

CHCANYS NYS-HCCN presents

Advancing Interoperability: Inspiring Better Outcomes

Day 2

February 25, 2021 – 2:00 pm



Zoom Guidelines

- You have been muted upon entry. Please respect our presenters and stay on mute if you are not speaking.
- Please share your questions in the chat. CHCANYS staff will raise your questions to our speakers and follow up as needed if there are unanswered questions.
- The workshop is being recorded.



Agenda

- Information Blocking and Policy
- EHR Panel: Interoperability and External Data
- Interoperability Workgroups: Gravity Project and Sequoia Project

Implementing the ONC Information Blocking Rule and the Proposed HIPAA Rules: What FQHCs Need to Know

Helen Pfister
Partner, Phelps & Phillips
Manatt



Randi Seigel
Partner, Phelps & Phillips
Manatt





Implementing the ONC Information Blocking Rule and the Proposed HIPAA Rules: What FQHCs Need to Know



Randi Seigel
Partner, Manatt, Phelps
& Phillips, LLP

212.790.4567
RSeigel@manatt.com



Helen Pfister
Partner, Manatt, Phelps
& Phillips, LLP

212.830.7277
HPfister@manatt.com

- **Background**
- **What Constitutes Information Blocking?**
- **Exceptions to the Definition of Information Blocking**
- **Coming Into Compliance**
- **Proposed HIPAA Rules**

Background

“Interoperability, Information Blocking and the ONC Health IT Certification Program” Final Rule

- Among other things, implements the information blocking provisions of the 21st Century Cures Act, which:
 - Were enacted in response to concerns that some individuals and entities are engaging in practices that unreasonably limit the availability and use of electronic health information (EHI) for authorized and permitted purposes.
 - Define practices that constitute information blocking when engaged in by a healthcare provider or a health IT developer, an exchange or a network
 - Authorize DHHS to identify, through notice and comment rulemaking, reasonable and necessary activities that do not constitute information blocking






The final rule was published in the Federal Register on May 1, 2020, and was supposed to be effective six months after publication. **Due to COVID-19**, the compliance date has been extended to **April 5, 2021**.

However, for the **first 18 months of implementation** (from six months after publication to two years after publication), actors are required to comply with the rule only regarding information in the USCDI rather than all EHI (defined on the following slide). This gives actors time to develop compliance in regard to a common data set before having to expand their obligations to all EHI.

*Final Rule: https://www.healthit.gov/sites/default/files/cures/2020-03/ONC_Cures_Act_Final_Rule_03092020.pdf;
<https://www.federalregister.gov/documents/2020/05/01/2020-07419/21st-century-cures-act-interoperability-information-blocking-and-the-onc-health-it-certification>*

Who does the rule apply to?

Applies to healthcare providers, health IT developers, health information networks and health information exchanges

 Healthcare provider	A hospital, skilled nursing facility, nursing facility, home health entity, other long-term care facility, healthcare clinic, community mental health center, renal dialysis facility, blood center, ambulatory surgical center, FQHC, group practice, pharmacist, pharmacy, laboratory, physician, practitioner, rural health clinic, therapist, and any other category of healthcare facility, entity, practitioner or clinician determined appropriate by the Secretary of DHHS
 Health IT developer	An individual or entity that develops or offers health information technology and has health information technology under the ONC Health IT Certification Program
 Health information network (HIN) or health information exchange (HIE)	An individual or entity that determines, controls or has the discretion to administer any requirement, policy or agreement that permits, enables or requires the use of any technology or services for access, exchange or use of electronic health information: <ul style="list-style-type: none">▪ Among more than two unaffiliated individuals or entities (other than the individual or entity to which this definition might apply) that are enabled to exchange with each other; <u>and</u>▪ That is for a treatment, payment or healthcare operations purpose

What Constitutes Information Blocking?

What Constitutes Information Blocking?

Information blocking means a practice that is likely to interfere with, prevent or materially discourage access, exchange or use of electronic health information, except as required by law or covered by an exception.

- What counts as “electronic health information”?
 - **Electronic health information means electronic protected health information (ePHI) under HIPAA to the extent that it would be included in a designated record set.**
 - ◆ USCDI is the baseline set of data that a certified health IT must make available for access and exchange.
 - De-identified data is **not** included in the definition of EHI.
 - Paper records are not subject to these rules.



What Constitutes Information Blocking?

- Examples of potential violations
 - **Formal restrictions:** Provider policy requires staff to obtain a patient’s written consent before sharing any EHI with unaffiliated providers for treatment purposes.
 - **Technical limitations:** A provider disables the use of an EHR capability that would enable staff to share EHI with users at other systems.
 - **Isolated interference:** A provider has the capability to provide same-day EHI access in a format requested by an unaffiliated provider but takes several days to respond.
 - **Opportunistic behavior:** An EHR developer imposes a surcharge on EHI transfers to third-party applications that compete with the developer’s products.



What Constitutes Information Blocking?

Information blocking means a practice that is likely to interfere with, prevent or materially discourage access, exchange or use of electronic health information, except as required by law or covered by an exception.



The information blocking rule does not apply to conduct that is required under federal or state law, but the rule does apply to conduct that is permitted by law.

Example

Under HIPAA, an individual may request that a provider not disclose PHI to a health plan regarding services that have already been paid in full (unless disclosure is permitted under some other HIPAA exception). The provider is **required by law** to withhold that information. Thus, this conduct does not implicate the information blocking rule.

Exceptions to the Definition of Information Blocking

Information blocking means a practice that is likely to interfere with, prevent, or materially discourage access, exchange, or use of electronic health information, except as required by law or covered by an exception.

- ONC defined **eight exceptions**, guided by the following principles:
 - The exceptions should be limited to activities that clearly **advance the overall aims** of the **information blocking rule**:
 - ◆ Preventing harm to patients and others and promoting privacy and security of EHI
 - ◆ Promoting competition, innovation & consumer welfare
 - ◆ Allowing system downtime for maintenance and upgrades
 - The **exceptions** should **protect these beneficial activities** to prevent a chilling effect
 - The **exceptions** are **strictly defined** to ensure they are limited to reasonable and necessary activities.
 - **All conditions must be satisfied** to qualify for an exception



Information blocking means a practice that is likely to interfere with, prevent, or materially discourage access, exchange, or use of electronic health information, except as required by law or covered by an exception.

ONC divided the **eight exceptions** into **two categories**:

- Exceptions that involve **not fulfilling requests** to access, exchange or use EHI
 - ◆ Preventing harm exception
 - ◆ Privacy exception
 - ◆ Security exception
 - ◆ Infeasibility exception
 - ◆ Health IT performance exception
- Exceptions that involve **procedures for fulfilling requests** to access, exchange or use EHI
 - ◆ Content and manner exception
 - ◆ Fees exception
 - ◆ Licensing exception





Exceptions that involve not fulfilling requests to access, exchange, or use EHI

1 Preventing Harm Exception

The actor holds a **reasonable belief** that the practice **will substantially reduce** the **risk of harm** to a patient or another natural person and the practice is **no broader than necessary** to substantially reduce the **risk of harm**

- **Declining** to share data that is **corrupt** or **erroneous**
- **Declining** to share data arising from **misidentifying** a patient or **mismatching** a patient's EHI
- **Refraining** from a disclosure that would **endanger life** or **physical safety** of a patient or another person
 - ◆ Licensed provider who made determination must have done so in the context of a current or prior clinician-patient relationship with the patient

2

Privacy Exception (consists of four “sub-exceptions”)

- **Precondition not satisfied.** Preconditions established by state or federal law have not been satisfied and the provider’s practice is tailored to the preconditions, is implemented in a consistent and non-discriminatory manner, and either conforms to the provider’s written policies and procedures or is documented by the provider, on a case-by-case basis
 - If the precondition relies on an individual’s consent and the consent isn’t adequate, the provider must use reasonable efforts to provide the individual with an adequate consent form and not improperly encourage or induce the individual to not provide the consent
- **Respecting an individual’s request not to share information.** Permissible so long as, among other things the provider didn’t improperly encourage or induce the request and the provider’s practice is implemented in a consistent and non-discriminatory manner

2 Privacy Exception (consists of four “sub-exceptions”)

- **Denial of an individual’s request for EHI consistent with HIPAA’s right of access provisions.** Examples include psychotherapy notes and information compiled for use in a civil, criminal or administrative proceeding
- **Health IT developer not covered by HIPAA.** Health IT developers not subject to HIPAA, like those that provide services directly to patients, can refuse to disclose data based on their organizational privacy policies if those policies meet certain requirements

3 Security Exception

- Permits practices that are **directly related to safeguarding** the confidentiality, integrity, and availability of EHI if they are:
 - **tailored to the security risk** being addressed
 - implemented in a **consistent and nondiscriminatory manner**
 - either **implement a written organizational security policy** that meets certain requirements, or **are made pursuant to a case-by-case determination** that the practice is necessary to mitigate the security risk and there are no reasonable and appropriate alternatives

4 Infeasibility Exception

- The request **cannot be fulfilled due to events beyond the actor's control**
 - Natural or man-made disaster, public health emergency, telecommunication or internet service disruption, etc.)
- The requested EHI **cannot be unambiguously segmented from other EHI that can't be made available**
 - Due to patient preference or by law, or under the Preventing Harm exception
- The request is **infeasible under the circumstances**
 - Requires contemporaneous documentation demonstrating consideration of:
 - ✓ Type of EHI and purpose for which it is needed
 - ✓ Cost of complying
 - ✓ Whether provider controls or owns the technology through which the EHI is exchanged
 - ✓ Financial and technical resources available
 - ✓ Whether practice is non-discriminatory
 - ✓ Why access, exchange, or use could not be provided consistent with the Content and Manner Exception

Provider must respond to request in writing within 10 business days, explaining why it was infeasible.

5 Health IT Performance Exception

- A practice that makes health IT **temporarily unavailable or temporarily degrades its performance** in order to perform maintenance or improvement, provided that:
 - The practice is implemented **for a period of time no longer than necessary**
 - The practice is implemented in a **consistent and non-discriminatory manner**
 - **If initiated by a health IT developer, health information exchange or health information network**, the practice must be **consistent with applicable service level agreements or, if unplanned, agreed to by the provider**

- A provider may take action against a **third-party application that is negatively impacting health IT performance**, if such action is:
 - Implemented in a **consistent and non-discriminatory manner** for a time no longer than necessary to resolve any negative impacts
 - Consistent with **existing service level agreements**, where applicable



Exceptions that involve procedures for fulfilling requests to access, exchange, or use EHI

6 Content and Manner Exception

- **Content Condition:** Until May 2, 2022, a response to a request to access, exchange or use EHI may be limited to the data elements represented in the **USCDI standard**
 - On and after that date, the **broader definition of EHI** applies
- **Manner Condition:** Except as provided below, a provider must fulfill a request to access, exchange or use EHI in the manner requested
 - If a **provider is technically unable to do so or cannot reach agreeable terms with the requestor**, the provider must fulfill the request **in an alternative manner**, without unnecessary delay, and in a specific order of priority
 - **If a provider fulfills a request in the manner requested**, any fees charged **do not need to satisfy** the Fees Exception and any license **does not need to satisfy** the Licensing Exception
 - **If a provider fulfills a request in an alternative manner**, any fees charged **need to satisfy** the Fees Exception and any license **needs to satisfy** the Licensing Exception

7 Fees Exception







- **Basis for Fees Condition.** For the exception to apply:
 - The fees an actor charges **must** be based on **objective and verifiable criteria; reasonably related to the actor's cost** of providing the EHI; **reasonably allocated** among similarly situated persons; and **based on cost otherwise not recovered** for the same instance of service to a provider and third party
 - The fees **may not** take into account **whether the requestor is a competitor**; any **value the requestor may derive** from the EHI; or **certain costs** incurred by the actor
- **Excluded Fee Condition.** The exception does not apply to:
 - Fees **prohibited by HIPAA**
 - Fees based **in any part on an individual's electronic access** to the individual's EHI
 - Fees to perform **an export of EHI via existing capabilities** for purpose of switching health IT or to provide patients their EHI
 - Fees to **export or convert data** from an EHR technology that was not agreed to in writing at the time the technology was acquired

8 Licensing Exception

Applies to requests to license an interoperability element

- Requires that an actor **commence negotiations within 10 business days** of the request and **finalize negotiations within 30 business days** of the request
- Provides that the **license must provide all rights necessary** to achieve the intended access, exchange, or use, and charge a **reasonable royalty** that's based solely on the independent value of the actor's technology (not strategic value)
- Requires license terms to be **non-discriminatory**, based on objective and verifiable criteria uniformly applied for similarly situated persons, and **not be based on whether the requestor is a competitor or what value the requestor may derive**
- **Prohibits certain collateral terms**, such as terms prohibiting competition or requiring exclusivity. Reasonable non-disclosure agreements are permitted
- Requires that the license **not impede the interoperability elements**

Coming Into Compliance

-  Identify all necessary elements for implementation planning
-  Assess current state to uncover barriers to compliance
-  Remove barriers to complying with the information blocking rule
-  Identify all necessary elements for implementation planning
-  Train and Educate
-  Test, Monitor, and Audit (repeat)

Proposed HIPAA Rules

Similar to the final rules on interoperability, the proposed rule implements the HHS Secretary's goal of increasing patients' access to their own health information and improving data sharing for care coordination. The proposed rule also seeks to clarify certain provisions under the Privacy Rule and to reduce administrative burden on covered healthcare providers.

- **Expand a Patient's Right of Access.** Allow individuals inspecting their PHI to take notes or use other personal resources to view and capture images of such PHI.
- **Shorten Response Time.** Shorten the timeframe to respond to an access request from 30 days to 15 days.
- **Prohibit Unreasonable Barriers to Access.** Remove barriers to exercising a right to access that are unreasonable or delay access.
- **Modifying Fee Structure Based on Access Type.**

- **Clarify Permitted Disclosures for Care Coordination and Care Management.**
 - Amend the definition of healthcare operations in order to clarify that PHI may be shared with health plans involved in care coordination and care management without being subject to the minimum necessary rule.
 - Permit PHI to be disclosed to others to facilitate care management or wrap around support services.
- **Enable Disclosures to Help Individuals Experiencing Substance Abuse Disorder or Serious Mental Illness and in Emergency Circumstances.** Replace the privacy standard that permits covered entities to make certain uses and disclosures of PHI based on their “professional judgment” with a standard permitting such uses or disclosures based on a covered entity’s good faith belief that the use or disclosure is in the best interests of the individual.
- **Eliminate the Written Acknowledgement of Notice of Privacy Practices Requirement.**



Randi Seigel
Partner, Manatt, Phelps
& Phillips, LLP
212.790.4567
RSeigel@manatt.com



Helen Pfister
Partner, Manatt, Phelps
& Phillips, LLP
212.830.7277
HPfister@manatt.com

To learn more on these topics visit Manatt's Website:

- **Information Blocking:** [https://www.manatt.com/insights/webinars/implementing-the-onc-information-blocking-rule-\(1\)](https://www.manatt.com/insights/webinars/implementing-the-onc-information-blocking-rule-(1))
- ***HIPAA's Proposed Changes:***
<https://www.manatt.com/insights/newsletters/health-update/significant-changes-to-the-hipaa-regulations-propo>

EHR Panel: Interoperability and External Data

eClinicalWorks
"Improving Healthcare Together"

nextgen
healthcare

MEDENT



Farah Saeed, eCW
Interoperability Sales and Business Development



Muhammed Chebli, NextGen
Vice President of Solutions



Heather Vile, NextGen
Interoperability Project Manager



Margot Hultz, MEDENT
Interoperability Team Leader



Barbara Cuthbert, MEDENT
Vice President of Sales and Marketing



Interoperability

eClinicalWorks

Information Blocking



Effective November 2, 2020 (delayed compliance date: 4/5/2021), health providers, developers of certified health IT, and health information networks and exchanges are prohibited from engaging in any practice that is *likely* to interfere with, prevent, or materially discourage the **access**, **exchange** or **use** of electronic health information (EHI).

Information Blocking

eClinicalWorks Policy

The screenshot displays the eClinicalWorks Knowledge Base interface. A modal window titled "eCW Information Blocking Notice - Feb 2021" is open, showing a document with two pages. The document content includes:

eClinicalWorks
February 17, 2021
RE: Information Blocking

Dear eClinicalWorks Customer,

The information blocking regulation is set to take effect on Monday, April 5, 2021. We want to remind our customers of this upcoming applicability date and to provide an update on the resources available to help you navigate this important regulation.

As a reminder, the ONC Cures Act Final Rule includes the information blocking regulation, which prohibits an Actor from engaging in any practice that is likely to interfere with the access, exchange, or use of Electronic Health Information. Healthcare providers, health IT developers of certified health IT, and health information networks and exchanges are all considered Actors under the regulation.

eClinicalWorks has been researching and collaborating on the interpretation and implementation of the information blocking regulation. The knowledge we have gained, and continue to gain, through these collaborations has informed our approach to implementing the regulation in our company and EHR software. As we continue to gain new insights, we will be making appropriate enhancements to the software that will aid healthcare providers in their information blocking compliance efforts, while maintaining flexibility for clinicians in the provision of care. Some of these enhancements will be incorporated into an updated version of the eClinicalWorks EHR software prior to April 5, 2021, while other improvements will be implemented only after further research and feedback is obtained.

The background interface shows a navigation menu with "Knowledge Base" and "Implementation" tabs. A list of articles is visible, including "CVS e-Prescribing Outage - Feb 18 2021", "eCW Information Blocking Notice - Feb 2021", "eCW Usability Referrals Study - Feb 2021", "eCW Recommended Practice - Manual Patient", "eCW Logging in to eClinicalTouch Version 3.0", "Walgreens Scheduled Maintenance - Feb 12 2021", "eCW Minimum iOS Version Requirement for", "eCW MAQ Dashboard Notification - Planned", "eCW UDS 2020 II Notification - Feb 2021", and "eCW Vaccine Information Sheets - Feb 2021". A "Live Chat" button is also present.

Elements of Information Blocking



➤ Electronic Health Information (EHI)

- In the context of Information Blocking, Electronic Health Information means Electronic Protected Health Information (ePHI) to the extent that the ePHI would be included in a designated record set. It is limited to data elements in USCDI in the initial phase of implementation of this rule.



➤ Knowledge Standard

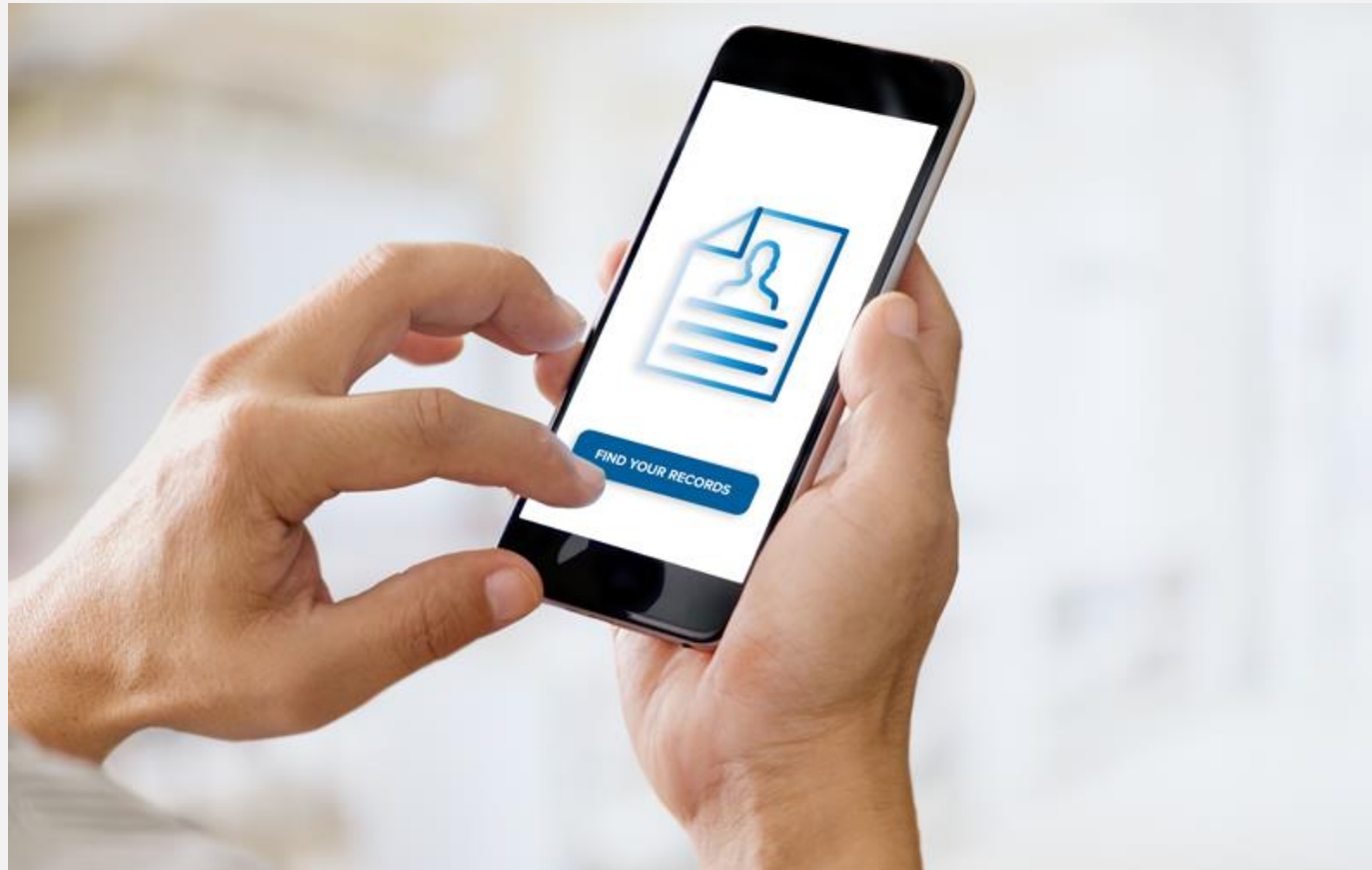
- For health care providers, they should not act in ways that they “know that such practice is unreasonable and is likely to interfere with the access, exchange, or use of EHI.”



➤ “Actors” regulated by the information blocking provision are:

- Health Care Providers
- Health IT Developers of Certified Health IT
- Health Information Exchanges and Networks

Need for FHIR?



eClinicalWorks Developer Portal

connect.healow.com

connect.healow.com/apps/jsp/dev/register.jsp

healow
Health and Online Wellness

Log In As Developer

Connect.Code.Integrate

Become a healow developer & connect with healow network

healow lets you integrate your application solutions with providers that use eClinicalWorks one of the most connected and interoperable EHRs.

Learn More

Clinical Scheduling

Sign up for healow developer account.

Name

First name Last name

E-mail address

john.smith@gmail.com

Password

Password

Confirm your password

Confirm Password

Phone number

+1

Prove you are not a robot

gm5yr

Can't read the text above? Try another text or Play audio

Please enter captcha here

Submit

On Demand Activation of FHIR APIs

Interoperability Hub

The screenshot displays the 'Interoperability Settings' interface. On the left is a navigation menu with options: Network, Commonwealth Health Alliance, Carequality Framework, FHIR (selected), Consents, and Registries. The main content area is titled 'Fast Healthcare Interoperability Resources (FHIR)' and includes the text: 'Activation will take you through a wizard to enable the FHIR API for your entire practice.' Below this is a blue header for the 'On-Demand FHIR API for 3rd Party Application Access Activation Consent Form'. The main body contains a paragraph of legal text, followed by the heading 'Addendum For Healow FHIR Cloud Service for Patient-Facing Apps'. A table with two columns and three rows details the functionality, license, and initial term. Below the table, a note states: 'Fee: \$ 0.1 per successful transaction request made by the 3rd party developer application which receives a response back with data from eClinicalWorks.' At the bottom right, there is a checked checkbox for 'I Accept FHIR API for 3rd Party Application Access Terms' and 'Save' and 'Deactivate' buttons.

Interoperability Settings -

- Network
- Commonwealth Health Alliance
- Carequality Framework
- FHIR**
- Consents
- Registries

Fast Healthcare Interoperability Resources (FHIR)

Activation will take you through a wizard to enable the FHIR API for your entire practice.

On-Demand FHIR API for 3rd Party Application Access Activation Consent Form

This Addendum to the License Agreement between eClinicalWorks, LLC, and Customer (the entity that has licensed the eClinicalWorks software and services) would make additional software and/or services available to Customer and constitutes a binding agreement between eClinicalWorks and Customer. The relationship between eClinicalWorks and Customer will continue to be subject to the License Agreement, each Terms of Use, this Addendum (if accepted), and any other addenda to which eClinicalWorks and Customer have agreed.

Addendum For

Healow FHIR Cloud Service for Patient-Facing Apps

Functionality	eCW supports FHIR through Healow FHIR Cloud Service, and Customer desires to add the Healow FHIR Cloud Service (Patient Electronic Access through an API method).
License	This service is made available by eClinicalWorks through a license with healow, LLC.
Initial Term	12 months.

There is no additional charge for the Healow FHIR Cloud Service until December 31, 2020. Healow reserves the right to introduce costs for this service. Customer will be given 30 days notice.

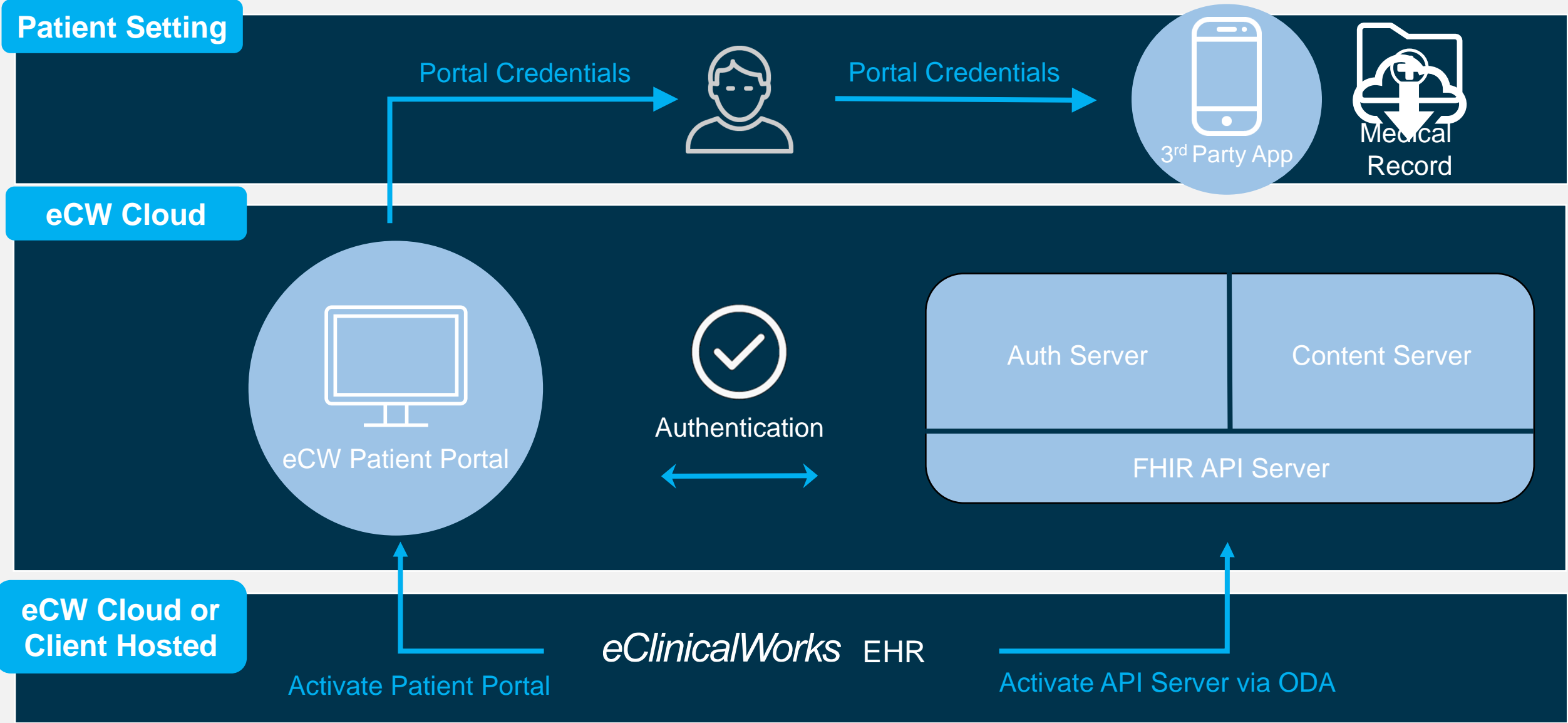
Fee: \$ 0.1 per successful transaction request made by the 3rd party developer application which receives a response back with data from eClinicalWorks.

I Accept FHIR API for 3rd Party Application Access Terms

You will be signing up to share information with third party applications when you click save button To learn more about FHIR click [here](#)

Save Deactivate

Patient Apps Technical Workflow



Direct

Secure

Messaging

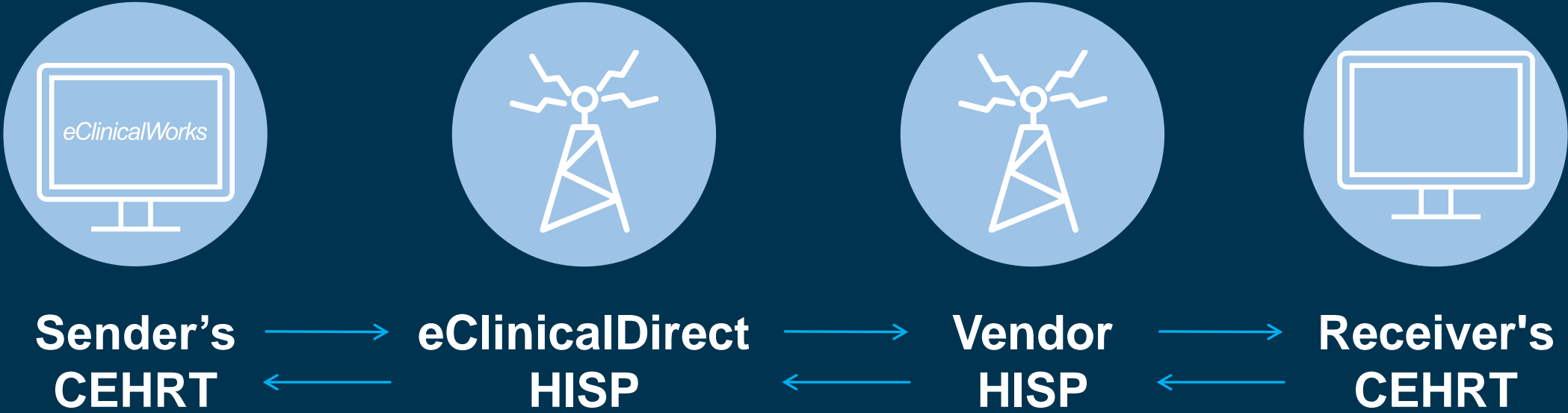


DirectTrust™

eClinicalDirect HISP



Direct Messaging Architecture



CEHRT = Certified Electronic Health Records Technology

Immunization Registries

NY State NYSIIS

- Uni-directional immunizations feed is LIVE
 - Bi-directional component in progress
- COVID updates requested (Priority Groups) are LIVE

NY City CIR

- Bi-directional immunizations feed is LIVE
- COVID updates requested (Priority Groups) are LIVE

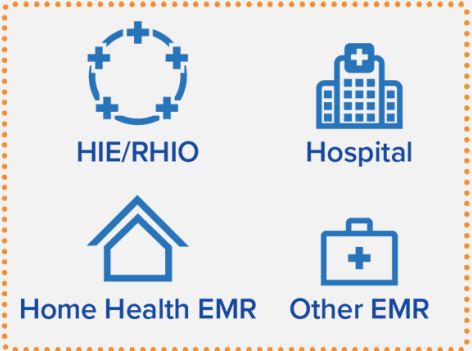
Nationwide Data Sharing



Nationwide Data Sharing



(National Record Locator Services)



Members



Participating Organizations

Search for Carequality-enabled Providers Near You

Search By Name: Search By City:
Search By State: New York Search By Zip:
Radius:

Organization Name	City	State
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<https://carequality.org/active-sites-search/>

Care Provider Sites

To see what practitioners currently are live with CommonWell Services, click on the map. You also can filter by venue of care or search the full list of sites below.

Care Provider Site: City/State/Zip:
Filter by Distance: Filter by Category:

The information contained in this map is proprietary and the copyright (© 2014-20) of CommonWell Health Alliance. Physical or electronic storage or distribution of this information by parties other than CommonWell Health Alliance is strictly prohibited.

Show entries

Provider Name	Category	City	State	Zip Code
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<https://www.commonwellalliance.org/who-is-connected>

Automated Query

Appointment on Friday, September 29, 2017

Patient* x Name Info

Doe,John | 205-111-2222 | chander.m@eclinicalworks.com

Appointment

Facility* POS Provider*

Date* Claim Provider

Time*

Resource*

Ref. Provider Email

Visit

Visit Type* x

Reason

Visit Status* x **Diagnosis**

Pager Status

Billing

Automatic query upon arrival

Overview DRTL History CDSS Ordersets Template **eEHX**

Doe, John, 35Y, M as of 09/29/2017

Problem List SNOMED

[Click here to view Patient external documents](#)

PROBLEM LIST

- 10 J45.909 Asthma
- 10 D18.00 Hemangioma

ALLERGIES

- CAT HAIR EXTRACT
- CARBAMAZEPINE
- TETRACYCLINE

MEDICATION

Active Medication

- LORazepam (ATIVAN) 0.5 MG tablet(Lorazepam 0.5 Mg Po Tabs) 0.5 Oral
- cetirizine (ZvrTFC) 10 MG tablet(Cetirizine Hcl 10 Mg Po Tabs) 10

Document notification on the Interactive Clinical Wizard



PRISMA

One Patient, One Record

PRISMA

eClinicalWorks' Healthcare Search Engine

- healow Insights consolidates data from external networks and presents a longitudinal view of the patient record with all internal and external data
- PRISMA allows that full record of data to be searchable

Smith, Gary . 65 Y . M INFO HUB ASK EVA

2800 Opryland Dr., Nashville, TN37214
 09/14/1955 | 774-275-0482
 gary1955@gmail.com

Allergies Billing Alerts

Wt: 08/06/20:185 lbs.
 Appt(L): 08/04/20 (SW)
 Appt(N): 10/28/20 (SW)
 Trans: No

Ins: BCBS PPO
 Acc Bal:\$ 0.00
 Guar: Gary Smith
 Gr Bal: \$0.00

NOTES

SECURE NOTES

HEALOW

Progress Note Scribe Orders Quick Order 08/04/2020

Patient: Smith, Gary **DOB:** 09/14/1955 **Age:** 64 Y **Sex:** Male
Phone: 774-275-0482 **Primary Insurance:**
Address: 2800 Opryland Dr, Nashville, TN-37214
Account Number: 22128 **Case Label:** Encounter **Date:** 08/04/2020 **Provider:** Sam Willis, MD TEST
Appointment Facility: Westborough Facility

Subjective:

- Chief Complaint(s):**
- Diabetes insipidus
 - back pain
 - abdominal pain

HPI:

Diabetes insipidus

The patient presents for follow-up of diabetes insipidus which was recently diagnosed. The patient's last follow-up was weeks ago. The patient complains of polyuria with urination 4-6 times daily. The patient complains of polydypsia with fluid ingestion hourly. The patient also reports fatigue lasting months. Laboratory testing has included urine osmolality. Testing/procedures have included no tests/procedures. Medication(s) include tegretol. Response to therapy has been fair.

Current Medication:

Taking

- Amoxicillin 400 MG/5ML Suspension Reconstituted as directed Orally.

Medical History:

- abdominal pain
- Abdominal adhesions

Allergies/Intolerance:

Fish Oil

Surgical History:

Implants:

Hospitalization:

Family History:

Social History:

Member Insights healow Insights 11 UpToDate

Overview DRTLA History CDSS Order Sets Templates Dental

SMITH, Gary Sep 14, 1955 (65 yo M) Acc No. 22128

Problem List SNOMED

Right Panel data last modified on: 10/07/2020 12:14 PM

Global Alerts

Advance Directive

Problem List

10	E11.00	Type 2 diabetes mellitus with hyperosmolarity without nonketotic hyperglycemic-hyperosmolar coma (NKHHC)
10	I10	Accelerated hypertension
10	I71.3	Abdominal aortic aneurysm, ruptured

Potential Condition(s) for Evaluation

Clinical Inference and Potential Conditions

Respiratory Failure	hl Health Plan
CHRONIC KIDNEY DISEASE, STAGE 5 - 136	hl Health Plan
CHRONIC KIDNEY DISEASE, MODERATE (STAGE 3) - 138	hl Health Plan
VASCULAR DISEASE - 108	hl Health Plan
CHRONIC OBSTRUCTIVE PULMONARY DISEASE - 111	hl Health Plan

PRISMA Search



PRISMA Overview **Records** Healow Hub

All Records All Sources

All Facilities Mayo Clinic New Hanover Regional Medical Center Riverside Health System Westborough Facility Premier Orthopedic Surgery Center

Records Timeline Collapse All

- Creation Date 10/25/2020: Discharge Summary**

Provider Willis, Sam <i>Internal Medicine</i>	Facility Mayo Clinic	Admission Date 10/25/2020	Discharge Date 10/25/2020	Dx Principal Diagnosis Arthroplasty Total Shoulder Replacement Status Post Right
--	--------------------------------	-------------------------------------	-------------------------------------	--
- Creation Date 10/20/2020: Discharge Summary**

Provider Smith, Jones DO <i>Internal Medicine</i>	Facility New Hanover Regional Medical Center	Admission Date 10/20/2020	Discharge Date 10/20/2020	Dx Principal Diagnosis Right upper quadrant abdominal pain
--	--	-------------------------------------	-------------------------------------	--
- Creation Date 10/09/2020: Patient Summary (CCD)**

Provider Willis, Sam <i>Internal Medicine</i>	Facility Riverside Health System	Admission Date 10/09/2020	Discharge Date 10/09/2020	Dx Principal Diagnosis Otitis media
--	--	-------------------------------------	-------------------------------------	---
- Creation Date 08/26/2020: Discharge Summary**

Provider Johnson, Amy MD <i>Emergency Medicine</i>	Facility Riverside Health System	Admission Date 08/26/2020	Discharge Date 08/26/2020	Dx Principal Diagnosis Acute otitis media, right
---	--	-------------------------------------	-------------------------------------	--

Results: 11 Prev Page 1 of 2 Next

Creation Date 10/25/2020: Discharge Summary

Last refreshed: 10/25/2020 02:34 PM

Jump to

Patient: Smith, Gary, **Provider:** Willis, Sam
DOB: 09/14/1955 **Sex:** Male **Date:** 10/25/2020

Social History

Tobacco Use	Types	Packs/Day	Years Used	Date
Never Smoker				
Smokeless Tobacco: Never Used				

Alcohol Use	Drinks/Week	oz/Week	Comments
No			

Sex Assigned at Birth	Date Recorded
Not on file	

as of this encounter

Lab Result

PT (Prothrombin Time) with INR (10/25/2020 3:45 AM)

Component	Value	Ref Range
Prothrombin Time, P	10.4	9.4 - 12.5 sec
INR	0.9 Comment: ----ADDITIONAL INFORMATION---- Standard intensity warfarin therapeutic range: 2.0 to 3.0???? High intensity warfarin therapeutic range: 2.5 to 3.5	0.9 - 1.1

Specimen	Performing Laboratory
----------	-----------------------

echo



All Results

No suggested keywords found



PRISMA Overview Records Healow Hub

All All Records All Sources

All Facilities Mayo Clinic New Hanover Regional Medical Center Riverside Health System Westborough Facility Premier Orthopedic Surgery Center

Records Results refreshed: Date: 10/20/2020 01:43 PM

Creation Date 07/14/2020: Discharge Summary

Lab Result
 ... Type of Study: TTE procedure: **ECHO** 2D, **Echocardiogram** complete w/bubble if app. HR: 81 bpmBP: 106/75 mmHg
 Indications ...
 ... Height 63 inches Weight 173 Lb Type of Study: TTE procedure: **ECHO** 2D, **Echocardiogram** complete w/bubble if app ...
 ... **Echocardiogram** complete w/Bubble if app (07/10/2020 4:01 PM EDT) Impressions ...
 ... Performed At Final Report Transthoracic **Echocardiogram** ...
 ... Interface, Rad Results In - 07/10/2020 4:17 PM EDT Final Report Transthoracic **Echocardiogram** Demographics ...

Procedures
 ... this procedure are in the results section . **ECHOCARDIOGRAM** ...

Creation Date 04/26/2020: Patient Summary (CCD)

Problem List
 ... Overview: Proceed with **echocardiogram** Thrombophlebitis 03/09/2020 ...

Results: 2 Prev Page 1 of 1 Next

Creation Date 07/14/2020: Discharge Summary

Patient: Smith, Gary, Provider: Smith, Jones DO, Smith, Jones DO, Smith, Jones DO
 DOB: 09/14/1955 Sex: Male Date: 07/14/2020

Social History

Tobacco Use	Types	Packs/Day	Years Used	Date
Never Smoker				
Smokeless Tobacco: Never Used				

Alcohol Use	Drinks/Week	oz/Week	Comments
No			

Sex Assigned at Birth	Date Recorded
Not on file	

Job Start Date	Occupation	Industry
Not on file	Not on file	Not on file

Travel History	Travel Start	Travel End
No recent travel history available.		

as of this encounter

Lab Result

Basic Metabolic Profile (BMP): Glucose, BUN, CO2-, Na+, K+, Cl-, Ca+, SCr, Anion Gap (07/14/2020 5:36 AM EDT)

Component	Value	Ref Range	Performed At
Sodium	141	136 - 145 mmol/L	NEW HANOVER REGIONAL MEDICAL CENTER - HLAB
			NEW HANOVER

echo

All Results No suggested keywords found

PRISMA Overview Records Healow Hub

All All Records All Sources

All Facilities Mayo Clinic New Hanover Regional Medical Center Riverside Health System Westborough Facility Premier Orthopedic Surgery Center

Records Results refreshed: Date: 10/20/2020 01:43 PM

Creation Date 07/14/2020: Discharge Summary

Lab Result
 ... Type of Study: TTE procedure: **ECHO** 2D, **Echocardiogram** complete w/bubble if app. HR: 81 bpmBP: 106/75 mmHg
 Indications ...
 ... Height 63 inches Weight 173 Lb Type of Study: TTE procedure: **ECHO** 2D, **Echocardiogram** complete w/bubble if app ...
 ... **Echocardiogram** complete w/Bubble if app (07/10/2020 4:01 PM EDT) Impressions ...
 ... Performed At Final Report Transthoracic **Echocardiogram** ...
 ... Interface, Rad Results In - 07/10/2020 4:17 PM EDT Final Report Transthoracic **Echocardiogram** Demographics ...

Procedures
 ... this procedure are in the results section . **ECHOCARDIOGRAM** ...

Creation Date 04/26/2020: Patient Summary (CCD)

Problem List
 ... Overview: Proceed with **echocardiogram** Thrombophlebitis 03/09/2020 ...

Results: 2 Prev Page 1 of 1 Next

Creation Date 07/14/2020: Discharge Summary

echo 4/8 Jump to

Diff Type	AUTO	REGIONAL MEDICAL CENTER - HLAB
Specimen		
Blood		
Performing Organization	Address	City/State/Zipcode
NEW HANOVER REGIONAL MEDICAL CENTER - HLAB	2131 South 17th Street	Wilmington, NC 28402
		Phone Number
		910-343-7072

Echocardiogram complete w/Bubble if app (07/10/2020 4:01 PM EDT)

Impressions	Performed At
Final Report Transthoracic Echocardiogram Demographics Patient name Smith Gary Date of Birth 07/02/1979 MRN # 12652867 Gender male Account # 225370231 Accession # CR2264193-18 Interpreting Nick Bobby Referring Nicholas SARA A D Physician Physician SonographerSteve SteveStudy Date07/10/2020 03:32 PM Type of Study: TTE procedure: ECHO 2D, Echocardiogram complete w/bubble if app. HR: 81 bpmBP: 106/75 mmHg Indications: Endocarditis. Measurements LV Diastolic Dimension: 4.43 cm Septum Diastolic: 0.77 cm LV PW Diastolic: 0.9 cm LVOT: 2 cm LA Volume: 32.7 ml Doppler Measurements: AV Peak Gradient: 9.73 mmHg MV Peak E-Wave: 1.33 m/s AV Mean Gradient: 6 mmHg MV Peak A-Wave: 1.3 m/s AV Area (Continuity):1.56 cm^2 MV E/A Ratio: 1.02 % MV Peak Gradient: 7.08 mmHg PV Peak Velocity: 1.05 m/s PV Peak Gradient: 4.41 mmHg E' Septal Velocity:10.4 m/s E' Lateral Velocity:11 m/s Findings Mitral Valve The mitral valve appears structurally normal. Aortic Valve There is a normal appearing trileaflet aortic valve. Tricuspid Valve The tricuspid valve is not well visualized. Pulmonic Valve The pulmonic valve is not well visualized. Trivial pulmonary regurgitation is seen. Left Atrium The left atrial size is normal. Left Ventricle There is normal left ventricular size. Normal left ventricular diastolic filling pattern. Normal regional wall motion Global left ventricular systolic function is normal. The estimated left ventricular ejection fraction is 60 - 65%. Right Atrium The right atrial size is normal. Right Ventricle There is grossly normal right ventricular size and function. Pericardium There is no evidence of pericardial effusion. Interatrial Septum The interatrial septum is not well visualized, but appears to be grossly intact. Miscellaneous The aortic root is normal in size. The inferior vena cava is normal in size and demonstrates normal inspiratory collapse. Conclusions Summary There is normal left ventricular size. Normal left ventricular diastolic filling pattern. Normal regional wall motion Global left ventricular systolic function is normal. The	NHRMC RAD



ekg



All Results

No suggested keywords found



PRISMA Overview Records Healow Hub

All All Records All Sources

All Facilities Mayo Clinic New Hanover Regional Medical Center Riverside Health System Westborough Facility Premier Orthopedic Surgery Center

Records Results refreshed: Date: 10/20/2020 01:43 PM

Creation Date 10/20/2020: Discharge Summary

Lab Result

Andrew Smith, Jr, M.D. Hanover Gastroenterology ECG ... with repolarization abnormality Lateral infarct, age undetermined Abnormal ECG When compared with ECG of 21-APR-2002 12:34 ... Left ventricular hypertrophy with repolarization abnormality Lateral infarct, age undetermined Abnormal ECG When compared ... with ECG of 21-APR-2002 12:34, No significant change was found Confirmed by Thomas, M.D., THOMAS (119) on 10/18/2020 6:03:35 PM ...

Procedures

ECG 12-LEAD Routine 10/18/2020 10:41 AM EDT Results for this procedure are in the ...

Creation Date 08/26/2020: Discharge Summary

Lab Result

EKG (08/26/2020 12:58 AM) Narrative ... Ordered by an unspecified provider. EKG 12 lead (08/26/2020 10:34 PM ... atrial enlargement Borderline ECG No previous ECGs available Confirmed by Johnson MD, Amy (634) on 7/08/2020 11:00:14 PM ... Procedure Note Interface, Ekg ... - 08/26/2020 11:00 PM EDT Normal sinus rhythm Possible Left atrial enlargement Borderline ECG No ...

Creation Date 07/14/2020: Discharge Summary

Lab Result

ECG 12 lead (07/09/2020 6:34 AM EDT) Component Value Ref ... Normal sinus rhythm Low voltage QRS Borderline ECG When compared with ECG of 04-SEP ... Interface, Rad Results In - 07/10/2020 1:40 PM EDT Normal sinus rhythm Low voltage QRS Borderline ECG ... When compared with ECG of 04-SEP-2020 23:48, No significant change was found Confirmed by Tracey, MD, Leo (3303) on 9/6/2020 1:40:19 PM ... ECG 12 lead (07/08/2020 11:48 PM EDT ...

Procedures

ECG 12-LEAD Routine 07/09/2020 6:34 AM EDT Results for this procedure are in ... Results for this procedure are in the results section . ECG 12 ...

tylenol



All Results

acetaminophen ofirmev mapap pharbetol fverall tylophen



PRISMA Overview Records Healow Hub

All All Records All Sources

All Facilities Mayo Clinic New Hanover Regional Medical Center Riverside Health System Westborough Facility Premier Orthopedic Surgery Center

Records Results refreshed: Date: 10/20/2020 01:43 PM

Creation Date 10/09/2020: Patient Summary (CCD)
Medication
 ... affected ear Otic Twice a day 01 Oct, 2020 Active **Acetaminophen** 500 MG 2 tablets as needed Orally every 6 hrs 01 Oct, 2020 Active ...

Creation Date 08/02/2020: Unstructured Record
Unstructured Document
 ... Fainting denies. Provider: Sam Willis, MD Date: 09/15/2020 10/19/2020 Print Preview 4/6 SMITH, Gary DOB: 09/14/1955 (65 yo M) Acc No. 9165 DOS: 09/15/2020 Headache denies. Medications: Taking **Tylenol** 325 MG ...

Creation Date 03/20/2020: Patient Summary (CCD)
Medication
 ... 1 tablet as needed Orally every 6 hrs Active **Acetaminophen** 500 MG 2 capsules as needed Orally every 6 hrs ...

Results: 3 Prev Page 1 of 1 Next

Creation Date 10/09/2020: Patient Summary (CCD)

tylenol 1/1 Jump to

Problem	Unspecified otitis externa, left ear	H60.92	Active	1089331000119109
---------	--------------------------------------	--------	--------	------------------

Medication

Medication	SIG (Take, Route, Frequency, Duration)	Start Date	End Date	Status
Augmentin 875-125 MG	1 tablet Orally every 12 hrs for 10 day(s)	01 Oct, 2020		Active
Benadryl Allergy 25 MG	1 tablet as needed Orally every 8 hrs	01 Oct, 2020		Active
Ciprodex 0.3-0.1 %	4 drops into affected ear Otic Twice a day	01 Oct, 2020		Active
Acetaminophen 500 MG	2 tablets as needed Orally every 6 hrs	01 Oct, 2020		Active

Immunizations

No Information

Encounters

Encounter	Location	Date	Provider	Diagnosis
Riverside Doctors' Hospital	1500 Commonwealth Avenue, Willburg, VA 23185-5229	18 Jul, 2020	Sam Willis	Unspecified otitis externa, left ear H60.92 and Acute infection of left ear H66.92

Plan Of Treatment

New Follow up Patient Consult

NextGen Connected Health Solutions

An Introduction

Muhammad Chebli & Heather Vile

February 2021



Presenters



Muhammad Chebli
VP, Solutions

[in linkedin.com/in/muhammadchebli/](https://www.linkedin.com/in/muhammadchebli/)

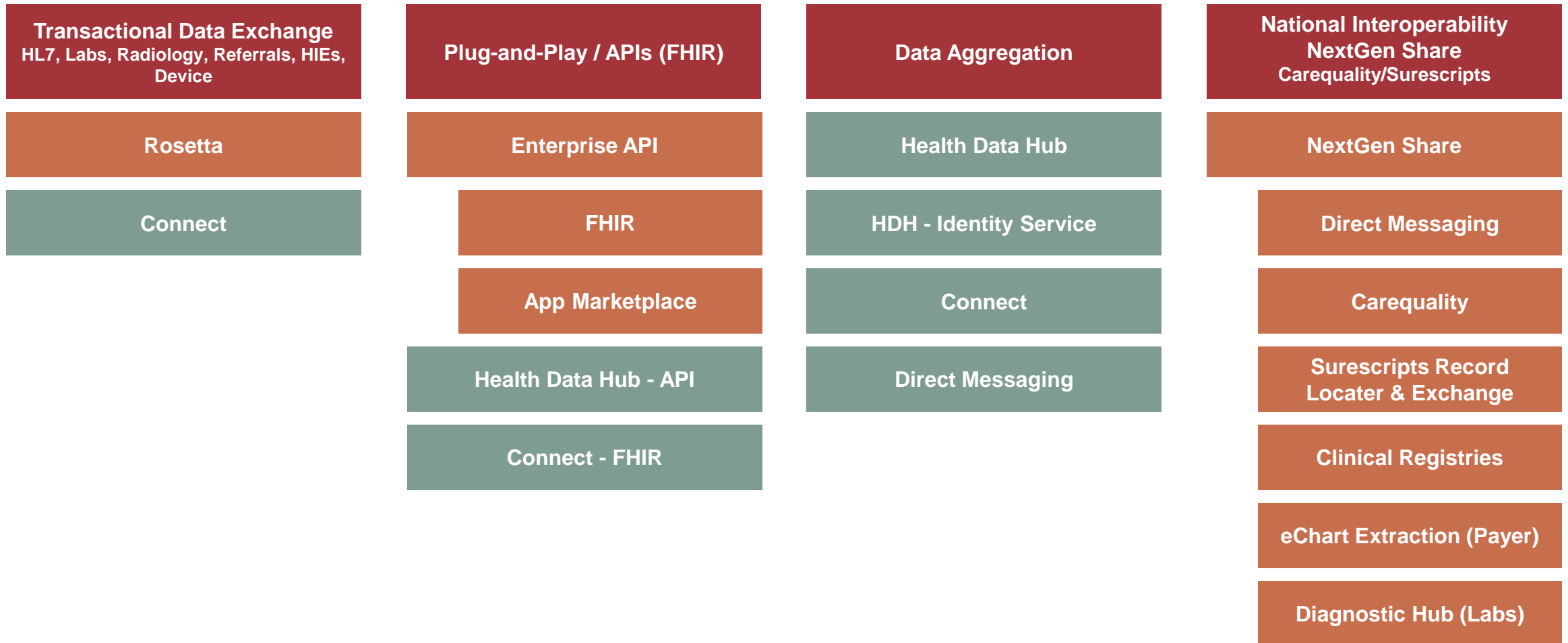


Heather Vile
Interoperability Product Manager

[in linkedin.com/in/heather-vile/](https://www.linkedin.com/in/heather-vile/)

Connected Health Solutions

■ For NextGen EHR Customers
 ■ For any EHR



NextGen Data Exchange by the Numbers

221

Million sent & received
secure Direct
Messages†

2.1

Million directory
addresses in NextGen
Share (largest in nation) †

72

Million clinical docs
exchanged thru
Carequality‡

170

Million patient records in
the NextGen Record
Locator Service†

71%

Of all clinical exchanges
are with a non-NextGen
system†

30

Million clinical registry
document
submissions‡

6.5

Million clinical docs
exchanged with
insurance cos. & payers‡

75

Million Carequality
queries from external
systems / month†

Sources: † NextGen Share Platform Reports 10/2020, ‡ NextGen Share Bastion Report 10/2020

Connectivity Options

- Local and Regional Health Information Exchange
 - NextGen technology powers three New York state HIEs:



- State & regional immunization registries
- Carequality & CommonWell
- Direct Messaging
- FHIR and API connectivity to trusted 3rd party apps & services
- In-office medical devices
- Point-to-point interfaces

The Challenge of Finding the Right Data *in* the CCD

- They are frequently too long, can be 10+ pages long (printed)
- They are hard to navigate
- It is difficult to find relevant & critical data
- There is a fixed order of elements and different specialties may need to focus on different information
- And more

Content Overload

Recipients of C-CDAs typically are overwhelmed by the amount of data each document contains

Continuity of Care Document (C-CDA) (Encounter date: 02/03/2017 01:47 AM)	
Patient	2017 February3
Date of birth	August 8, 1972
Sex	Male
Race(s)	
Ethnicity	
Language(s)	
Contact info	647 New West Ave. Troy, MI 48084
Patient IDs	2.16.840.1.113883.3.109.2.215.2.2.1.0
Document Id	b4962eeb-42ec-4606-873a-2dd569c6ebc6 2.16.840.1.113883.3.109.3.6659.4.2.1.80210.2.2.1
Document Created:	February 3, 2017, 01:52:16, PST
Author	Yvan Charpentier
Contact info	55 LAKE AVE North Worcester, MA 01655 Work Phone: +1-7744422173
Encounter Id	46c77819-e483-4d4d-9570-e7d7b3890411 2.16.840.1.113883.3.109.3.6659.4.2.1.80210.2.2.1
Encounter Date	at February 3, 2017, 01:47
Signed	Yvan Charpentier at February 3, 2017, 01:52:16, PST
Contact info	55 LAKE AVE North Worcester, MA 01655 Work Phone: +1-7744422173
Informant	Yvan Charpentier of Gold PCP
Contact info	55 LAKE AVE North Worcester, MA 01655 Work Phone: +1-7744422173
Information recipient:	Test Provider
Contact info	address not available
Legal authenticator	Yvan Charpentier of Gold PCP signed at February 3, 2017, 01:52:16, PST
Contact info	55 LAKE AVE North Worcester, MA 01655 Work Phone: +1-7744422173
Document maintained by	Gold PCP
Contact info	100 Gold St Horsham, PA 19044, US

Table of Contents

- [Allergies, Adverse Reactions, Alerts](#)
- [Medications](#)
- [Problems](#)

C-CDAs are too long

Sometimes they are 10+ pages when printed

This is a screenshot of a C-CDa document page. The top section has a blue header with the title "Continuity of Care Document (CCD) (Document Date: 03/11/2010 09:00 AM)". Below the header, there are several sections of text and tables, including a table with columns for "ID", "Name", "Type", "Version", and "Status". The bottom part of the page contains a large table with multiple columns and rows of data.

This is a screenshot of a C-CDa document page with a yellow background. It contains a large table with multiple columns and rows of data, including a table with columns for "ID", "Name", "Type", "Version", and "Status".

This is a screenshot of a C-CDa document page with a yellow background. It contains a large table with multiple columns and rows of data, including a table with columns for "ID", "Name", "Type", "Version", and "Status".

This is a screenshot of a C-CDa document page with a yellow background. It contains a large table with multiple columns and rows of data, including a table with columns for "ID", "Name", "Type", "Version", and "Status".

- Demographics
- Medications (21)
- Allergies (10)
- Problems (13)
- Immunizations (3)
- Meds Administered
- Results (3)
- Encounters (19)
- Vital Signs (7)
- Procedures (11)
- Family History (7)
- Social History (2)
- Advanced Directives (1)
- Medical Equipment (4)
- Payers (3)
- Reason For Referral (1)
- Header

This view reflects data relative to the document creation date of 11/06/2017 and may not contain all information available in the original document. Click "Full View" to see the original document.

My User Filter (Default Filter)

Demographics (Name: C-CDAVIEWER UGM, DOB: 1/1/1980, Sex: Male, Age: 37 years old) [Back To Top](#)

C-CDAVIEWER UGM - DOB 1/1/1980 Male - 37 years old

Address: 795 Horsham Horsham, PA 19044
Contact Information: Work Phone: +1-2156577011
 Mobile Phone: +1-2156577014
 Primary Home Phone: +1-2156577010
Race: White, American Indian or Alaska Native
Language: English (Preferred)
Ethnicity: Not Hispanic or Latino

Medications Showing: All (21 of 21) [Back To Top](#)

Medication Name	Directions	Date Started	Date Stopped	? Status When Generated	? Current Status	Dosag	Comments
Spiriva Respimat 1.25 mcg/actuation solution for in...	inhale 2 puff by inhalation route every day	10/17/2017	02/08/2018	Active	Inactive	2 {puff}	
Crestor 20 mg tablet	take 1 tablet by oral route every day	10/17/2017	12/29/2017	Active	Inactive	1 {tbl}	
albuterol sulfate HFA 90 mcg/actuation aerosol inh...	inhale 2 puff by inhalation route every 4 -6 hours as needed	10/17/2017	12/01/2017	Active	Inactive	2 {puff}	
Qvar 80 mcg/actuation Metered Aerosol oral inhaler	inhale 2 puff by inhalation route 2 times every day	10/17/2017	11/30/2017	Active	Inactive	2 {puff}	
Lipitor 20 mg tablet	take 1 tablet by oral route every day	10/17/2017	11/30/2017	Active	Inactive	1 {tbl}	
bumetanide 1 mg tablet	take 1 tablet by oral route every day	10/17/2017	11/15/2017	Active	Inactive	1 {tbl}	
Qvar 40 mcg/actuation Metered Aerosol oral inhaler	inhale 2 puff by inhalation route 2 times every day	10/17/2013	10/17/2013	Inactive	Inactive	2 {puff}	
Vyvanse 50 mg capsule	take 1 capsule by oral route every day in the morning	09/01/2013	09/01/2013	Inactive	Inactive	1 {ca-}	
Humira Pediatric Crohn&#39;s Starter 40 mg/...	take 2 capsule by oral route every day	07/10/2013	07/10/2013	Inactive	Inactive	2 {ca-}	
Abilyfy 20 mg tablet	take 1 tablet by oral route every day	11/06/2012	11/06/2012	Inactive	Inactive	1 {tbl}	
Sovaldi 400 mg tablet	take 1 tablet by oral route every day	11/26/2009	11/26/2009	Inactive	Inactive	1 {tbl}	
OxyContin 40 mg tablet, crush resistant, extended r...	take 1 tablet by oral route every 12 hours	02/24/2009	02/24/2009	Inactive	Inactive	1 {tbl}	
Crestor 40 mg tablet	take 1 tablet by oral route every day	02/24/2009	06/02/2009	Inactive	Inactive	1 {tbl}	
Enbrel SureClick 50 mg/mL (0.98 mL) subcutaneo...	inject 1 milliliter by subcutaneous route every week	03/03/2008	03/03/2008	Inactive	Inactive	1 mL	
Abilyfy 10 mg tablet	take 1 tablet by oral route every day	05/10/2007	05/10/2007	Inactive	Inactive	1 {tbl}	
Nexium 24HR 22.3 mg capsule, delayed release	take 1 capsule by oral route every day	04/09/2007	04/09/2007	Inactive	Inactive	1 {ca-}	
Celebrex 400 mg capsule	take 1 capsule by oral route every day	01/13/2005	01/13/2005	Inactive	Inactive	1 {ca-}	
Symbicort 160 mcg-4.5 mcg/actuation HFA aeroso...	inhale 2 puff by inhalation route 2 times every day in the morning and evening	06/02/2004	06/02/2004	Inactive	Inactive	2 {puff}	
Viagra 100 mg tablet	take 1 tablet by oral route every day as needed approximately 1 hour before...	06/29/2003	06/29/2003	Inactive	Inactive	1 {tbl}	
Cialis 20 mg tablet	take 1 tablet by oral route every day	09/11/2002	09/11/2002	Inactive	Inactive	1 {tbl}	
Stelara 45 mg/0.5 mL subcutaneous syringe	inject 0.5 milliliter by subcutaneous route every 12 weeks (for patients weigh...	09/01/2000	09/01/2000	Inactive	Inactive	0.5 mL	

Allergies Showing: All (10 of 10) [Back To Top](#)

Allergy Description (Criticality)	Onset Date	Resolved Date	Reaction (Severity)	? Status When Generated	? Current Status
Wheat gluten extract	08/16/2017		nausea, pain (moderate)	Active	Active
soy	04/30/2017		hives (severe)	Active	Active
A-ACETYLMADELIC ACID	02/29/2016	05/31/2017	pruritic rash (mild)	No Longer Active	No Longer Active
cow milk allergenic extract	07/02/2012	02/14/2017		No Longer Active	No Longer Active
peanut allergenic extract	02/15/2011	04/15/2015	anaphylaxis (severe)	No Longer Active	No Longer Active
Wheat preparation	11/18/2009	10/08/2014	nausea, pain (moderate)	No Longer Active	No Longer Active
Dacarbazine	04/05/2007		hives (severe)	Active	Active

Custom Viewer – Display Options

- Font Sizing For Individual Users:
- Column Auto Sizing
- Manual Column Ordering

The screenshot displays the CDA Viewer interface for a patient named C-CDViewer UGM. The interface includes a navigation sidebar on the left with tabs for Demographics, Medications (21), Allergies (10), Problems (13), Immunizations (3), Meds Administered, Results (3), Encounters (19), Vital Signs (7), Procedures (11), Family History (7), Social History (2), Advanced Directives (1), Medical Equipment (4), Payers (3), Reason For Referral (1), and Header. The main content area shows the patient's demographic information and two data tables: Medications and Allergies.

Demographics (Name: C-CDViewer UGM, DOB: 1/1/1980, Sex: Male, Age: 37 years old)

C-CDViewer UGM - DOB 1/1/1980 Male - 37 years old

Address: 795 Horsham, Horsham, PA 19044
 Contact Information: Work Phone: +1-2156577011, Mobile Phone: +1-2156577014, Primary Home Phone: +1-2156577010
 Race: White, American Indian or Alaska Native; Language: English (Preferred)
 Ethnicity: Not Hispanic or Latino

Medications (Showing: All (21 of 21))

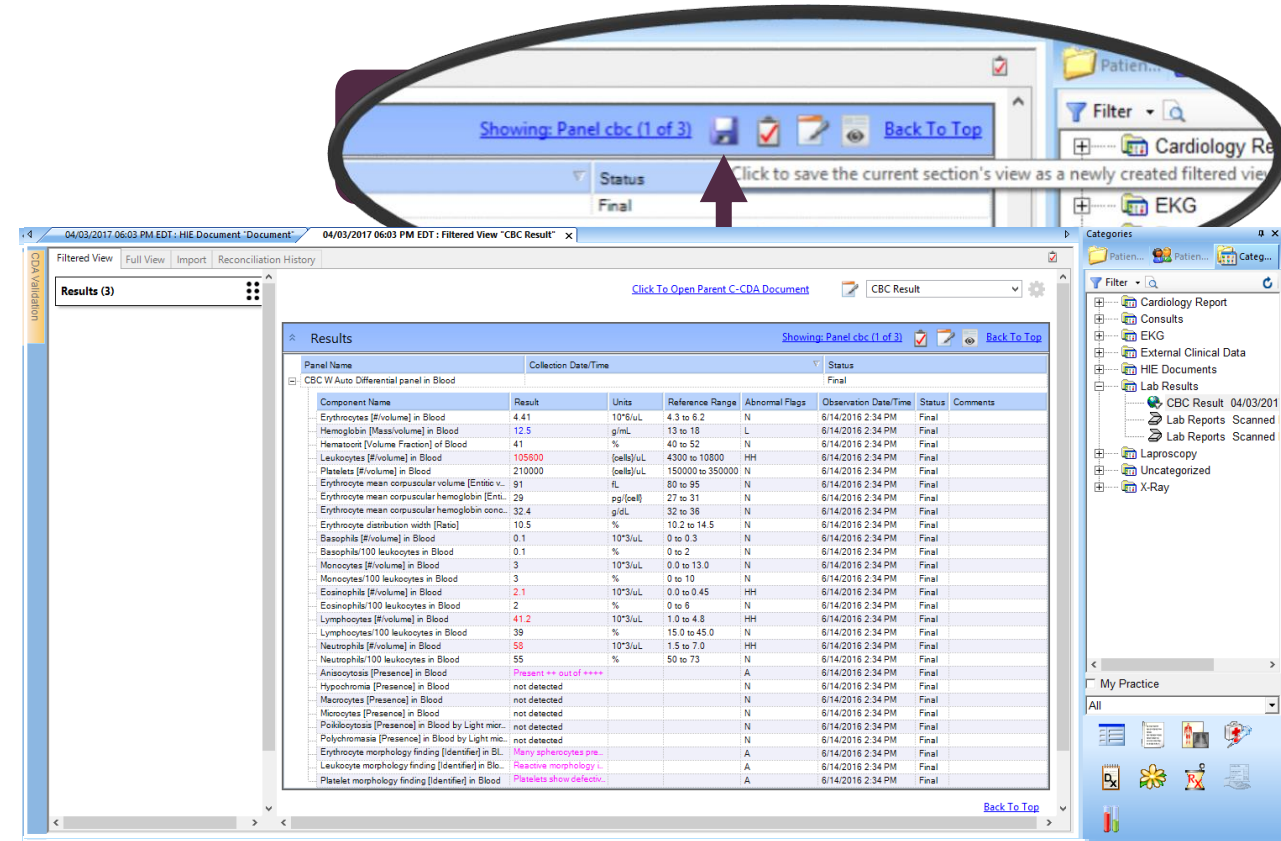
Medication Name	? Current Status	? Status When Generated	Directions	Date Started	Date Stopped	Dosag	Comments
Spiriva Respimat 1.25 mg/actuation solution for in...	Inactive	Active	inhale 2 puff by inhalation route every day	10/17/2017	02/08/2018	2 (puff)	
Crestor 20 mg tablet	Inactive	Active	take 1 tablet by oral route every day	10/17/2017	12/29/2017	1 (tbl)	
albuterol sulfate HFA 90 mcg/actuation aerosol inh...	Inactive	Active	inhale 2 puff by inhalation route every 4 - 6 hours as needed	10/17/2017	12/01/2017	2 (puff)	
Qvar 80 mcg/actuation Metered Aerosol oral inhaler	Inactive	Active	inhale 2 puff by inhalation route 2 times every day	10/17/2017	11/30/2017	2 (puff)	
Lipitor 20 mg tablet	Inactive	Active	take 1 tablet by oral route every day	10/17/2017	11/30/2017	1 (tbl)	
bumetanide 1 mg tablet	Inactive	Active	take 1 tablet by oral route every day	10/17/2017	11/15/2017	1 (tbl)	
Qvar 40 mcg/actuation Metered Aerosol oral inhaler	Inactive	Inactive	inhale 2 puff by inhalation route 2 times every day	10/17/2013	10/17/2013	2 (puff)	
Vyvanse 50 mg capsule	Inactive	Inactive	take 1 capsule by oral route every day in the morning	09/01/2013	09/01/2013	1 (ca...	
Humira Pediatric Crohn&#39;s Starter 40 mg/L	Inactive	Inactive	take 2 capsule by oral route every day	07/10/2013	07/10/2013	2 (ca...	
Abilify 20 mg tablet	Inactive	Inactive	take 1 tablet by oral route every day	11/06/2012	11/06/2012	1 (tbl)	
Sovlati 400 mg tablet	Inactive	Inactive	take 1 tablet by oral route every day	11/26/2009	11/26/2009	1 (tbl)	
OxyContin 40 mg tablet,orush resistant,extended r...	Inactive	Inactive	take 1 tablet by oral route every 12 hours	02/24/2009	02/24/2009	1 (tbl)	
Crestor 40 mg tablet	Inactive	Inactive	take 1 tablet by oral route every day	02/24/2009	06/02/2009	1 (tbl)	
Enbrel SureClick 50 mg/mL (0.98 mL) subcutaneo...	Inactive	Inactive	inject 1 milliter by subcutaneous route every week	03/03/2008	03/03/2008	1 mL	
Abilify 10 mg tablet	Inactive	Inactive	take 1 tablet by oral route every day	05/10/2007	05/10/2007	1 (tbl)	
Nexium 24HR 22.3 mg capsule,delayed release	Inactive	Inactive	take 1 capsule by oral route every day	04/09/2007	04/09/2007	1 (ca...	
Celebrex 400 mg capsule	Inactive	Inactive	take 1 capsule by oral route every day	01/13/2005	01/13/2005	1 (ca...	
Symbicort 160 mcg-4.5 mcg/actuation HFA aerosol...	Inactive	Inactive	inhale 2 puff by inhalation route 2 times every day in the morning and evening 06/02/2004	06/02/2004	06/02/2004	2 (puff)	
Viagra 100 mg tablet	Inactive	Inactive	take 1 tablet by oral route every day as needed approximately 1 hour before...	06/29/2003	06/29/2003	1 (tbl)	
Cialis 20 mg tablet	Inactive	Inactive	take 1 tablet by oral route every day	09/11/2002	09/11/2002	1 (tbl)	
Stielara 45 mg/0.5 mL subcutaneous syringe	Inactive	Inactive	inject 0.5 milliter by subcutaneous route every 12 weeks (for patients weigh...	09/01/2000	09/01/2000	0.5 mL	

Allergies (Showing: All (10 of 10))





Allergy Description (Criticality)	Onset Date	Resolved Date	Reaction (Severity)	? Status When Generated	? Current Status
Wheat gluten extract	08/16/2017		nausea, pain (moderate)	Active	Active
soy	04/30/2017		hives (severe)	Active	Active
A-ACETYLMANDELIC ACID	02/29/2016	05/31/2017	pruritic rash (mild)	No Longer Active	No Longer Active
cow milk allergenic extract	07/02/2012	02/14/2017		No Longer Active	No Longer Active
peanut allergenic extract	02/15/2011	04/15/2015	anaphylaxis (severe)	No Longer Active	No Longer Active
Wheat preparation	11/18/2009	10/08/2014	nausea, pain (moderate)	No Longer Active	No Longer Active
Bevacizumab	04/05/2007		hives (severe)	Active	Active

Custom Viewer – Save Sections to Categories

- When hovering over the Save icon the user will see that they are creating a view of the document
- Views of the document can be saved to a specific category
- When Save is clicked the user is shown a screen to save the category
- Users can give a descriptive name and category for their view and click OK to save the view
- Once saved, the view will open and can be viewed later through the Category view in the EHR



Custom CDA Viewer – Discrete Data Import

- Imports can be done at the row level or section level.
- There are 4 icons available:
 -  - – The item is available to be imported
 -  - – The item already exists in the EHR
 -  - – The item was ignored
 -  - – The item cannot be imported due to missing data

Sections which can be imported:

- Medications
- Meds Administered
- Allergies
- Problems
- Diagnosis Codes
- Procedures
- Immunizations
- Vital Signs
- Family History
- Social History
- Implantable Devices
- *Lab Results - Coming Soon!*

State & regional immunization registries

- New York State Immunization Information System (NYSIIS)
 - Standard immunization export (VXU)
 - Required COVID-19 related updates
 - Custom Query/Response (QBP) currently in beta with 2 clients
- New York Citywide Immunization Registry (CIR)
 - Immunization export (VXU)
 - Query/Response (QBP)

BELIEVE IN BETTER.™

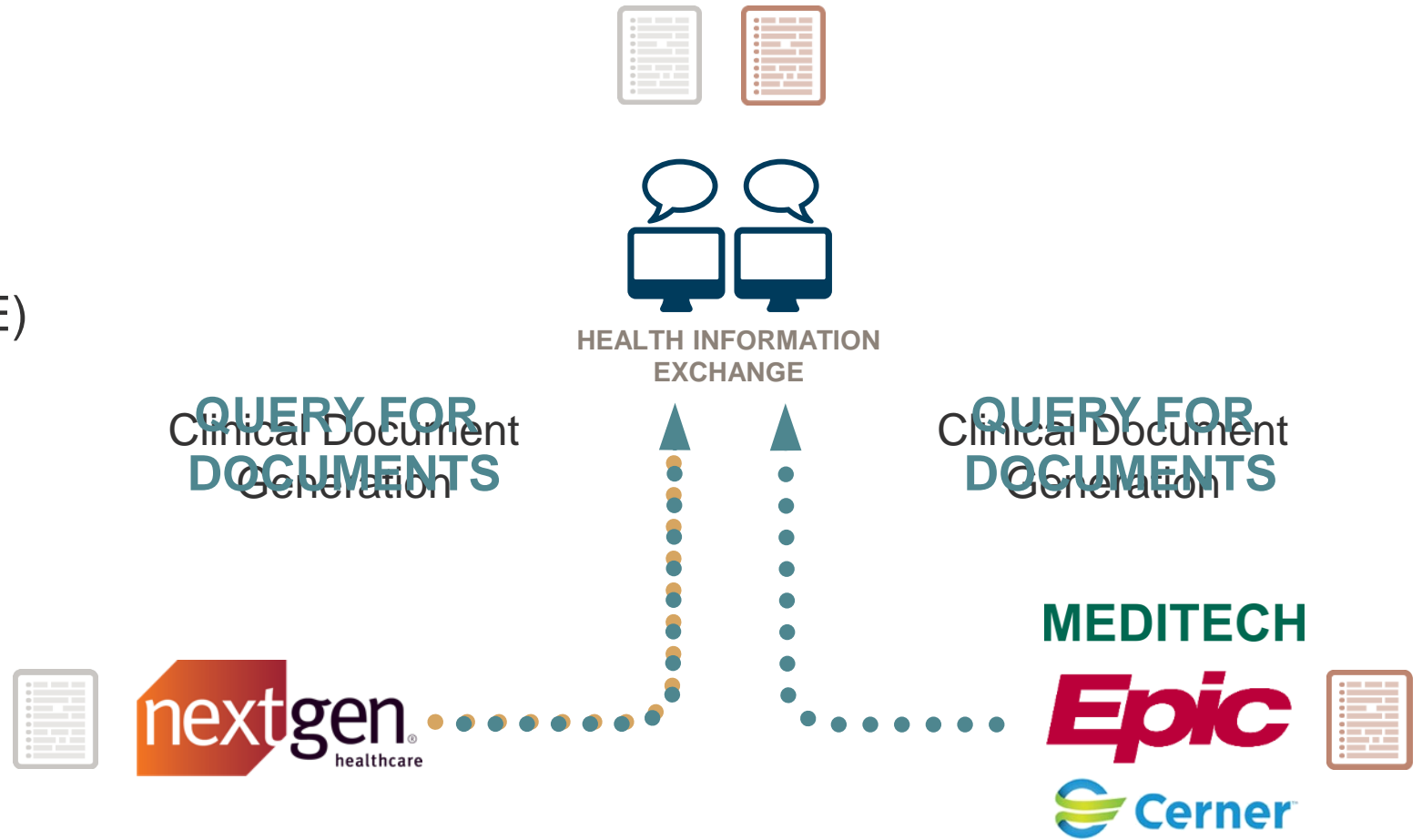


HIE Connectivity

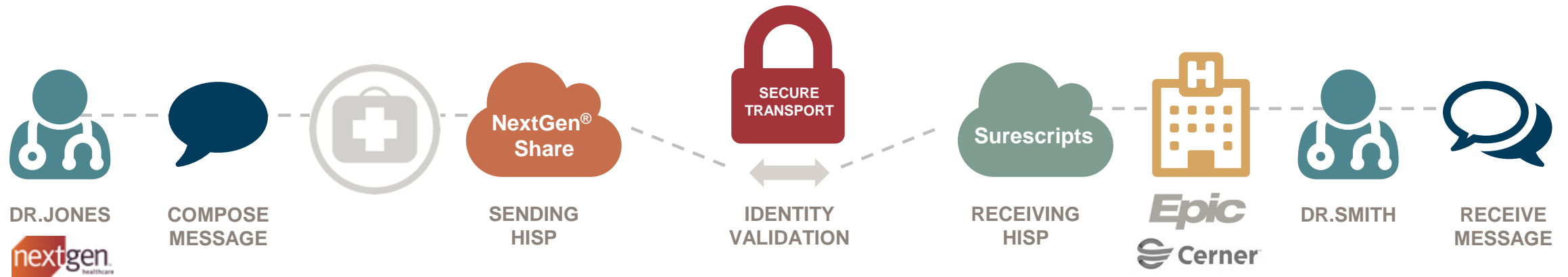
An interface which supports demographics and document exchange (CCD/C-CDA) with a Health Information Exchange (HIE)

Benefits

- Automation of data exchange
- Patient demographic synchronization
- Locked encounter document submission



Direct Messaging



Real-time manual or automated push of data from NextGen EHR to any downstream EHR.

Benefits

- Ability to send structured & unstructured data
- Supports provider-to-provider, provider-to-organization messaging
- Access to the largest searchable provider directory with 2.1 million recipients

Carequality & Surescripts



Provides the ability to query and retrieve patient data from any other Carequality connected system.

Benefits

- Automation of data exchange
- Notification of new document availability from 3rd party systems
- Ability to preview documents prior to import
- Clinical data reconciliation

Patient discovery response

Yes, I have 1 record for John Smith, M (12/07/81)

Patient discovery

Do you have a record for John Smith, M (12/07/81)?




Document retrieval response

Here is the record for John Smith, M (12/07/81)

Document Retrieval

Can I have the record for John Smith, M (12/07/81)?

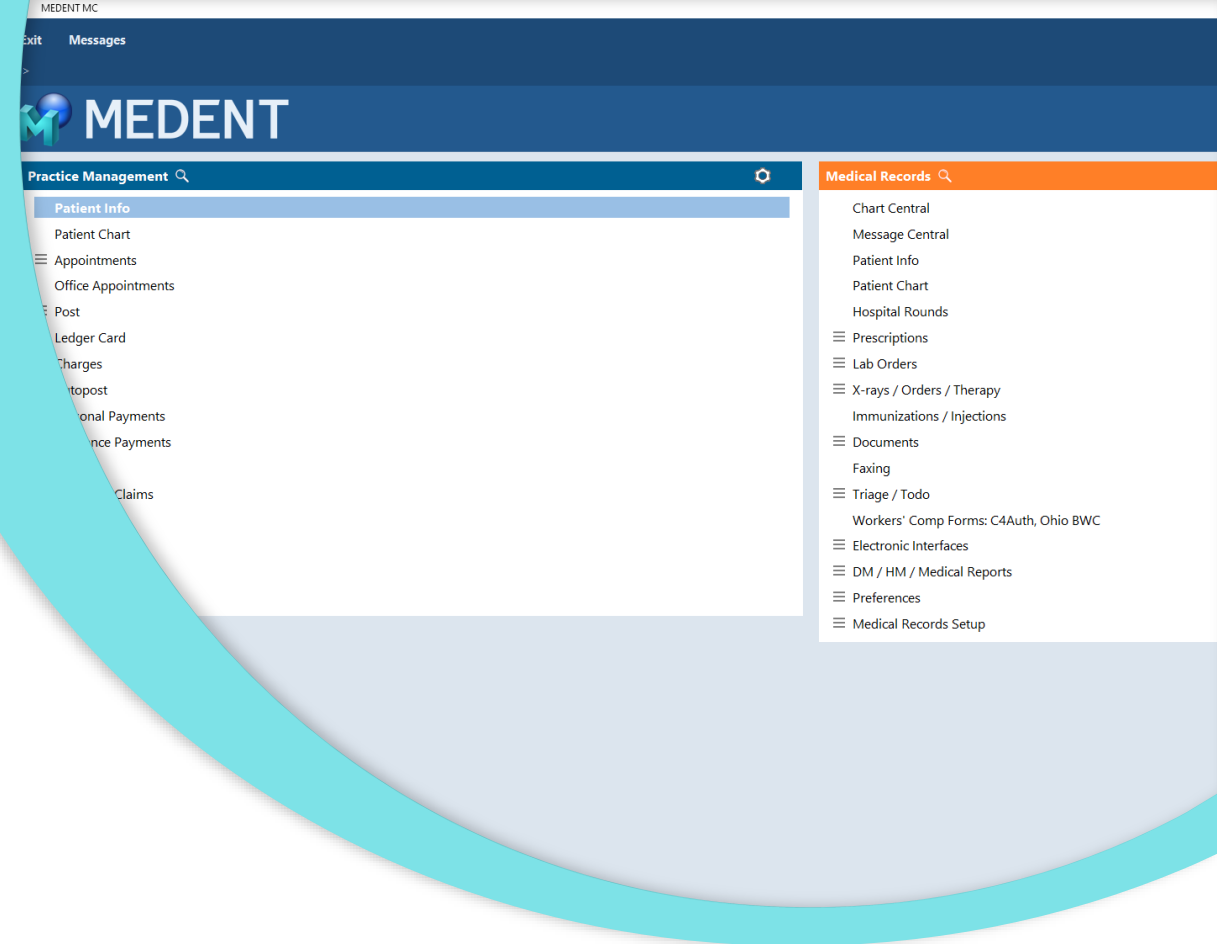


MEDEN

INTEROPERABILITY

— ••

EMR/EHR | PRACTICE MANAGEMENT | PATIENT ENGAGEMENT | TELEHEALTH



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MEDENT SPEAKERS



Barbara Cuthbert

Vice President of Sales & Marketing



Margot Hultz

Interoperability Team Leader

A G E N D A

MEDENT INTEROP FEATURES

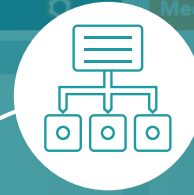


All-In-One



NYSIIS

Query, import and send immunization information with MEDENT's NYSIIS Bi-Directional Real-Time Interface.



Insights & Community Chart

Access cross-community patient data in MEDENT with Carequality, Holon and Surescripts' Record Locator & Exchange Service.



FHIR

Control who you want to connect with and what information you want to share with SMART protocol for FHIR.

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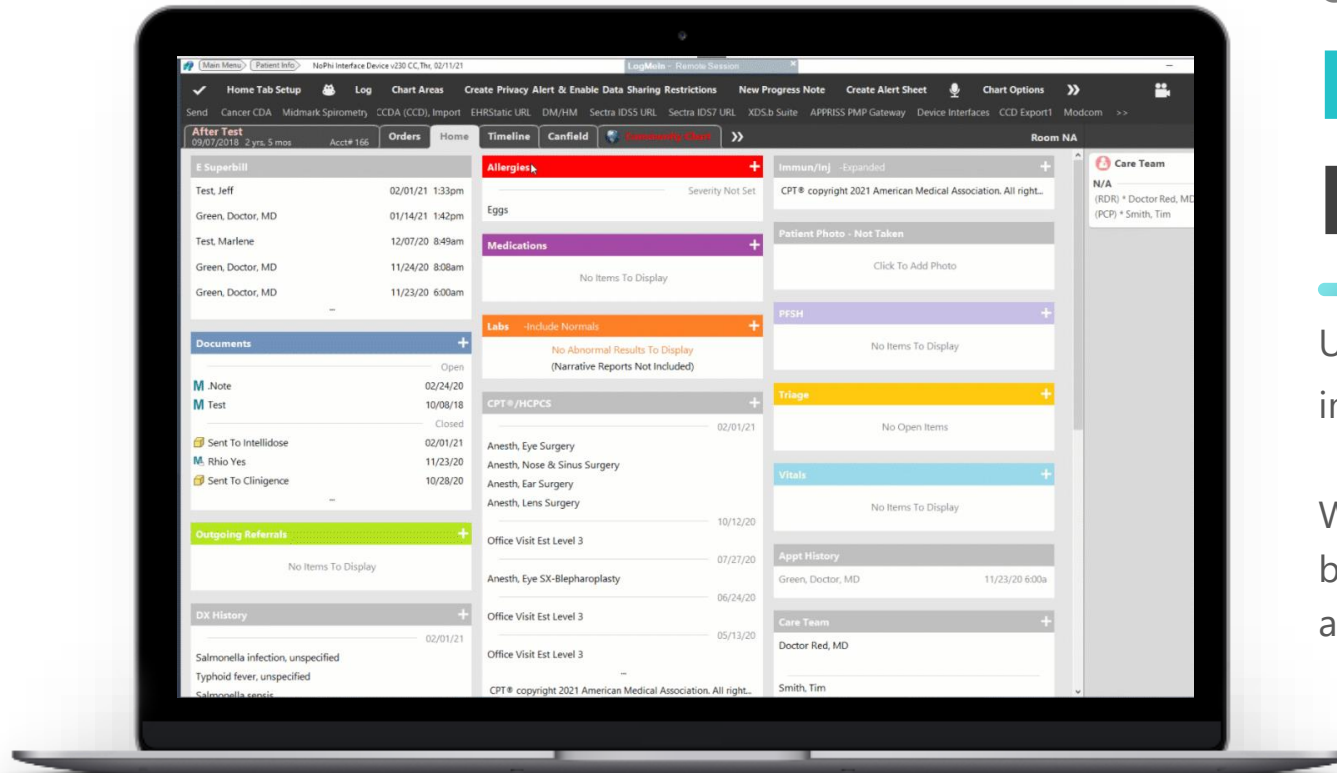
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QUERY & IMPORT

NYSIIS Bi-Directional Real-Time Interface

Users can now query NYSIIS from the immunization/injection area of MEDENT.

When the registry responds, users can check the box next to the immunization and click "Import" to add it to the patient's chart.



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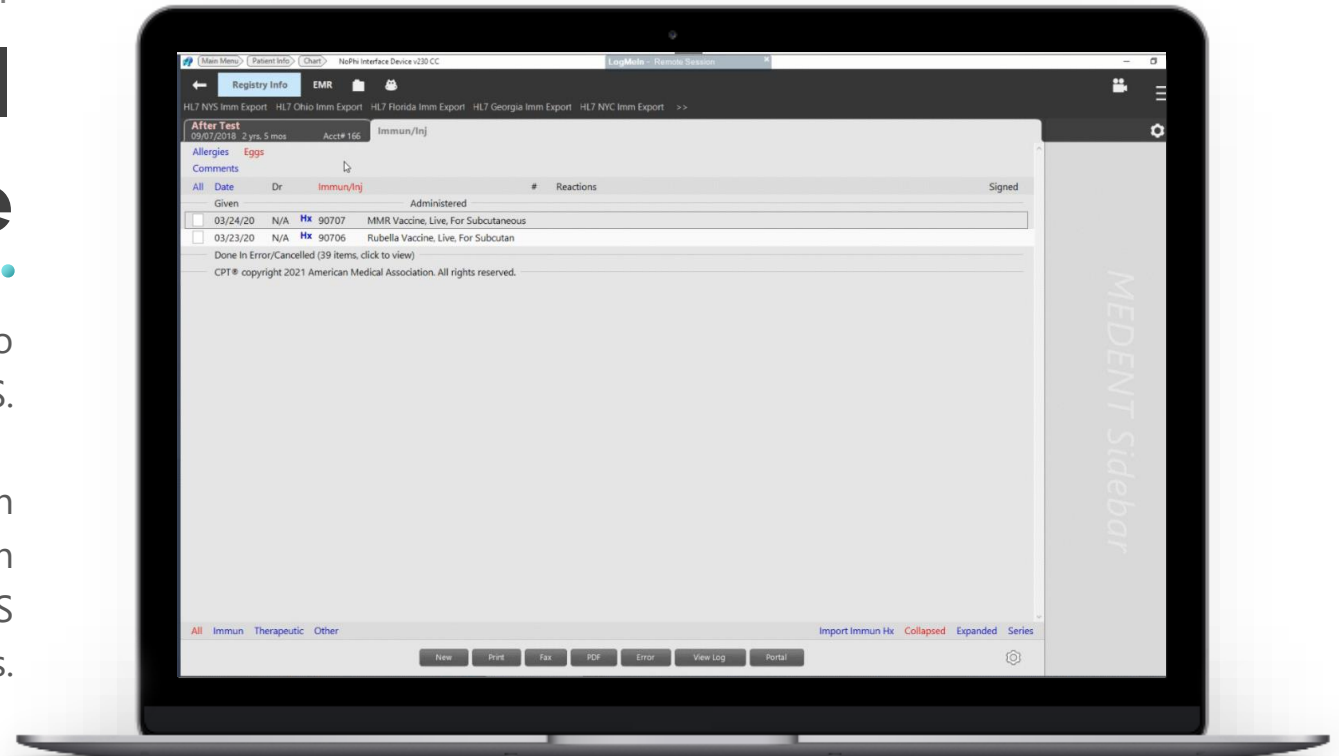
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SEND & SUBMIT

NYSIIS Bi-Directional Real-Time Interface

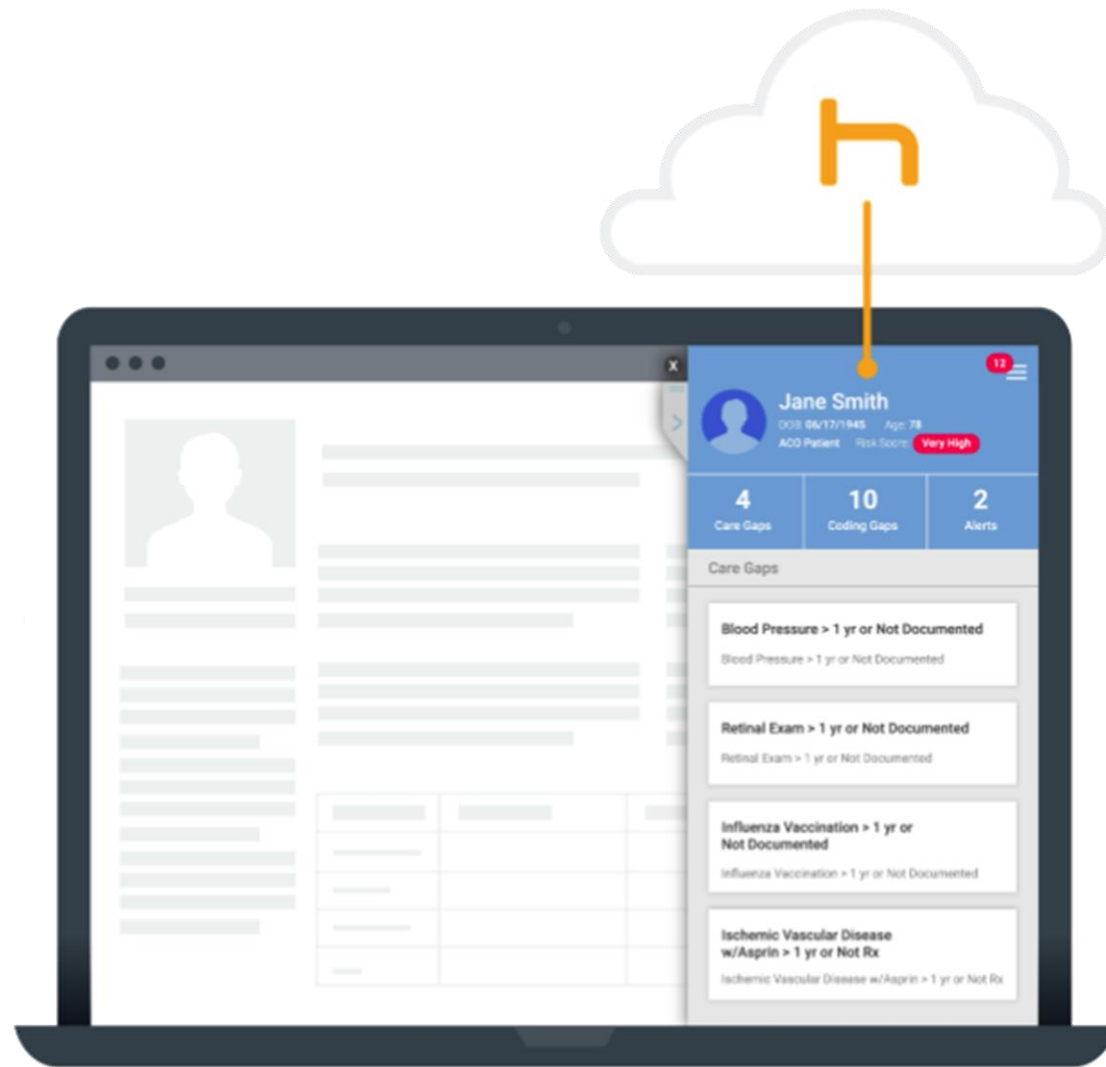
Users can also send immunization information to NYSIIS.

Simply enter the immunization as usual, click on "Administered" and exit. The immunization information will automatically export to NYSIIS behind the scenes.



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HOLON

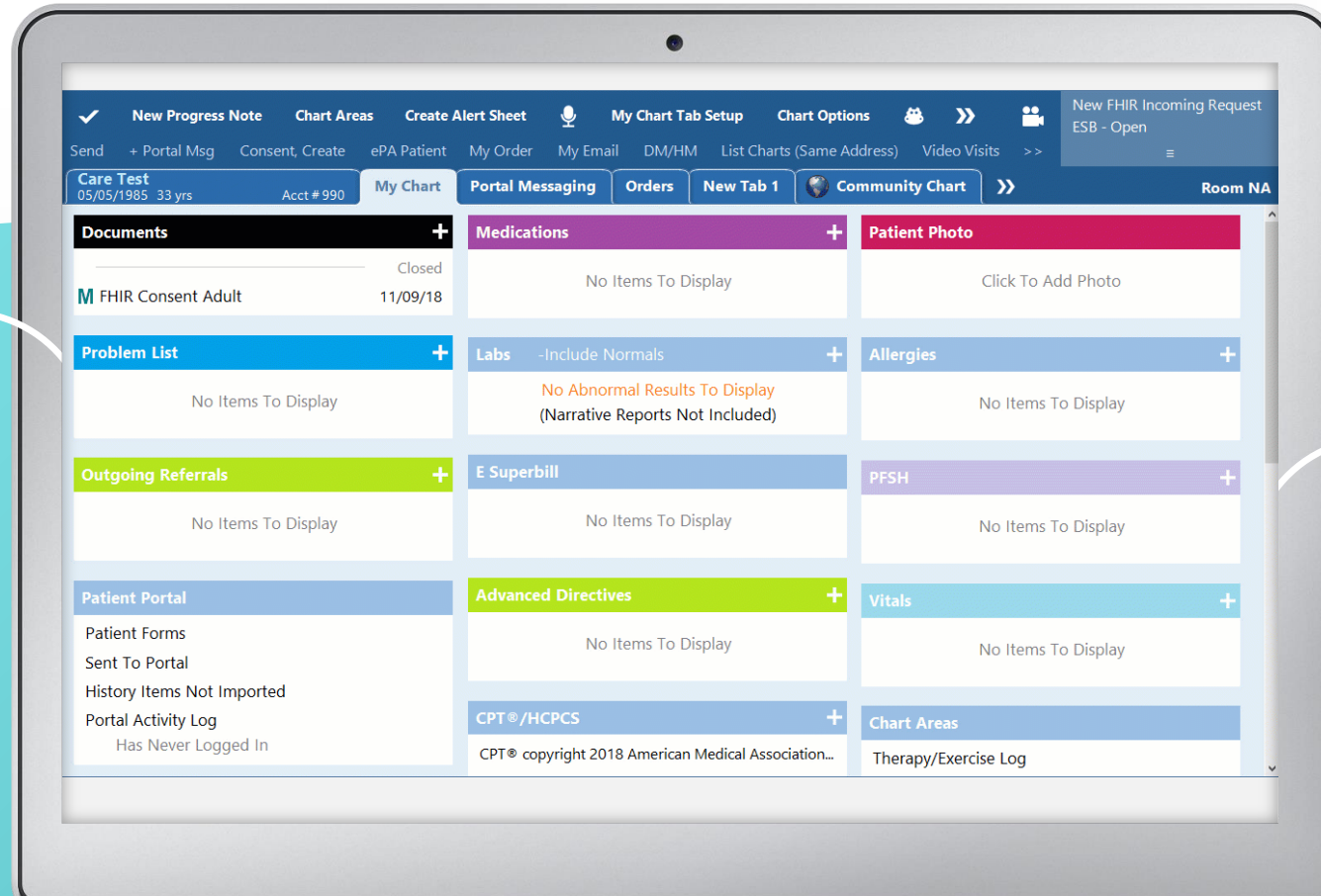
“Insights” ribbon

As soon as a patient’s chart is opened, Insights mines patient data and feeds providers relevant, patient-specific information. This helps providers make more informed treatment decisions and removes administrative burden.

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COMMUNITY CHART



Carequality

Carequality Interoperability Framework

Cross-Community Patient Discovery & Cross-Community Access

Surescripts

Record Locator and Exchange Service

Cross-Community Patient Discovery & Patient Location Query

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carequality



The MEDENT Carequality Interface enables a widespread exchange of health information, providing a national-level, consensus-built, common interoperability framework that connects providers across health data sharing networks.





Surescripts

Record Locator & Exchange



Community Access

Gives providers access to clinical history of more than 258 million patients across the nation.

Patient Discovery

Pulls 12 months of data from more than 600,000 providers, 25,000 clinics and 1,250 hospitals.

Complete Connection

Provides a complete, accurate view of a patient's clinical history and notifies primary care physicians of any new hospital or emergency room visits.

HIEs, RHIOs & FHIR

86



Health Information Exchange (HIE) Regional Health Information Organization (RHIO)

MEDENT practices can submit to multiple HIEs/RHIOs. Simply work with our Interoperability Department to get the process started!



Fast Healthcare Interoperability Resources (FHIR)

Within MEDENT, connections via Substitutable Medical Apps and Reusable Technology (SMART) on FHIR will give users control over who they want to connect with and what information they want to share.

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KEY TAKEAWAYS



NYSIIS

Query, Import & Submit immunization/injection information with the NYSIIS Bi-directional Interface.



Insights with Holon

Make more informed treatment decisions by accessing relevant patient health data from other communities.



Community Chart

Locate and import vital patient health information from outside systems with Carequality and Surescripts.



HIE, RHIO & FHIR

Control who you want to connect with and what information you'd like to share with SMART protocol.

QUESTION & ANSWER



CONNECT



15 Hulbert St., Auburn, NY 13021



(315) 255-0900



communications@medent.com



www.medent.com



MEDENTEMR



@MEDENTEMR



MEDENTEMR



@MEDENTEMR

EHR PANEL: FACILITATED DISCUSSION AND Q&A

eClinicalWorks
"Improving Healthcare Together"

nextgen
healthcare

MEDENT



Farah Saeed, eCW
Interoperability Sales and Business Development



Muhammed Chebli, NextGen
Vice President of Solutions



Heather Vile, NextGen
Interoperability Project Manager



Margot Hultz, MEDENT
Interoperability Team Leader



Barbara Cuthbert, MEDENT
Vice President of Sales and Marketing

Take a Quick Break

Please return in 10 minutes

The Gravity Project: Consensus-driven Standards on Social Determinants of Health

Evelyn Gallego, MBA, MPH, CPHIMS

**CEO Of EMI Advisors, Gravity
Program Manager**



The Gravity Project: Consensus-driven Standards on Social Determinants of Health

CHCANYS Interoperability Workshop

February 25, 2021

Evelyn Gallego, EMI Advisors LLC, Gravity Program Manager



Agenda

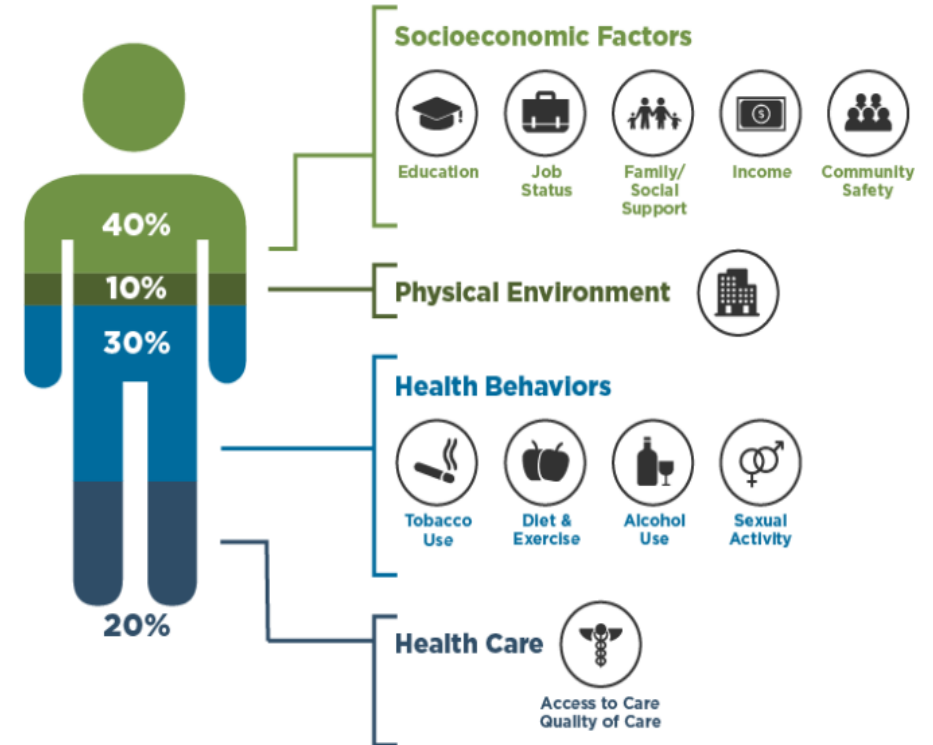
- Background (WHY)
- Project Scope (WHAT)
- Accomplishments & Success Factors
- How to Engage

Why Social Determinants of Health (SDOH) are Important

There is broad consensus that SDOH information improves whole person care and lowers cost. Unmet social needs negatively impact health outcomes.

- **Food insecurity** correlates to higher levels of diabetes, hypertension, and heart failure.
- **Housing instability** factors into lower treatment adherence.
- **Transportation barriers** result in missed appointments, delayed care, and lower medication compliance

What Goes Into Your Health?



Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)

Adapted from The Bridgespan Group

Challenges in SDOH Data Capture and Exchange

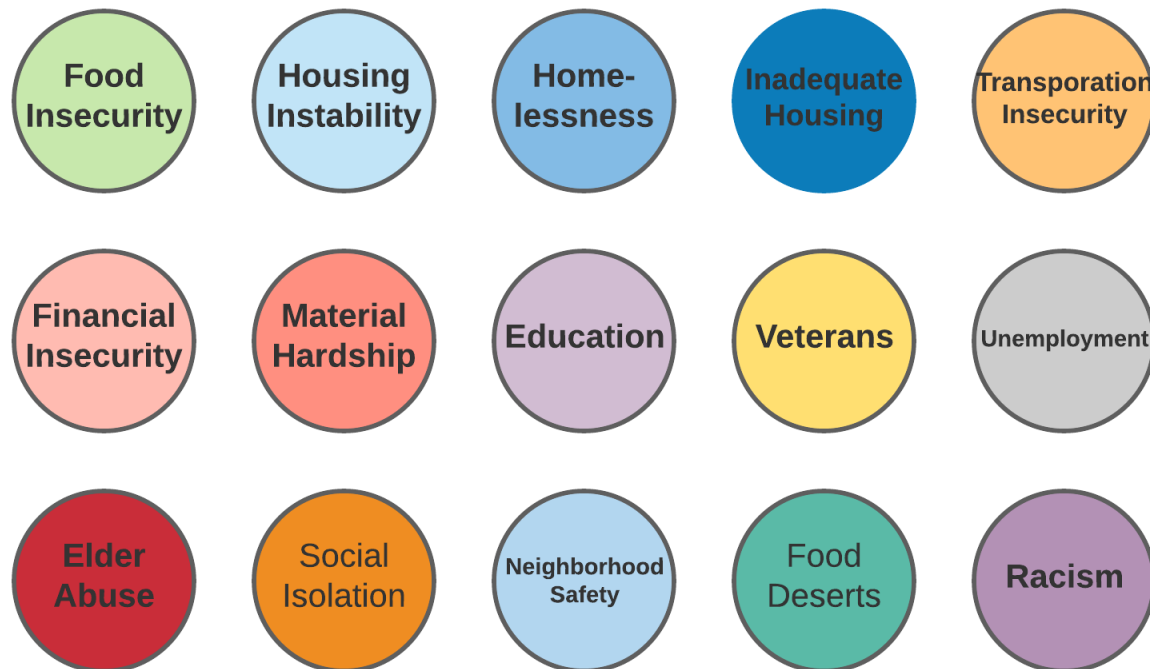
- Consent Management
- **Standardization of SDOH Data Collection and Storage**
- Data Sharing Between Ecosystem Parties
- Access & Comfort with Digital Solutions
- Concerns about Information Collection and Sharing
- Social Care Sector Capacity and Capability
- Unnecessary Medicalization of SDOH

https://www.nasdoh.org/wp-content/uploads/2020/08/NASDOH-Data-Interoperability_FINAL.pdf

Enter the Gravity Project...

Goal

Develop consensus-driven data standards to support use and exchange of social determinants of health (SDOH) data within the health care sectors and between the health care sector and other sectors.



Project Scope

In May 2019, the [Gravity Project](#) was launched as a multi-stakeholder public collaborative with the goal to develop, test, and validate standardized SDOH data for use in patient care, care coordination between health and human services sectors, population health management, public health, value-based payment, and clinical research.

The Gravity Project was initiated by the Social Interventions Research and Evaluation Network (SIREN) with funding from the Robert Wood Johnson Foundation and in partnership with EMI Advisors LLC.

Gravity Project Scope: Develop data standards to represent patient level SDOH data documented across four clinical activities: screening, assessment/diagnosis, goal setting, and treatment/interventions.

SDOH Interoperability Glide Path

HL7 FHIR Accelerator: In August 2019, Gravity officially joined the HL7 FHIR Accelerator Program and balloted the first HL7 SDOH FHIR IG in Dec. 2020.

Public Collaboration: Gravity has convened over **1,500+** participants from across the health and human services ecosystem from clinical provider groups, community-based organizations, standards development organizations, federal and state government, payers, and technology vendors.



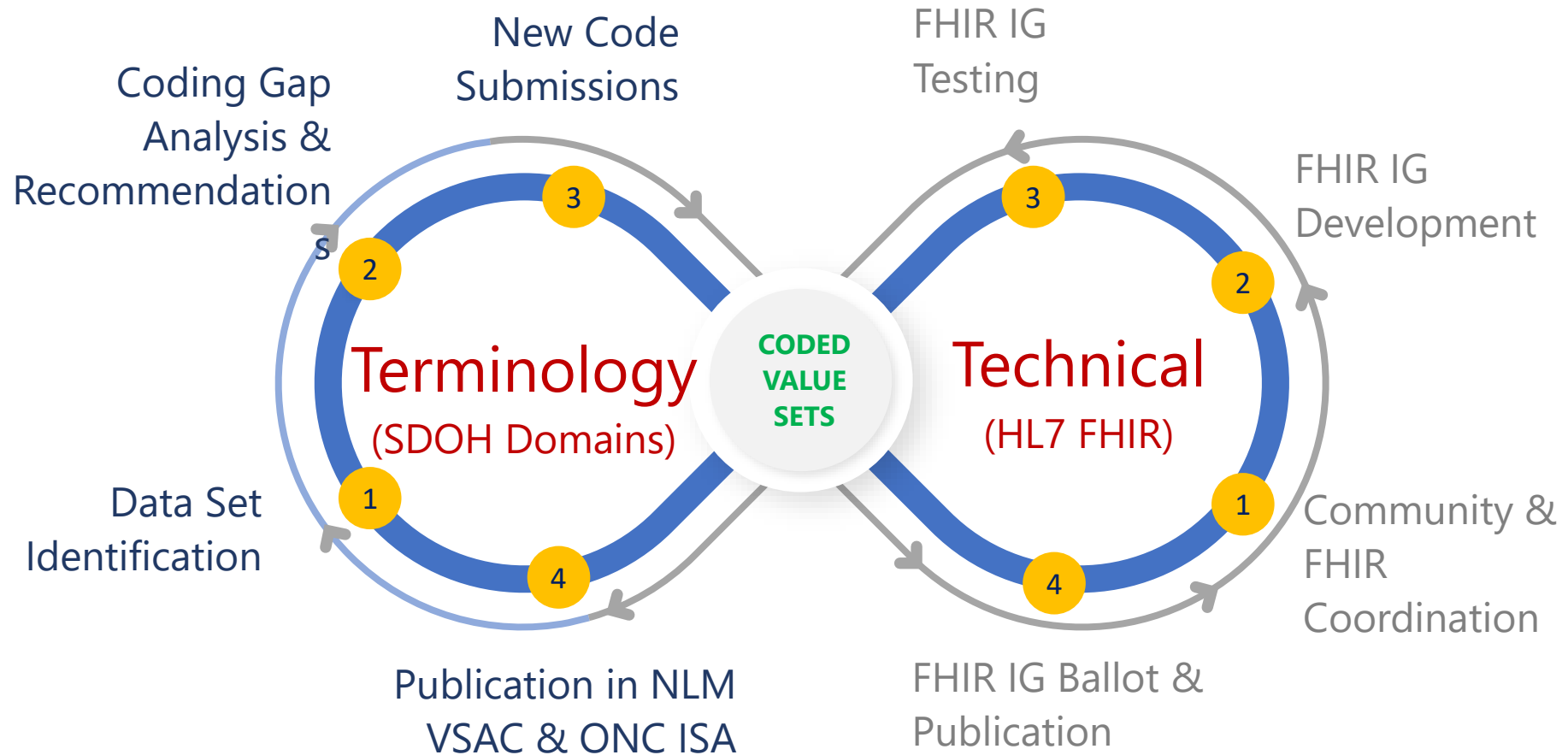
Gravity Project Sponsorship (Financial & In-Kind)



<https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors>



Gravity Overview: Two Streams

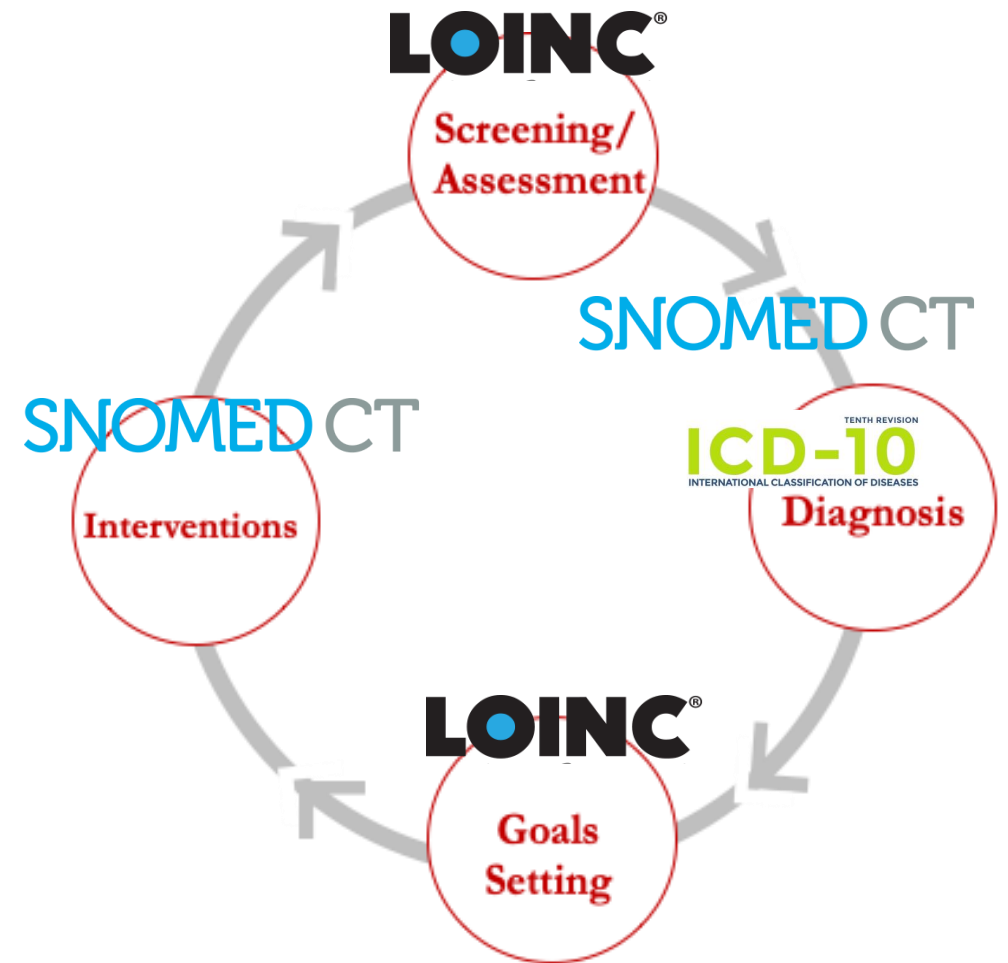


Terminology Workstream

Terminology Workstream

Data Element and Ensuring Gap Analysis

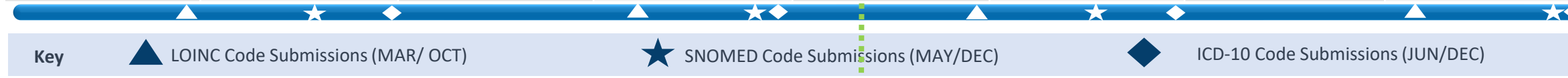
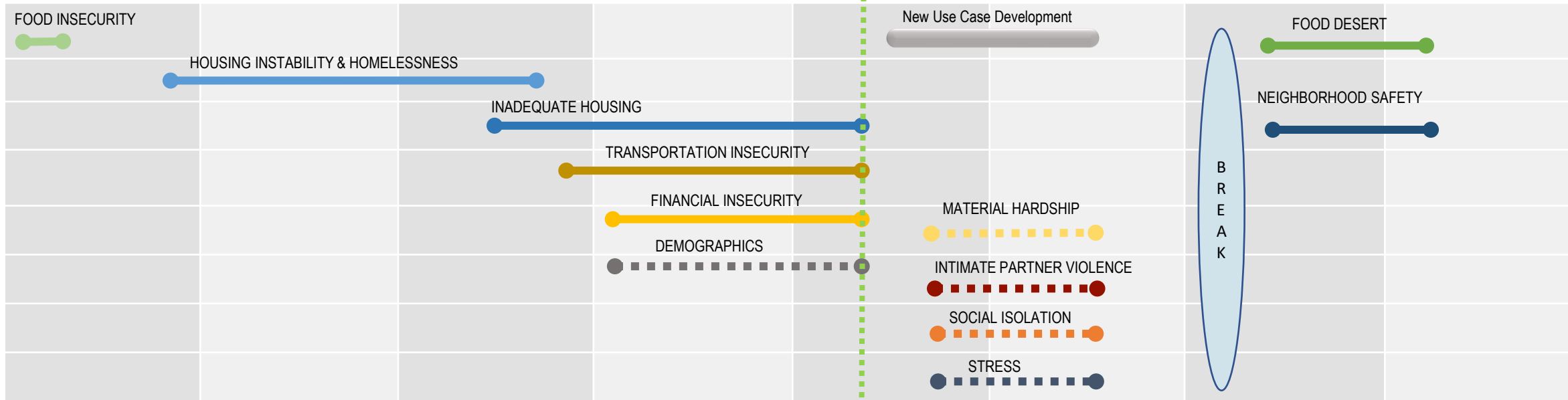
- All data is sorted across four activities into a master set.
- For data within each domain, we ask:
 - What concepts need to be documented across the four activities?
 - What codes reflecting these concepts are currently available?
 - What codes are missing?



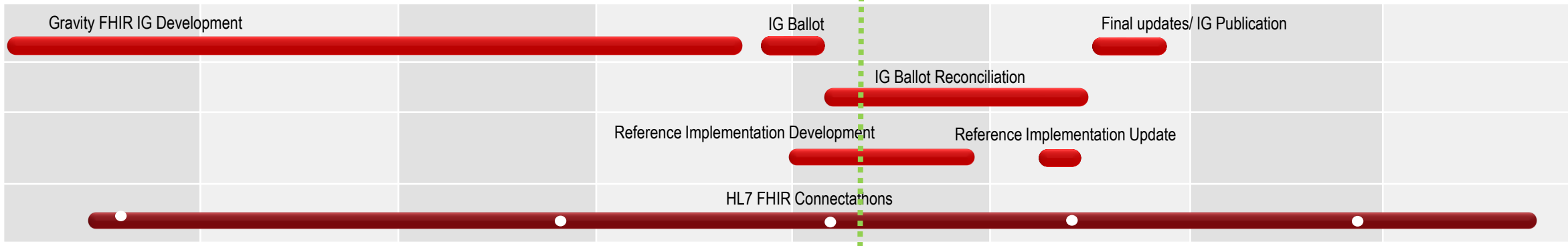
Gravity Roadmap



TERMINOLOGY



TECHNICAL
















































PILOTS



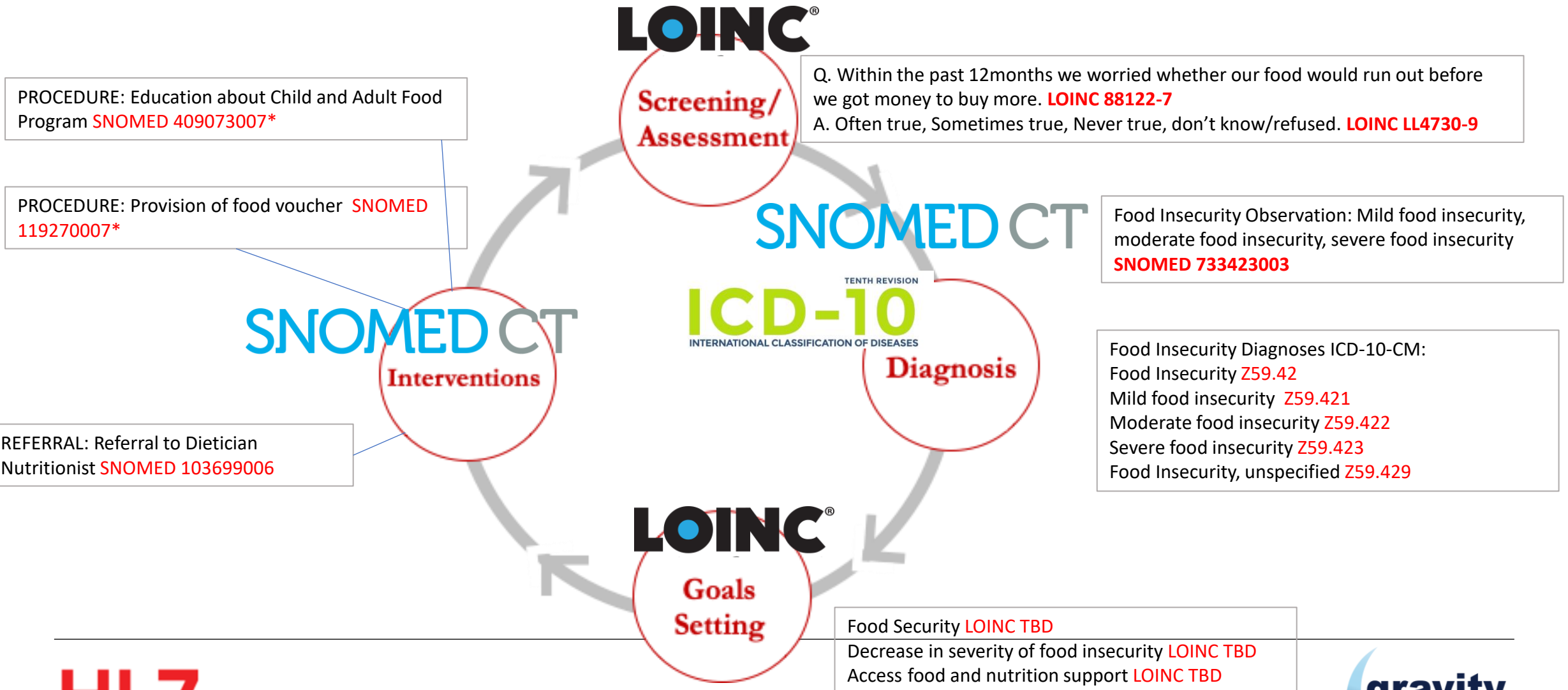
Terminology Stream Status

Legend

-  Complete (100%)
-  Partially Complete (+50%)
-  Not Complete (0%)

Domain	Terminology Identification				Code Submission		Value Set Publication
	Plan	Gather	Review	Finalize	Submit	Finalize	
Food Insecurity							
Housing Instability/ Homelessness							
Inadequate Housing							
Transportation Insecurity							
Financial Strain							
Demographics							

Food Insecurity Terminology Build



Where to find Published Gravity Data Sets & Coding Submissions?

The screenshot displays the Gravity Project Terminology Workstream Dashboard. On the left is a navigation sidebar with sections for Pages, Blog, Calendars, and SPACE SHORTCUTS (including HL7 Documentation & Help). Below these is a PAGE TREE for the Terminology Workstream Dashboard, listing items such as Coding Submissions, Financial Strain, Food Insecurity, Housing Instability and Homelessness, Inadequate Housing, Terminology Overview, Transportation, and Demographics Domain. The main content area features a 'Domains' header and a grid of ten domain cards:

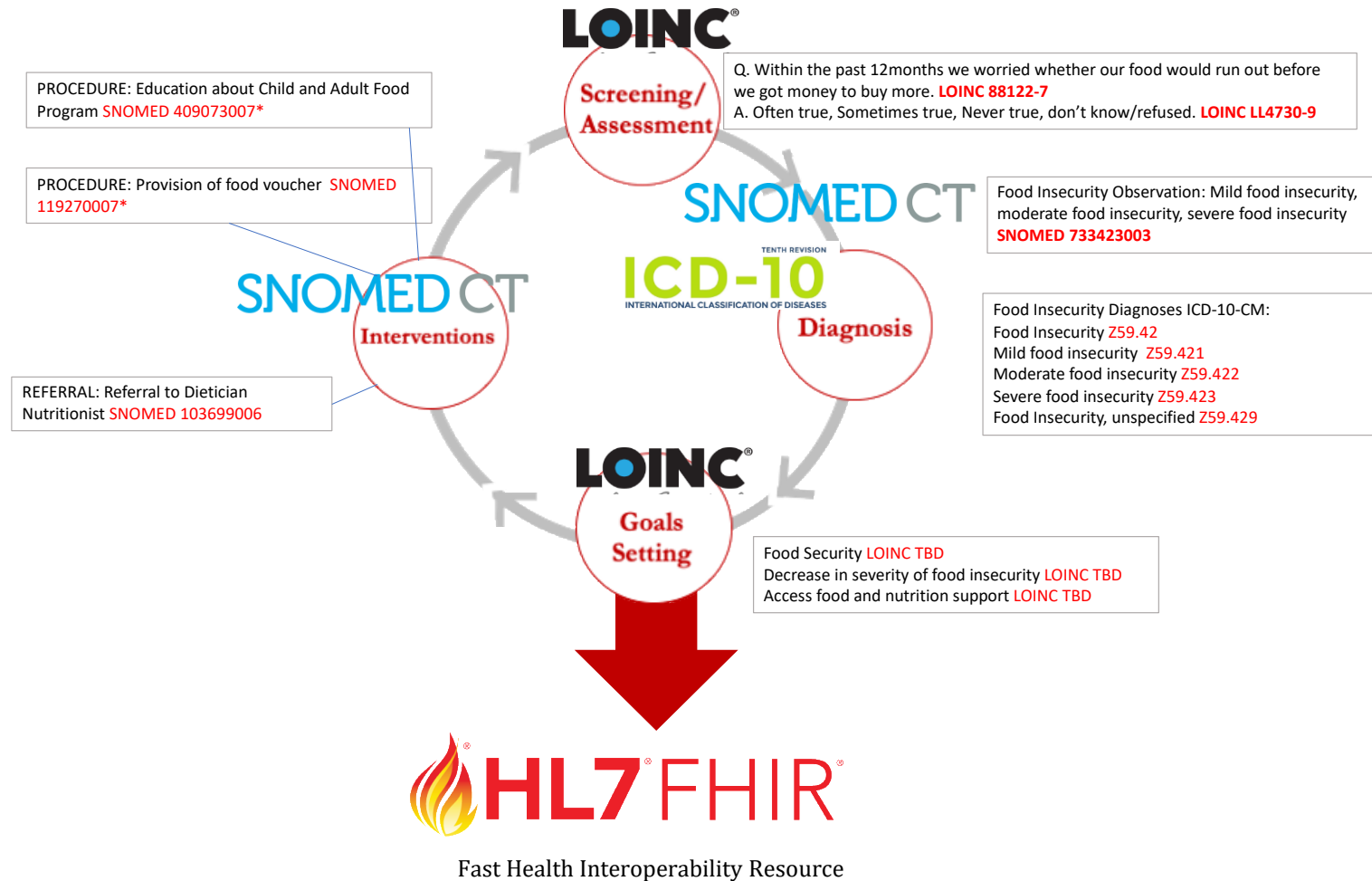
- Food Insecurity**: Represented by an illustration of various fruits and vegetables.
- Housing Instability & Homelessness**: Represented by a house shape composed of words like 'sheltered', 'homeless', and 'doubled up'.
- Inadequate Housing**: Represented by a simple black silhouette of a house.
- Transportation**: Represented by a blue cartoon car.
- Financial Strain**: Represented by a fan of green dollar bills.
- Demographics**: Represented by a computer monitor displaying a data chart.
- Social Isolation**: Represented by a silhouette of a person sitting alone with their head in their hand.
- Stress**: Represented by a person sitting at a desk with a computer, looking stressed.
- Neighborhood Safety**: Represented by a yellow triangular warning sign with a black exclamation mark.
- Interpersonal Violence**: Represented by a colorful explosion.

Each domain card includes a title and, for some, a 'Coming Soon!' note.

<https://confluence.hl7.org/display/GRAV/Terminology+Workstream+Dashboard>

Technical Workstream

Accelerating Adoption Using Nationally Recognized Standards



Technical Stream – SDOH Clinical Care FHIR Implementation Guide

1. This is a framework Implementation Guide (IG) and supports multiple domains
2. IG support the following clinical activities
 - Assessments
 - Health Concerns / Problems
 - Goals
 - Referrals
 - Consent
 - Aggregation for reporting
3. Completed January 2021 ballot as a Standard for Trial Use Level 1 (STU1)

<https://build.fhir.org/ig/HL7/sdoh-cc/>

HL7 International SDOH Clinical Care 0.0.4C3 - CI Build HL7 FHIR

IG Home Table of Contents Artifact Index

Table of Contents > IG Home Page

SDOH Clinical Care, published by HL7 International - Patient Care WG. This is not an authorized publication; it is the continuous build for version 0.0.4C3. This version is based on the current content of <https://github.com/HL7/sdoh-cc/> and changes regularly. See the [Directory of published versions](#).

1 IG Home Page

1.1 Overview

IG Characteristic	Value
FHIR Version:	FHIR R4
IG Realm:	US
IG Type:	STU

Exchange Methods: RESTful Query, Messages, Transactions, Documents, Tasks

IG Dependencies: The SDOH-CC IG utilizes and adopts guidance developed in several other FHIR® Implementation Guides.

IG Dependencies	IG Code	Version
HL7 FHIR US Core	US Core	Version 3.1.0
Structured Data Capture	SDC	Version 2.7.0
C-CDA on FHIR R4	C-CDA on FHIR	Version 1.0.0
DaVinci Clinical Data exchange	CDex	Version 0.1.0
Bidirectional Services eReferrals	BSer	Version 1.0.0

- Overview
- Purpose
- How to Use This Guide
- Notes to Reviewers and Balloters
- History of Document Changes
- Acknowledgements
- Authors

1.2 Purpose

This HL7® IG defines FHIR R4 profiles, extensions and value sets needed to exchange SDOH content defined by the Gravity Project. It defines how to represent coded content used to support the following care activities: screening, clinical assessment/diagnosis, goal setting, and the planning and performing of interventions. It addresses the need to gather SDOH information in the context of clinical encounters and describes how to share SDOH information and other relevant information with outside organizations for the purpose of coordinating services and support to address SDOH related needs. It also demonstrates how to share clinical data to support secondary purposes such as population health, quality, and research. It supports the following use cases:

1. Document SDOH data in conjunction with the patient encounter,
2. Document and track SDOH related interventions to completion,
3. Gather and aggregate SDOH data for uses beyond the point of care (e.g. public health, population health, quality measurement, risk adjustment, quality improvement, and research.)

1.3 How to Use This Guide

A FHIR IG address the needs of multiple audiences. It provides technical artifacts that assist programmers when implementing standards-based FHIR application program interfaces (APIs) for specific purposes. It provides instructive material that explains how FHIR is used to accomplish specific uses cases. It also provides general information that helps business analysts and technology decision-makers understand the use cases and benefits associated with achieving specific data exchange capabilities. A FHIR IG is as much a business planning tool as it is an educational resource and a technical specification.

However, one caveat must be clear: this FHIR IG and the other FHIR IG's it depends upon are at low levels of maturity. Changes to the specification can be major and may happen rapidly as Gravity Project incorporates the full scope of SDOH content domains. Plan accordingly and budget for exploration and potential rework. For example, the solutions tested at one Connectathon may need to be substantially revised before testing at the next Connectathon. Early engagement in FHIR IG development and sustained collaboration will create the opportunity to have greater impact on the design of these emerging implementer standards.

1.3.1 For implementers interested in getting started with FHIR

Read the IG to:

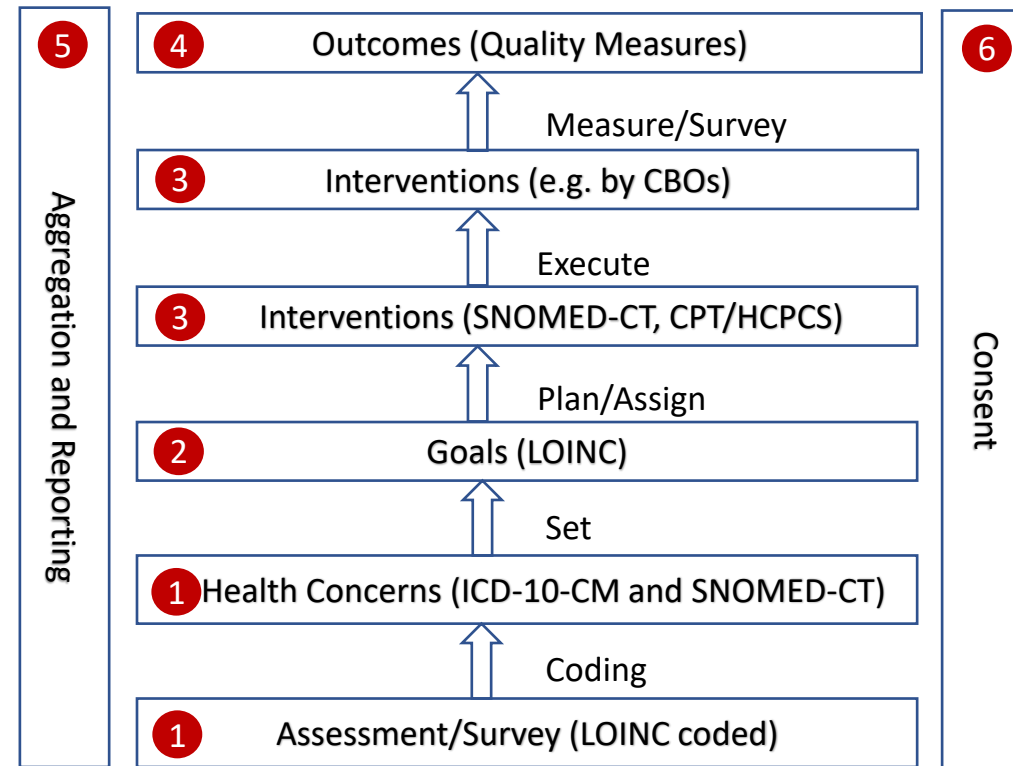
- Understand the design of FHIR APIs to inform your product management, clinical workflow planning, business planning, and to inform expectations about what will be possible in the future.
- Discover an additional/alternate API you could begin offering to give your customer a path toward utilizing standards
- Become more informed about the national direction for inclusion of SDOH information in clinical care
- Consider opportunities to utilize standards-based data exchange sooner rather than later
- Plan to utilize standards-based data exchange as you consider technology solutions, look at making future investments that can improve patient care
- Imagine the role of standards-based data exchange as you advocate for yourself and others

Participate in Connectathon testing to:

Gravity FHIR SDOH Clinical Care Implementation Guide Scope

Use Cases

1. Document SDOH data in conjunction with the patient encounter
2. Set SDOH related goals.
3. Establish interventions to completion.
4. Measure outcomes.
5. Gather and aggregate SDOH data or uses beyond the point of care (e.g. population health management, quality reporting, and risk adjustment/ risk stratification).
6. Manage patient consent



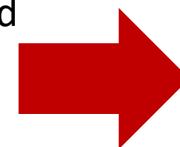
<http://build.fhir.org/ig/HL7/fhir-sdoh-clinicalcare/>

What's Next?

- Continue to engage with NLM, Regenstrief and other stakeholders to advance tooling
- Continue to engage the community to establish the clinical content required for multiple SDOH domains
- Continue to advance the development of the Reference Implementation
- Respond to January 2021 ballot comments
- Begin Gravity Pilots Design for Summer 2021 Start
- Please join us at the Gravity SDOH FHIR IG Workgroup Calls every Wednesday from 3 to 4 pm ET
 - <https://confluence.hl7.org/display/GRAV/FHIR+IG+Work+Group+Meetings>

Accomplishments & Success Factors

- **January 2020:** Completed food insecurity coding gap analysis and recommendations.
- **March 2020:** Launched housing instability domain.
- **May - June 2020:** Submitted new code applications for food insecurity to the coding stewards. Tested draft HL7 FHIR SDOH Implementation Guide (IG) at two FHIR Connectathons; achieved 1st place status in competition.
- **September 2020:** Tested HL7 FHIR SDOH IG at FHIR Connectathon; launched Transportation and Inadequate Housing Domains; completed Housing Instability & Homelessness data set.
- **October 2020:** Launched financial strain and demographics domains in parallel; submitted SDOH Data Class Application to ONC USCDI
- **December 2020:** Presented new ICD-10 codes for ICD-10 2021 review cycle; submitted FHIR SDOH IG for the January 2021 HL7 ballot cycle; began build of Reference Implementation.
- **January 2021:** Gravity standards included in CMS State Health Official (SHO) Medicaid guidance and in ACL Social Referrals Challenge Grant submissions; publish final data sets for Transportation, Financial Strain, Demographics status; began FHIR IG ballot reconciliation; tested FHIR IG at the HL7 FHIR Connectathon.



- **POLICY:** (e.g. ONC USCDI, CMS Promoting Interoperability, State Medicaid Director Letters)
- **PAYMENT MODELS:** (e.g. CMMI SDOH Model)
- **PROGRAMS:** (e.g. Medicare Advantage, Medicaid Managed Care, Hospital QRRP, MIPS).
- **GRANTS:** (e.g. ACL Challenge Grant, ONC Health IT LEAP, RWJF SDOH Integration in Clinical Care).
- **PRACTICE:** (e.g. repeatable process for adoption, implementation, and use of SDOH data at practice level.
- **INNOVATION:** New tools for capture, aggregation, analytics, and use.

Policy Integration: Gravity USCDI Submission

- The Gravity Project formally made a submission to the ONC U.S. Core Data for Interoperability (USCDI) version 2 in October 2020.
- Submission available here: <https://confluence.hl7.org/display/GRAV/Gravity+Project+USCDI+Submission>



In addition to “Comment” and “Level 1” criteria, Level 2 data elements demonstrate extensive existing use in systems and exchange between systems, and use cases that show significant value to current and potential users. These data elements would clearly improve nationwide interoperability. Any burdens or challenges would be reasonable to overcome relative to the overall impact of the data elements.

A grid of seven data element cards. Each card has an icon, a title, a description, and a list of associated data elements. 1. 'Allergies and Intolerances' (potted plant icon): Represents harmful or undesirable physiological response associated with exposure to a substance. Elements: Substance (Food), Substance (Non-Medication). 2. 'Laboratory' (test tube icon): Laboratory Result Status, Laboratory Result Value, Laboratory results: date and timestamps, Laboratory Test Performed Date, Laboratory Test/Panel Code. 3. 'Provenance' (globe icon): The metadata, or extra information about data, that can help answer questions such as when and who created the data. Element: Author. 4. 'Care Team Member(s)' (person icon): The specific person(s) who participate or are expected to participate in the care team. Elements: Provider DEA Number, Provider Identifier, Provider Location. 5. 'Medical Device or Equipment' (star icon): Devices used (applied). 6. 'Medications' (pill bottle icon). 7. 'Social Determinants of Health' (star icon): Assessment, Goals, Interventions, Outcomes, Problems/Health Concerns. A red arrow points from the bottom right towards the 'Social Determinants of Health' card.

<https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi>

Policy Integration: CMS State Health Official Letter

- On January 7th, CMS released guidance for states on opportunities under Medicaid and CHIP to address SDOH.
- The guidance acknowledges that states can leverage Medicaid resources to support data integration and data sharing for SDOH initiatives.
- States are required to design technical infrastructure for Mechanized Claims Processing, Information Retrieval Systems, and care coordination hubs that are **interoperable** with human services programs, HIEs, and public health agencies, as applicable.
- **States are encouraged to review ISA SDOH standards and review and participate in the Gravity Project.**

DEPARTMENT OF HEALTH & HUMAN SERVICES
Centers for Medicare & Medicaid Services
7500 Security Boulevard, Mail Stop 52-26-12
Baltimore, Maryland 21244-1850



SHO# 21-001
RE: Opportunities in Medicaid and CHIP
to Address Social Determinants of Health
(SDOH)

January 7, 2021

Dear State Health Official:



The purpose of this State Health Official (SHO) letter is to describe opportunities under Medicaid and CHIP to better address social determinants of health (SDOH)¹ and to support states with designing programs, benefits, and services that can more effectively improve population health, reduce disability, and lower overall health care costs in the Medicaid and CHIP programs by addressing SDOH. This letter describes: (1) several overarching principles that CMS expects states to adhere to within their Medicaid and CHIP programs when offering services and supports that address SDOH; (2) services and supports that are commonly covered in Medicaid and CHIP programs to address SDOH; and (3) federal authorities and other opportunities under Medicaid and CHIP that states can use to address SDOH. A table that summarizes the information on key federal authorities for addressing SDOH is also included in an appendix.

Medicaid and the Children's Health Insurance Program (CHIP) provide health coverage to over 76 million low-income Americans, including many individuals with complex, chronic, and costly care needs. Many Medicaid and CHIP beneficiaries may face challenges related to SDOH, including but not limited to access to nutritious food, affordable and accessible housing, convenient and efficient transportation, safe neighborhoods, strong social connections, quality education, and opportunities for meaningful employment. There is a growing body of evidence that indicates that these challenges can lead to poorer health outcomes for beneficiaries and higher health care costs for Medicaid and CHIP programs and can exacerbate health disparities for a broad range of populations, including individuals with disabilities, older adults, pregnant and postpartum women and infants, children and youth, individuals with mental and/or substance use disorders, individuals living with HIV/AIDS, individuals living in rural communities, individuals experiencing homelessness, individuals from racial or ethnic minority populations,

¹ The Centers for Disease Control and Prevention (CDC) refers to SDOH as "conditions in the places where people live, learn, work, and play that affect a wide range of health risks and outcomes." See <https://www.cdc.gov/socialdeterminants/about.html> for CDC information on SDOH, including research on the impact of SDOH on health outcomes and health care costs. [Healthy People 2030](#), which is managed by the Office of Disease Prevention and Health Promotion in the U.S. Department of Health and Human Services (HHS), uses a place-based framework that highlights the importance of addressing SDOH. Healthy People 2030 was released in 2020 and sets data-driven national objectives to improve health and well-being over the next decade. Healthy People 2030 SDOH objectives can be found [here](#).

How to Engage!

Join our Project!

- Join the Gravity Project: <https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project>
 - Public Collaborative Workgroup meets bi-weekly on **Thursdays' 4:00 to 5:30 pm ET**
 - SDOH FHIR IG Workgroup meets weekly on **Weds. 3:00 to 4:00 pm ET**
- Help us find new sponsors and partners
- Give us feedback on the Data Principles:
<https://confluence.hl7.org/display/GRAV/Gravity+Data+Principles>
- Submit SDOH domain data elements (especially for Interventions):
<https://confluence.hl7.org/display/GRAV/Data+Element+Submission>
- Help us with Gravity Education & Outreach
 - Use Social Media handles to share or tag us to relevant information
 -  @the gravityproj
 -  <https://www.linkedin.com/company/gravity-project>
 - Partner with us on development of blogs, manuscripts, dissemination materials

Questions?

Evelyn Gallego

evelyn.gallego@emiadvisors.net

Twitter: @egallego

LinkedIn: [linkedin.com/in/egallego/](https://www.linkedin.com/in/egallego/)

Additional questions? Contact:
gravityproject@emiadvisors.net



@thegravityproj



<https://www.linkedin.com/company/gravity-project>

Interoperability Matters: Data Usability Workgroup

Didi Davis

**Vice President of Informatics,
Conformance & Interoperability
at the Sequoia Project**





Interoperability Matters: Data Usability Workgroup CHCANYS Interoperability Workshop

Didi Davis, VP, Informatics, Conformance & Interoperability

February 25, 2021



Agenda

- Background: The Sequoia Project
- Interoperability Matters Cooperative
 - Information Blocking Workgroup
 - Actor/Community Subgroups
 - Data Usability Work Group
 - Emergency Preparedness Information Work Group
- How to Engage

The Sequoia Project's Role

The Sequoia Project is a trusted, independent convener of industry and government.

Supports multiple independent initiatives, each with their own mission, governance, membership and structure.



SECURE



INTEROPERABLE



NATIONWIDE

Current Sequoia Project Initiatives



PULSE is a system which provides disaster healthcare volunteers access to information to treat individuals injured or displaced by disasters



RSNA Image Share Validation Program is an interoperability testing program to enable seamless sharing of medical images

Interoperability Matters

Interoperability Matters is an interoperability leadership engagement forum focused on solving practical challenges

Sequoia Previously Launched Two Successful Endeavors:

eHealth Exchange™

eHealth Exchange is a nationwide public-private health information network

carequality

Carequality operates a nationwide interoperability framework to link health information networks

Interoperability Testing Tooling

- The community has developed a large body of test cases, data, and conformity assessment tools that are open source
- Designed to ensure interoperability and assure compliance and minimal implementation
- The Sequoia Project has collaborated on the development of testing tools with [IHE International](#), [IHE Services](#), and [NIST](#) to support our [Sequoia](#), [RSNA](#) and [eHealth Exchange](#) validation testing programs
- Battle-hardened by years of operations and productized into the new **Sequoia Interoperability Testing Platform (ITP)**



Sequoia Project RCE Role

<https://rce.sequoiaproject.org>



*“[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]*

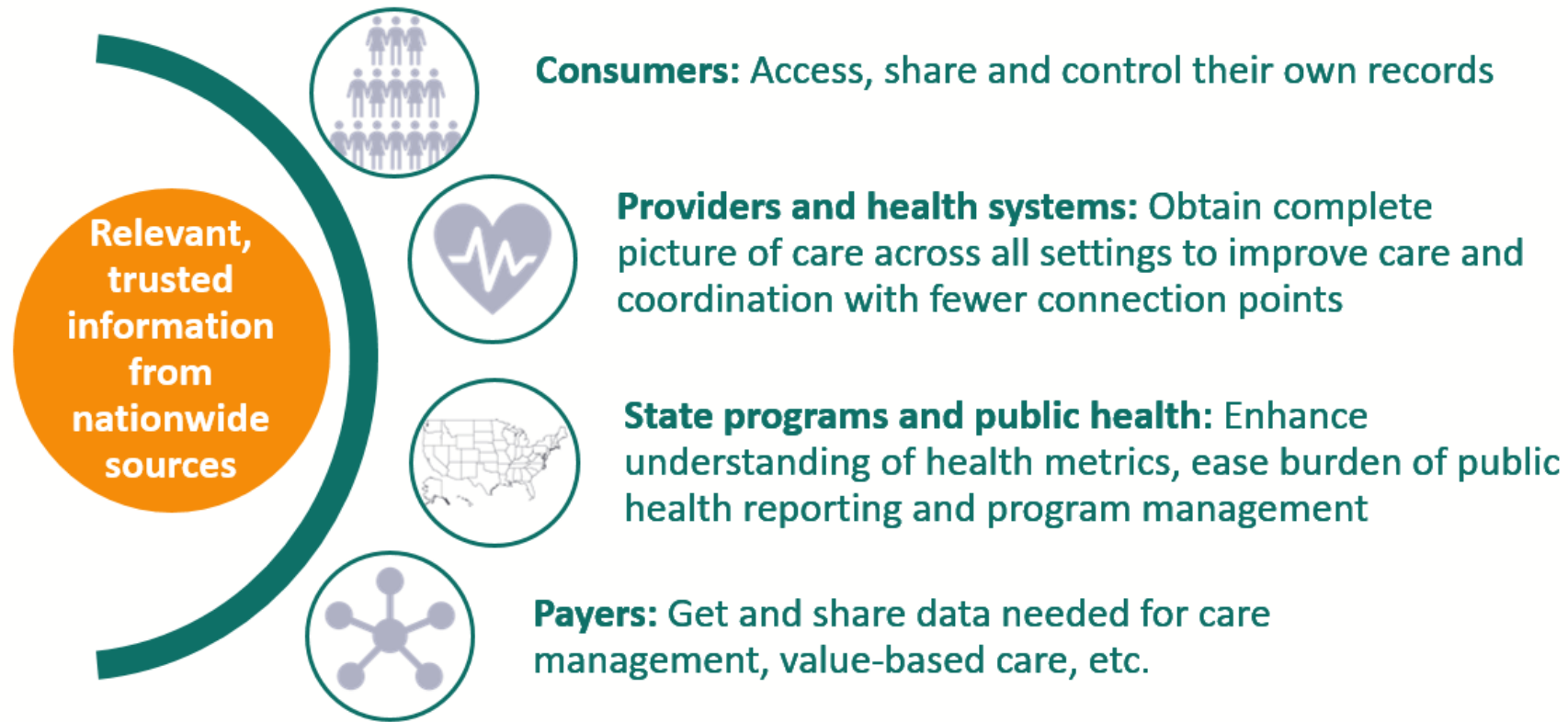
Sequoia was selected as the Recognized Coordinating Entity to work with the Office of the National Coordinator for Health IT (ONC) to implement the Trusted Exchange Framework and Common Agreement (TEFCA)

RCE Disclaimer

This project is supported by the Office of the National Coordinator for Health Information Technology (ONC) of the U.S. Department of Health and Human Services (HHS) under 90AX0026/01-00 Trusted Exchange Framework and Common Agreement (TEFCA) Recognized Coordinating Entity (RCE) Cooperative Agreement.

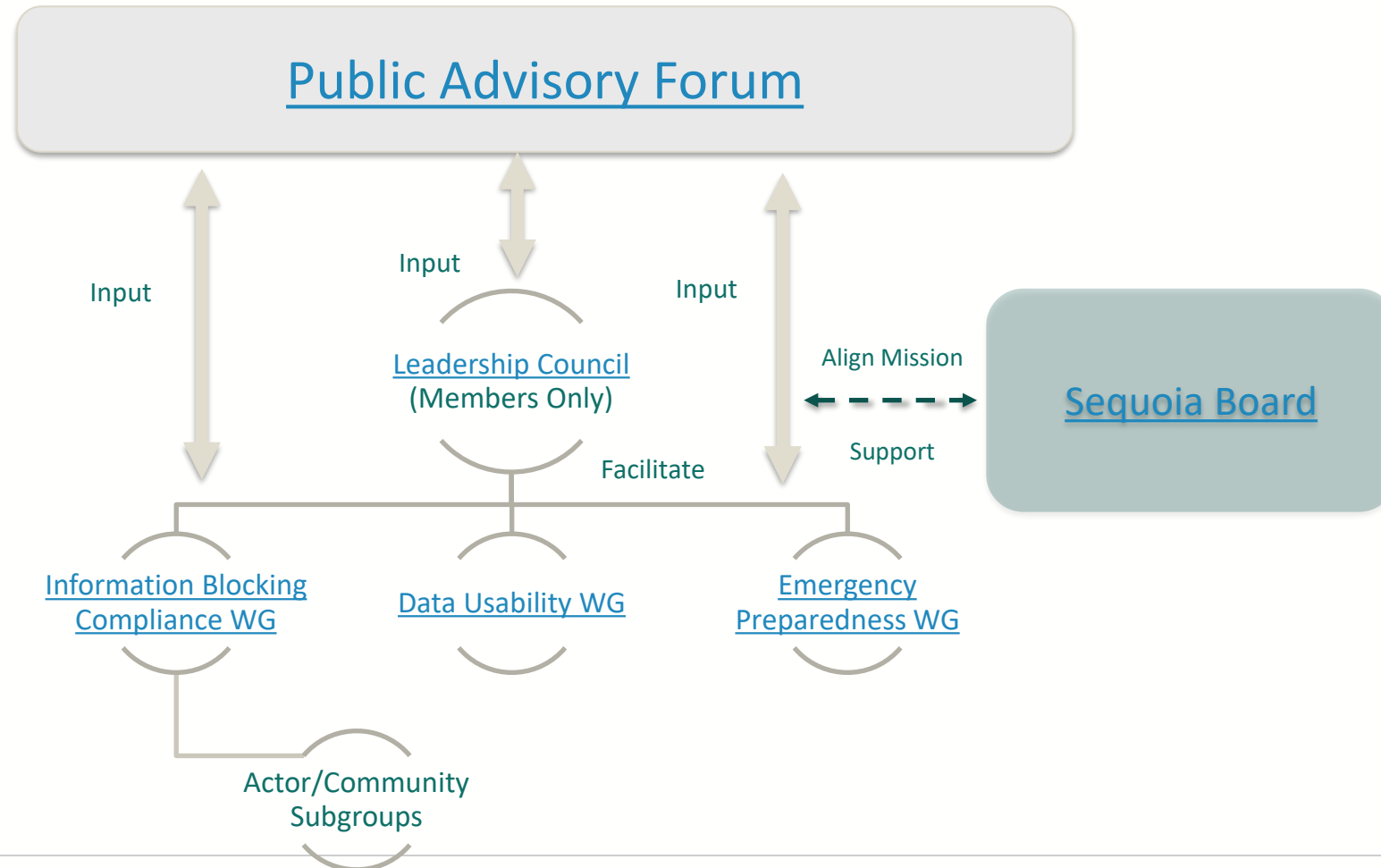
This information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by ONC, HHS or the U.S. Government.

Benefits of TEFCA



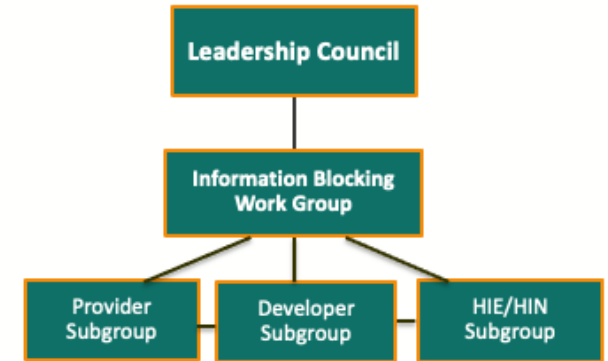
Interoperability Matters Cooperative

Interoperability Matters Structure



Information Blocking Subgroups – Purpose and Scope

- Purpose
 - Working discussions and drill down into specific issues by “actor” community
- Scope
 - Each Subgroup will have flexibility to focus on issues of greatest interest/relevance
- Composition
 - 12-15 members (including Chair) from primary actor community
 - Mix of actor (2/3) and other stakeholders (requesters, payers, SMEs)
 - Reflect “demographics” of actor
- Activities and Deliverables
 - Monthly meetings
 - Findings and recommendations
 - Guidance/best practices
 - Questions for ONC, OIG, etc.
 - Collaborate with other Subgroups, as appropriate
 - Presentation by Subgroup Chairs of deliverables and recommendations to Workgroup at its bi-monthly meetings (and Leadership Council as applicable)



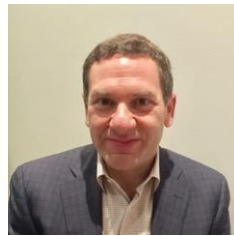
Information Blocking Compliance Support: Tools & Training

Boot Camp

- 1st Boot Camp
 - More than 300 people from 60+ organizations
 - Addressed more than 900 questions
 - Online Forum: <https://sequoiaproject.org/community/>
- 2nd Boot Camp launched January 20, 2021
 - ~150 people from 48 organizations
 - 2 classes and 1 office hours to-date
 - [Information Blocking Boot Camp - The Sequoia Project](#)



Interoperability Matters - Data Usability Workgroup



David Camitta, Co-chair
CommonSpirit Health



Bill Gregg, Co-chair
HCA Healthcare

Meeting Logistics and Timeline

- Meeting Schedule
 - Ongoing calls: Weekly, Thursday 3:00-4:00pm ET
 - <https://sequoiaproject.org/interoperability-matters/data-usability-workgroup/>
- Process & Timeframe

PHASE 1
Administration and Prioritization
(Current)
October 2020-March 2021
[View Meeting Notes](#)

PHASE 2
Developing Initial Drafts
April 2021-TBD (not beyond January 2022)

PHASE 3
Public Comment Period/
Recommended Next Steps
TBD, based on end of Phase 2-60 days after start

PHASE 4
Finalizing Implementation Guides
[TBD, based on end of Phase 3]-[3 months after start]

WEBINAR

Workgroup Meetings, Thursdays at 3:00 p.m. ET

For phase 1, the workgroup will meet each Thursday at 3:00 p.m. ET beginning October 29, 2020 through March 2021. We will strive to post the meeting materials for each meeting the day before, and upload meeting recordings within 24 hours.

REGISTER

ADD TO CALENDAR

Purpose

- Develop specific and pragmatic implementation guides on clinical content for healthcare stakeholders to facilitate health information exchange.
- Cover identified priority use cases, that are readily adoptable by health information exchange vendors, implementers, networks, governance frameworks, and testing programs.
- Target improvements necessary to enable semantic interoperability of health information to improve the usability of data received by end users within their workflows.
- Build on existing work (e.g. C-CDA Templates, ONC, USCDI V1, joint Carequality-CommonWell Document Content Workgroup) and coordinate with related SDOs and industry initiatives
 - JDCWG [2020 Priority Work Items](#) remaining from 2.0 guide
 - [JDCWG Draft 2.0 Guide](#)

Scope and Key Deliverables

- Develop three implementation guides focusing on data quality and addressing each of the following high-level use cases:
 - Provider-to-provider health information exchange
 - Provider-to-Public Health Agency information exchange
 - Healthcare entity-to-consumer information exchange
- Initial focus will be identifying priority elements to address in each implementation guide.
 - [Folder](#) for workgroup documentation
 - [Data Usability Workgroup Work Item Proposal Template](#)
 - Use Case Pain Point Gathering [2020-2021 Priority Work Items](#)
- Limit each implementation guide to a set of recommendations that is reasonable for a technology provider to address in one major software version cycle (e.g. 18 months).

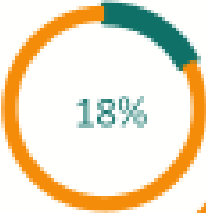
Workgroup Members

189 Organizations 271 Participants

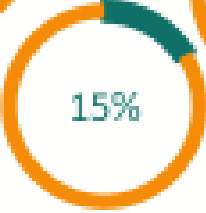
Healthcare Providers



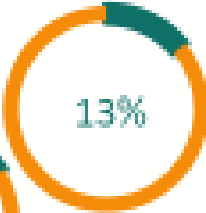
Health IT Developers



Other



HIN/HIEs



Federal, State, Local Government



Health Plan/Payer



Consumer/Patient



Standards Developer



Public Health



Emergency Preparedness Information Work Group

Key Deliverables

The workgroup's initial operating scope will be to prioritize concepts and challenges where the members can utilize their backgrounds and experiences to bring about meaningful impact at the state and national level.

Deliverables will include:

1. Lessons learned from response to the COVID pandemic as it relates to Health IT and interoperability; this might include policy and regulatory challenges, data quality and availability and privacy
2. Key concepts and items to consider to improve disaster response utilizing technology innovations and best practices across states, HIEs, HINs and partners
3. Create a Community of Practice where Public Health, Medicaid and other state agencies/entities, etc and federal partners can discuss innovations and blockers to those innovations

Interoperability Matters Meeting Schedule

Meetings	Cadence	Day	Time	Upcoming Meetings
Leadership Council	Bimonthly	2nd Wednesday	1:00-2:00pm ET	4/14/2021
Public Advisory Forum	Quarterly	3rd Thursday	2:30-3:30pm ET	4/20/2021
Work Groups				
Information Blocking Compliance Work Group	Bimonthly	2nd Friday	12:00-1:30pm ET	2/12/2021
HIN/HIE Subgroup	Monthly	2nd Monday	2:00-3:30pm ET	2/8/2021
Health IT Developer Subgroup	Monthly	3rd Monday	3:30-5:00pm ET	2/15/2021
Healthcare Providers Subgroup	Monthly	4th Wednesday	12:00-1:30pm ET	2/24/2021
Emergency Preparedness Work Group	Monthly	3rd Monday	2:00-3:00pm ET	3/15/2021
Data Usability Work Group (Phase 1)	Weekly	Thursday	3:00-4:00pm ET	2/11/2021



Questions/Thank You!

Convene

Collaborate



Interoperate



For more information:

www.sequoiaproject.org

Twitter: [@sequoiaproject](https://twitter.com/sequoiaproject)

LinkedIn: <https://www.linkedin.com/company/the-sequoia-project/>

Please share your feedback using the survey link in the chat, the QR code below, or the link in the follow up email!





**Thank you
for joining us
today!**