24 Months) • Head Occipital-frontal Circumference Percentile (Birth - 36 Months)

★ New Data Classes and Elements → Data Element Reclassified

ONC FHIR API Requirements: Access “without special effort”



HL7[®] FHIR[®]

- **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 that same experience for the health care delivery and public health systems
- **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 (individual and bulk) across their entire customer base**
 - Will create a climate for innovation as apps can now be developed that will work across all EHR systems
- **Looking ahead to interactive functions: questionnaires, scheduling, FHIR links, subscriptions**

Building Interoperability for Public Health



Enable on-demand, uniform, nationwide interoperability for provider-STLT, STLT-STLT, STLT-CDC exchange



Catalyze the development of FHIR-based capabilities to address public health needs



Mechanisms for enhancing standardization of public health data systems

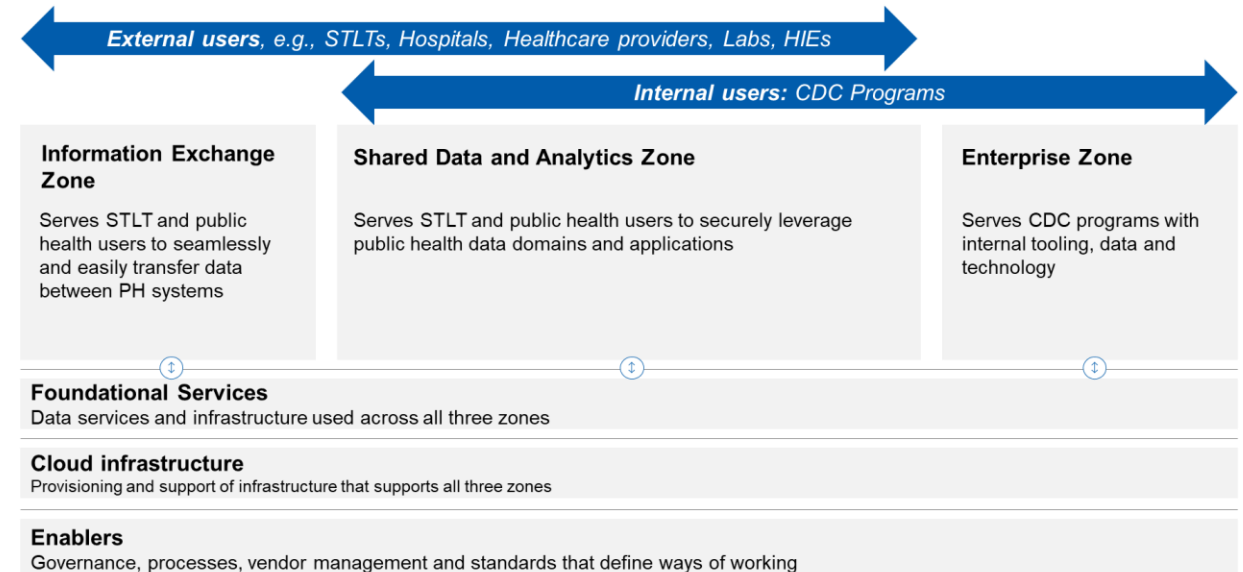


Establish a nationwide public health data model based on commonly adopted open-industry standards



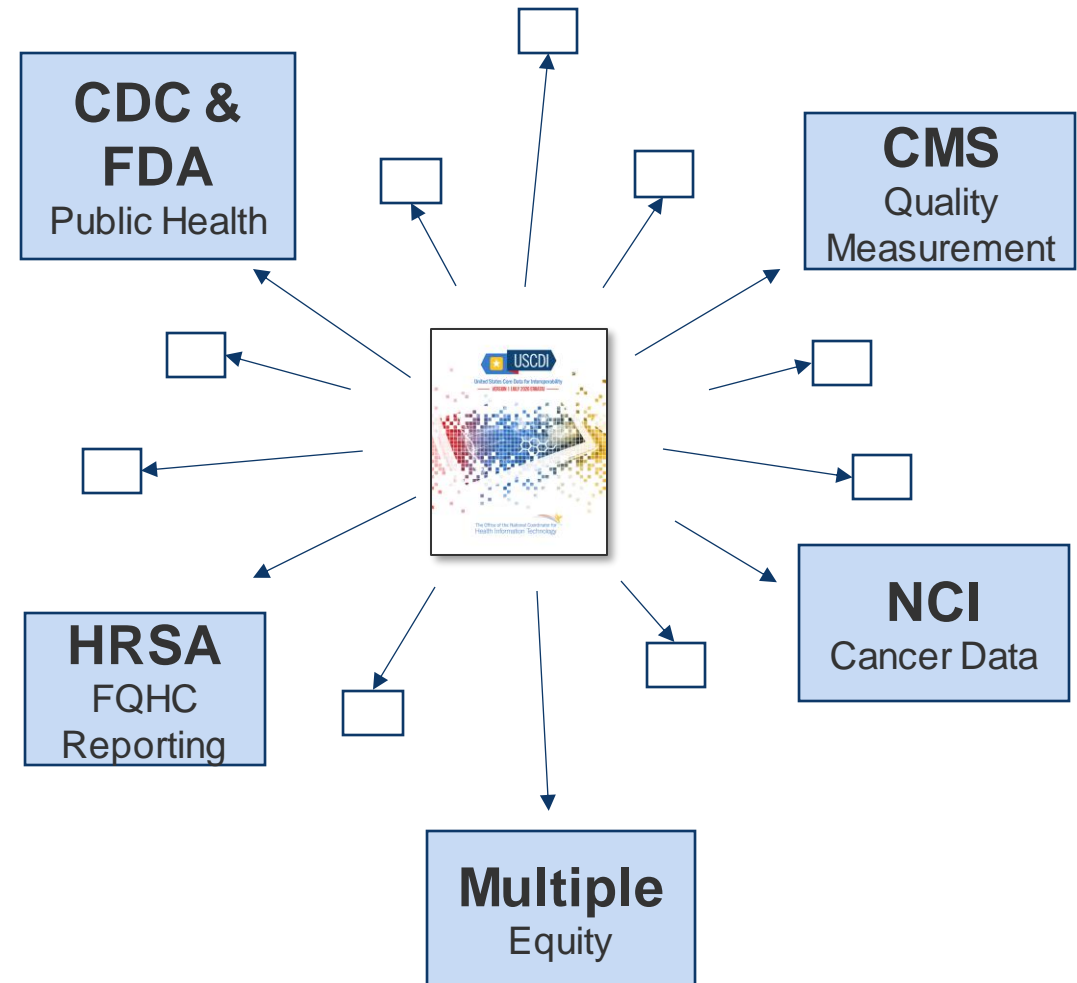
“North Star” Architecture

Open architecture public health cloud infrastructure to support STLT environments, shared applications and tooling, and data-sharing environments



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



USCDI+ for Public Health

Collaboration among CDC, STLTs, and ONC with stakeholder input



You are viewing USCDI+ as a strategic partner. [View USCDI as General Public](#)

Home > USCDI+

USCDI+	-
Public Health	-
Case-Based Surveillance	
Laboratory Data Exchange	
Maternal and Child Health	
Multi-Directional Exchange and Data Linkages	
Resource Reporting & Situational Awareness	
Risk Behaviors and Drivers of Inequity	
Quality Measurement Domain	-
Healthcare Effectiveness Data and Information Set (HEDIS)	
Long Term Post Acute Care (LTPAC)	
Quality Overarching	

United States Core Data for Interoperability (USCDI) +

USCDI+

USCDI+ is a service that ONC provides to federal partners who have a need to establish, harmonize, and advance the use of interoperable datasets that extend beyond the core data in the USCDI in order to meet agency-specific programmatic requirements. Learn more about [USCDI+ on HealthIT.gov](#). If you have any questions, technical issues, or need to request access for a colleague, please email USCDI.Plus@hhs.gov

- A USCDI+ "Domain" is a common set of data elements required for interoperability for multiple scenarios and use cases governed by the same set of standards, policies and/or guidelines. (Example: Public Health)
- A USCDI+ "Sub Domain" is a common set of data elements required to support a specific set of functions within a Domain. (Example: Resource Reporting/Situational Awareness)
- A USCDI+ "Use Case" is a specific example of data elements within a sub-domain that *may* require more specificity. Many Sub-Domains are the use case, when further specificity is not needed. (Example: Hospital Identifiers and Hospital Type)
- A USCDI+ "Data Class" is an aggregation of various Data Elements by a common scenario or use case. (Example: Facility Level Data)
- A USCDI+ "Data Element" is the most granular level at which a piece of data is exchanged. (Example: Facility Address)

[USCDI+ ONC New Data Element & Class \(ONDEC\) Submission System](#)


Leveraging FHIR for Public Health



HL7® Launches Helios FHIR® Accelerator for Public Health

Nov 16, 2021 3:55:58 PM / by HL7

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Alliance of government, private sector and philanthropic partners aims to use widely accepted healthcare standard to help advance public health

A new initiative launched by HL7 and jointly supported by the Centers for Disease Control and Prevention (CDC) and the Office of the National Coordinator for Health IT (ONC) seeks to use widely recognized data exchange standards to help advance public health. The effort, called Helios, intends to strengthen the capacity and streamline data sharing across all levels of public health using the HL7 Fast Healthcare Interoperability (FHIR®) standard.

Helios Current Projects

1. Bulk FHIR Access to IIS Systems
2. Health care delivery system capacity and situational awareness reporting for public health
3. Aligning and optimizing public health data sharing using EHR FHIR capabilities

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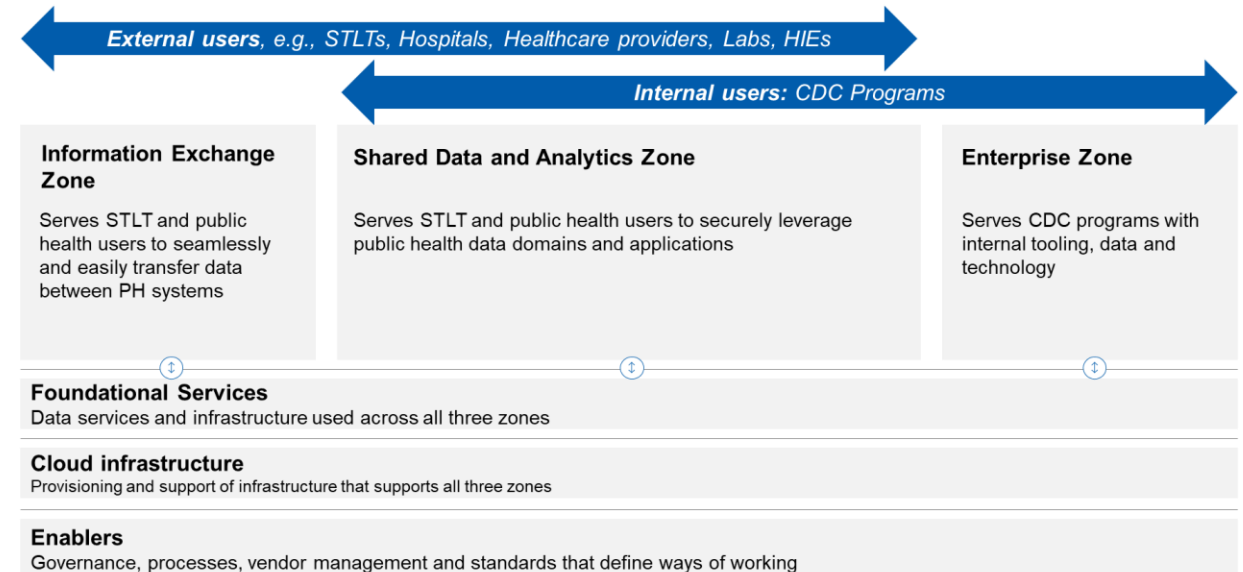


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Contact ONC

Ryan Dempsey Argentieri, MBA, MA

Office of Technology

National Coordinator for Health Information Technology



Phone: 202-215-0503



Health IT Feedback Form:

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