Office of the National Coordinator for Health Information Technology

ONC Social Determinants of Health (SDOH) Information Exchange Learning Forum

Implementation Services, Measurement and Evaluation

1:00 - 2:30 pm ET

Tuesday, May 23rd, 2023

Agenda

- Welcome
- Background on SDOH Information Exchange
- Overview of SDOH Information Exchange Foundational Element: Measurement and Evaluation
- Spotlight: Centers for Medicare and Medicaid Services (CMS)
- Overview of SDOH Information Exchange Foundational Element: Implementation Services
- Spotlight: MAC, Inc. and CRISP
- Questions and Discussion
- Learning Forum Series and Small Group Opportunities
- Closing

Welcome

Please chat in your name, role and organization.

Meley Gebresellassie
ONC

Mark Knee
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Background on SDOH Information Exchange

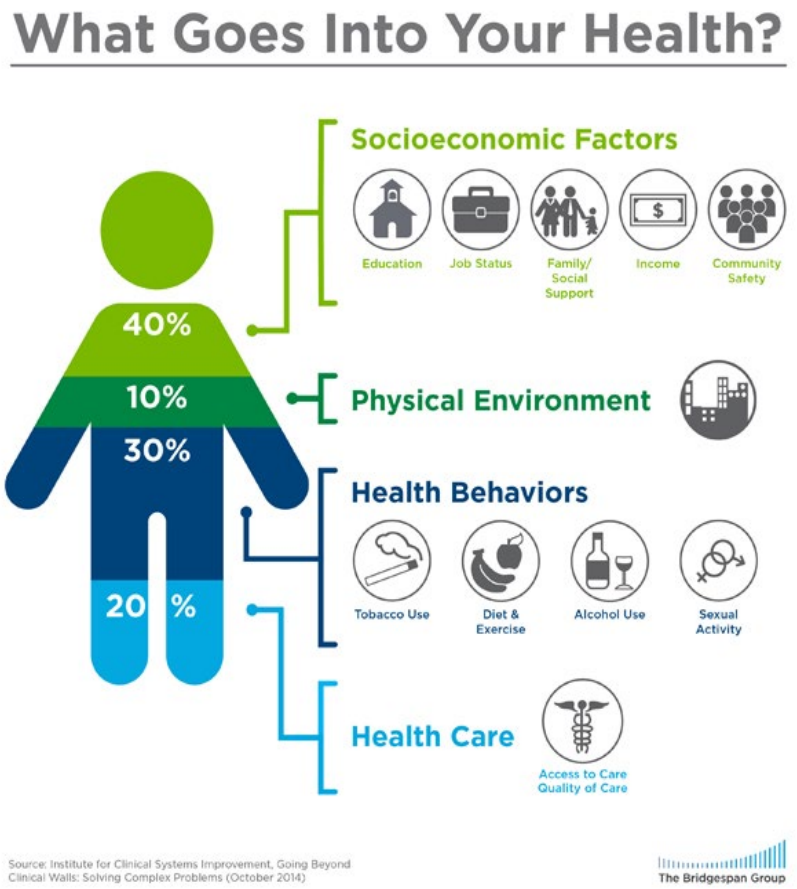
Why is addressing social needs important?

Unmet social needs negatively impact **health outcomes:**

- Social risks such as **food insecurity and homelessness** are associated with increased risk of chronic diseases. (e.g. hypertension, cancer, asthma, diabetes)

Unmet social needs negatively impact **health care access:**

- Social risks such as **transportation insecurity, housing instability, lack of health insurance** are associated with delayed or missed care.



Sourced: Gravity Project
https://aspe.hhs.gov/reports/health-conditions-among-individuals-history-homelessness-;
https://www.ers.usda.gov/webdocs/publications/84467/err-235.pdf ; https://health.gov/healthypeople

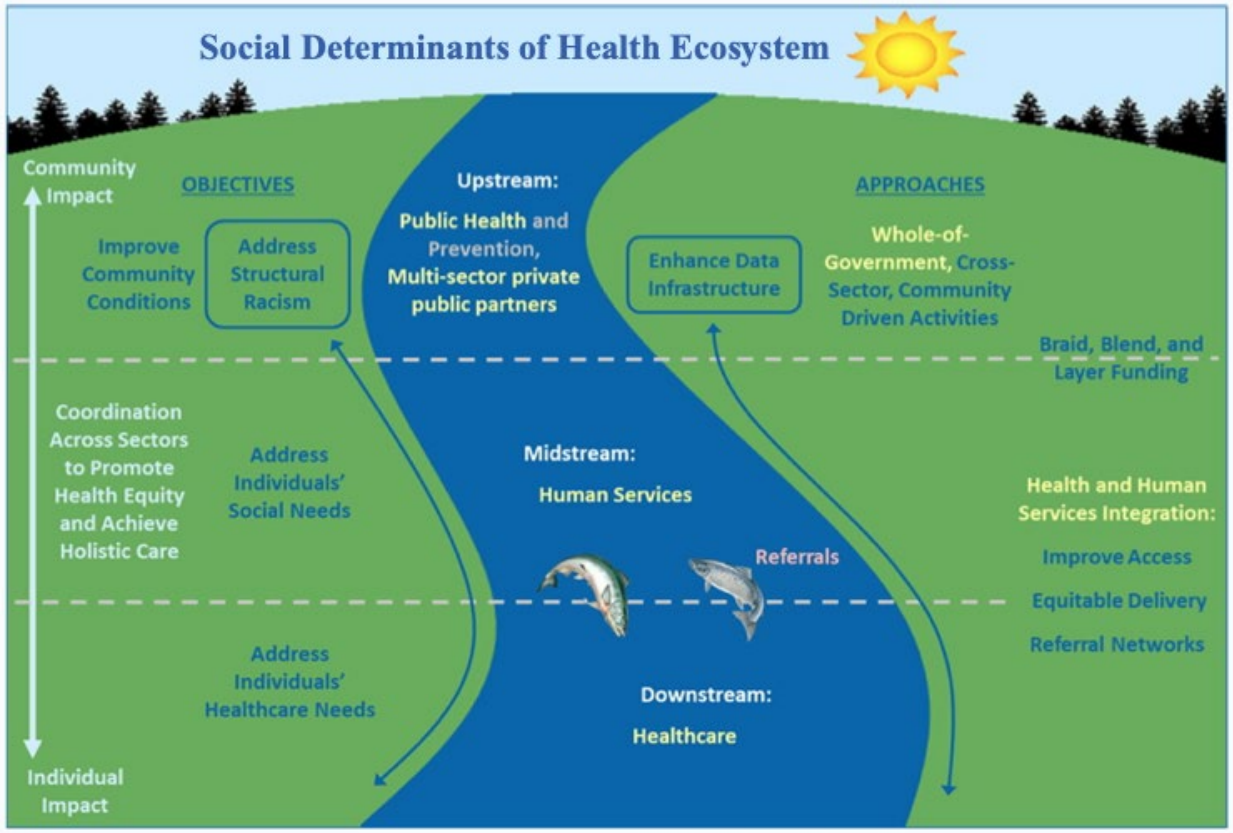
SDOH and HHS Healthy People 2030

- Healthy People 2030 sets data-driven national objectives to improve health and well-being over the next decade and was released by HHS on August 18, 2020.
- One of Healthy People 2030's 5 overarching goals is specifically related to SDOH: "Create social, physical, and economic environments that promote attaining the full potential for health and well-being for all."

https://health.gov/healthypeople/priority-areas/social-determinants-health

HHS SDOH Action Plan

- **Goal 1**: Build a robust and interconnected data infrastructure to support care coordination and evidence-based policymaking.
- **Goal 2**: Improve access to and affordability of equitably delivered health care services, and support partnerships between health care and human service providers, as well as, build connections with community partners to address social needs.
- **Goal 3**: Adopt whole-of-government approaches, support public-private partnerships, and leverage community engagement to address SDOH and enhance population health and well- being.



Note: Adapted from Castrucci B, Auerbach J. Meeting Individual Social Needs Falls Short of Addressing Social Determinants of Health. Health Affairs Blog. January 16, 2019

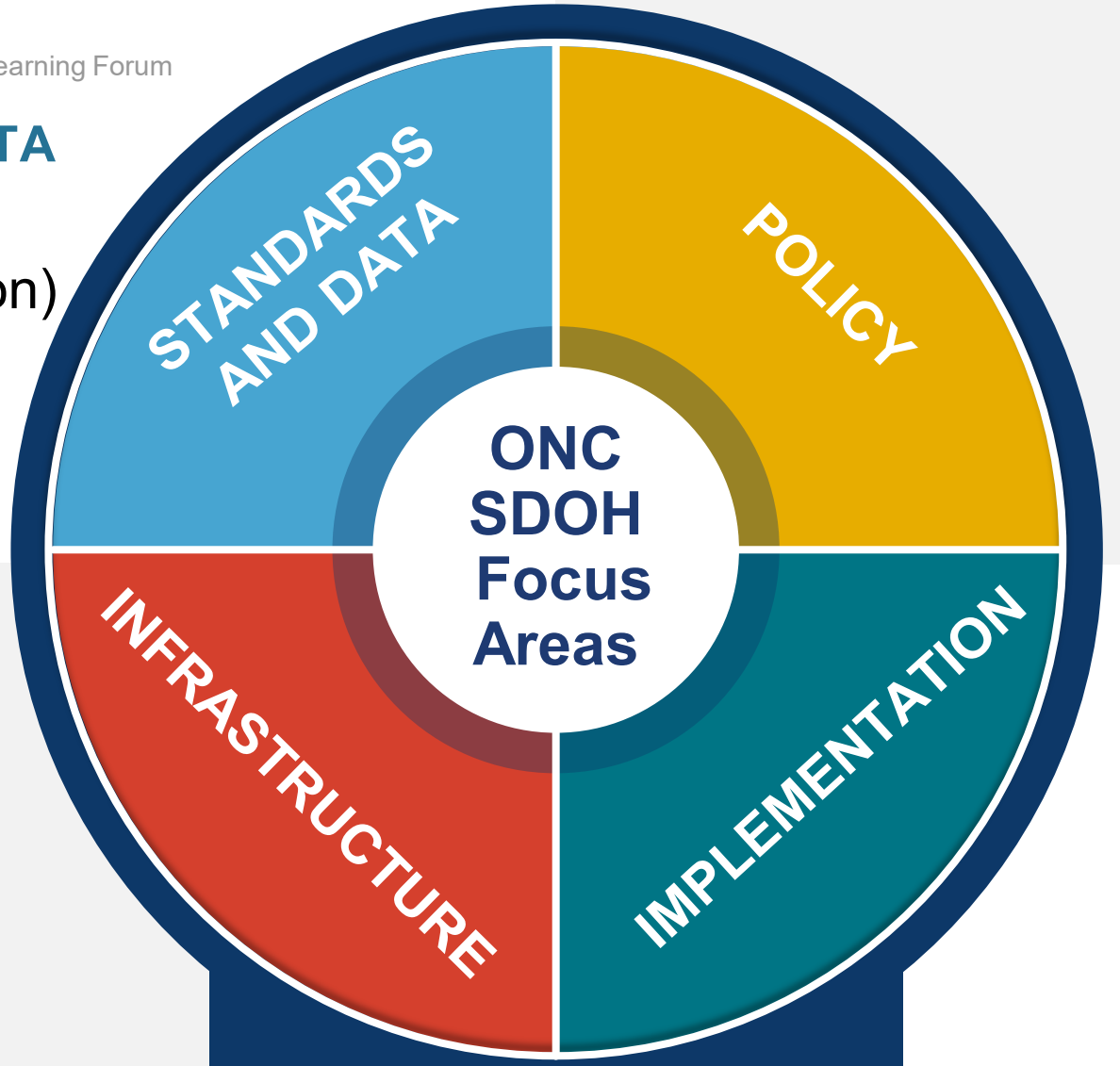
https://aspe.hhs.gov/sites/default/files/documents/aabf48cbd391be21e5186eeae728ccd7/SDOH-Action-Plan-At-a-Glance.pdf

STANDARDS AND DATA

(Advance Standards Development Adoption)

POLICY

(Emerging Policy Challenges & Opportunities)



INFRASTRUCTURE

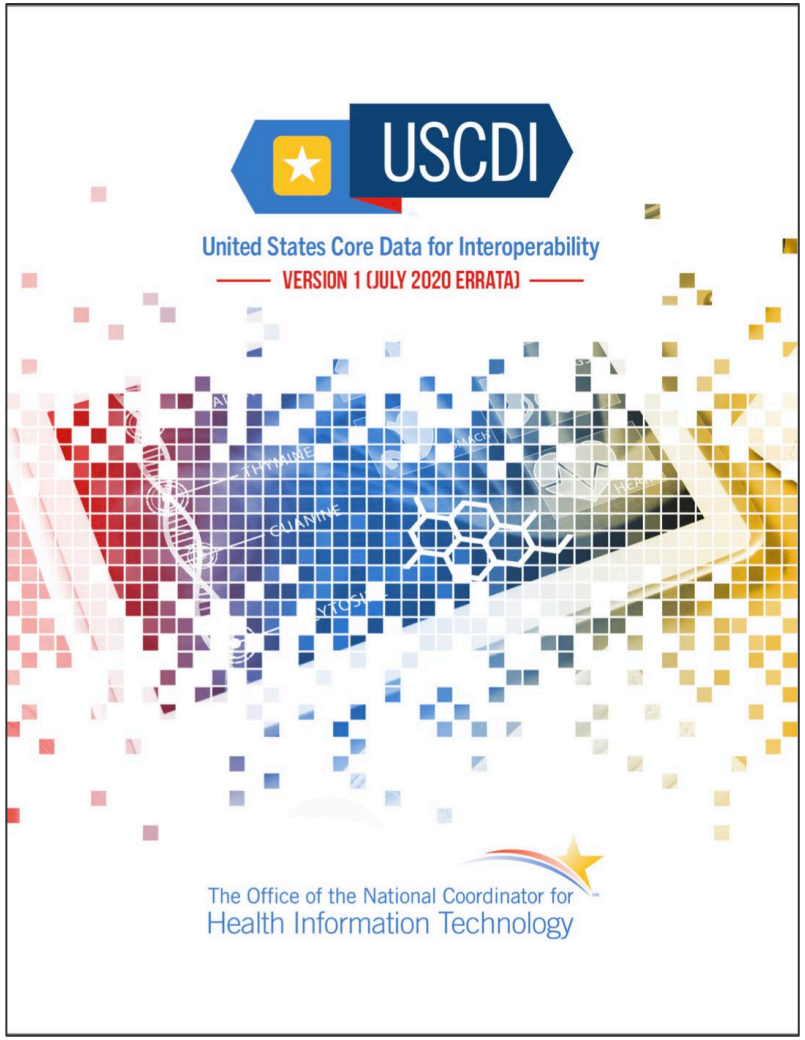
(SDOH Information Exchange/ Interoperable Referrals, HIE, State, & Local)

IMPLEMENTATION

(Integration, Innovation, and Health IT Tools)

Collect, Access, Exchange, Use

United States Core Data for Interoperability (USCDI):
the minimum dataset for the health care delivery system



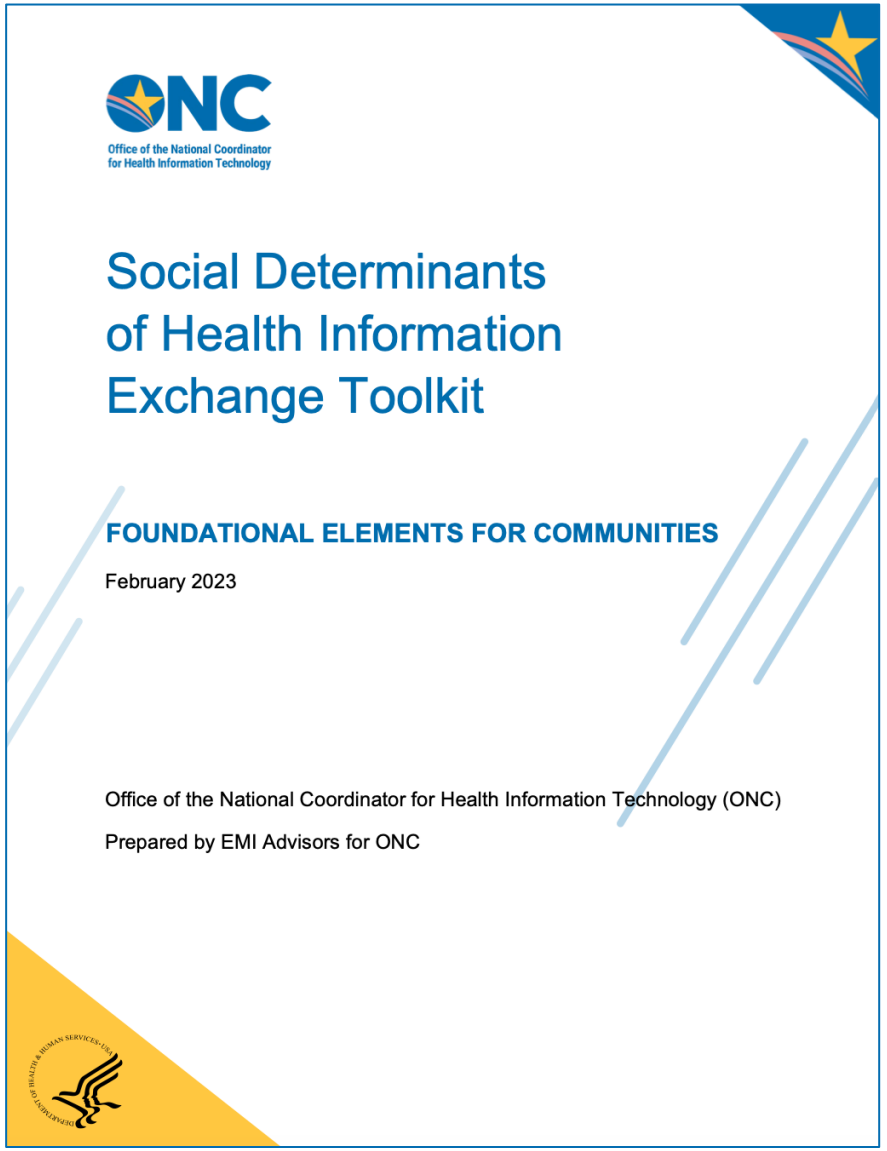
https://www.healthit.gov/isa/united-states-core-data-interoperability-uscdi

- **ONC standard for minimum dataset required for interoperability**
  - Defines required data elements and vocabulary standards
  - Agnostic to format.
- **Updated on annual cycle with federal agency and industry input**
  - Updates based on multiple criteria including standards maturity and public/industry priority.

ONC SDOH Information Exchange Toolkit publication

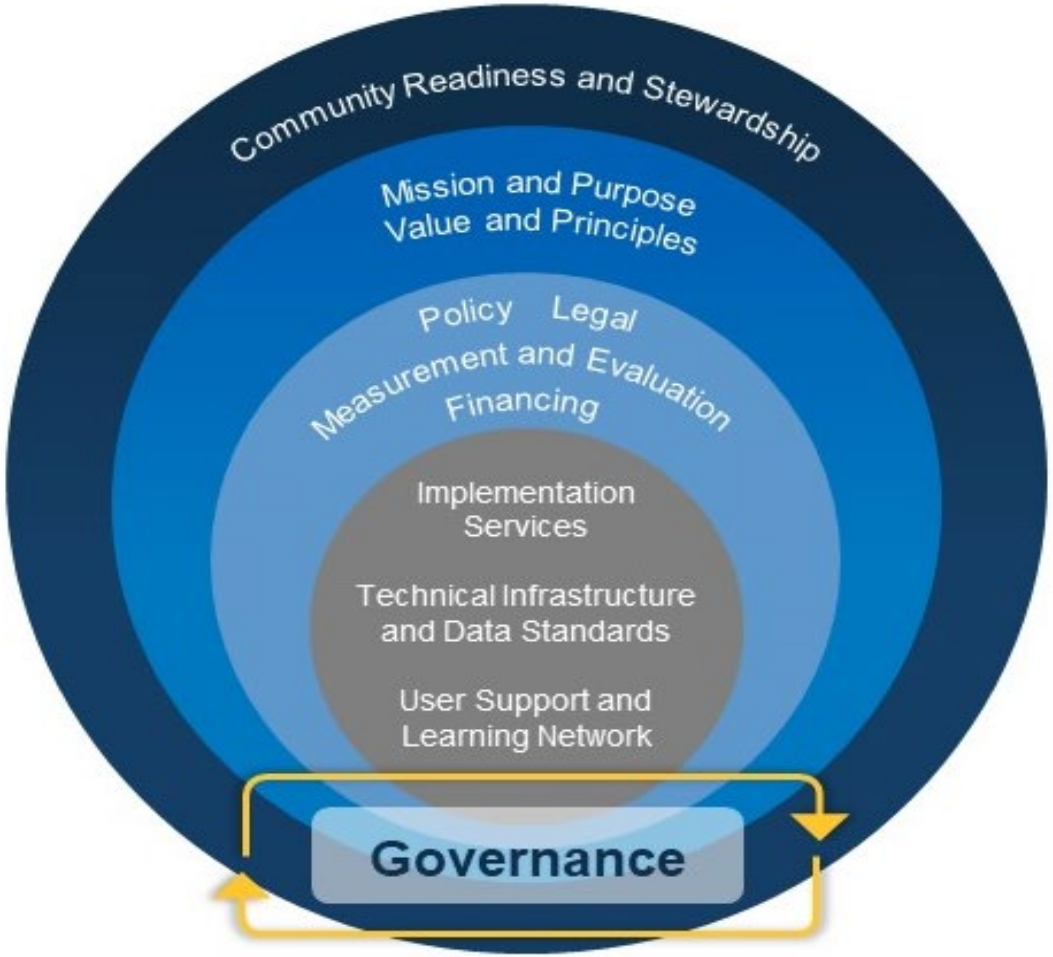
Developed by ONC with support from EMI Advisors and a panel of technical experts convened in 2020.

- Provides information on the SDOH information exchange landscape to stakeholders of all experience levels.
- Identifies approaches to advance SDOH information exchange goals through the 'foundational elements' framework.
- Provides examples of common challenges and promising approaches.
- Shares guiding questions and resources to support implementers.
- Available here: Social Determinants of Health (SDOH) Information Exchange Toolkit



Overview of SDOH Information Exchange Foundational Element: Measurement and Evaluation

Social Determinants of Health Information Exchange Foundational Elements



Foundational element: measurement and evaluation

Measurement and evaluation of performance metrics, individual and population outcomes, program effectiveness, and quality management and improvement.

Types of measures can include:

- **Process measures:** Individual-level impacts, such as number of individuals at risk screened and number of closed referrals to community-based organizations.
- **Utilization measures**: Monitoring the use of SDOH information exchange, including utilization, service volume, and participation.
- **Financial measures**: Measuring cost savings for improved health outcomes, reduced costs, and cost-benefit analysis.
- **Quality measures**: Conducting measurement activities to assess the association between improved population-level health outcomes and improvements in SDOH information exchange, referrals, and use of services.

Questions to consider

- What are the metrics for success?
- What is the evaluation framework, measures, and methodology?
- What are the data sources and how will the data be accessed?
- What quality measures will be utilized to quantify healthcare processes, patient perceptions, outcomes and structure/systems?
- What financial return on investments will be assessed?
- How is ethics and equity considerations woven into the evaluation process?
- How are participant experiences and outcomes considered in all aspects of the measurement process?
- How will results be shared and with whom?

Spotlight: CMS

CMS is working to advance health equity

CMS Framework for Health Equity: 5 Priority Areas

Priority 1: Expand the Collection, Reporting, and Analysis of Standardized Data

Priority 2: Assess Causes of Disparities Within CMS Programs, and Address Inequities in Policies and Operations to Close Gaps

Priority 3: Build Capacity of Health Care Organizations and the Workforce to Reduce Health and Health Care Disparities

Priority 4: Advance Language Access, Health Literacy, and the Provision of Culturally Tailored Services

Priority 5: Increase All Forms of Accessibility to Health Care Services & Coverage

CMS has announced the National Quality Strategy for a resilient, high-value healthcare system

CMS National Quality Strategy

Goals

Equity

Advance health equity and whole-person care

Engagement

Engage individuals and communities to become partners in their care

Safety

Achieve zero preventable harm

Resiliency

Enable a responsive and resilient health care system to improve quality

Outcomes

Improve quality and health outcomes across the care journey

Alignment

Align and coordinate across programs and care settings

Interoperability

Accelerate and support the transition to a digital and data-driven health care system

Scientific Advancement

Transform health care using science, analytics, and technology

Example CMS actions to advance the agency's Health Equity Framework priorities and National Quality Strategy goals

- Stratification of quality measures for equity
  - Current: race, ethnicity, dual-eligibility status
  - Considerations for future: standardized SDOH data elements
- Use of equity-specific measures, such as the proportion of adults screened for SDOH and a commitment to equity attestation measure

- Development of equity-specific measures, such as
  - Addressing social needs electronic clinical quality measure
  - Language services summary survey measure
- Advancing SDOH data standardization via recommendations for
  - USCDI
  - USCDI+ Quality
  - SDOH standards projects
    - HL7® Gravity Project: data standards to address the SDOH across core activities of screening using validated instruments, diagnosis, goal setting, and interventions
    - HL7 Gender Harmony Project: crafting evidence-based value sets for gender identity, sex for clinical use, and other related concepts

CMS Equity-Specific Quality Measurement

Measures under development:
(1) Addressing social needs electronic clinical quality measure

CMS has finalized the use of the proportion of adults screened for SDOH measure

- Voluntary for 2023, required beginning 2024 under the Hospital Inpatient Quality Reporting Program
- This current measurement is limited
  - Does not require use of standardized screening instruments to complete the quality measure
  - Does not capture follow-up intervention activity to address social needs

CMS is developing a next-generation measure – the addressing social needs electronic clinical quality measure (ASN eCQM)

- This ASN eCQM under development aims to enhance current measurement by
  - Enhancing accuracy of measurement by refining social need domain definitions and requiring validated technical standards for endorsed screening tools
  - Promoting efficiency and alignment across the ecosystem through use of all-payer eCQMs
  - Aligning with national health information technology interoperability standards (USCDI)
  - Encouraging and developing accountability for follow-up when screening is positive

Measures under development:
(1) Addressing social needs electronic clinical quality measure

- **Measure type:** electronic clinical quality measure (eCQM)
  - Process measure (episode-based)
- **Data source:** social needs collected from hospital electronic health records (EHRs)
- **Measure focus**
  - Designed to **measure screening** of patients (all ages) for social needs within four domains (1-food insecurity, 2-housing insecurity (housing instability and homelessness), 3-utility insecurity, and 4-transportation insecurity), **and** if an **intervention activity** is performed
  - Successful completion requires hospitals encode information on screening, diagnoses, and follow-ups into structured data elements in accordance with USCDI
- **Measure status:** under development

Measures under development:
(1) Addressing social needs electronic clinical quality measure

How the ASN eCQM is enhancing measurement through use of standards

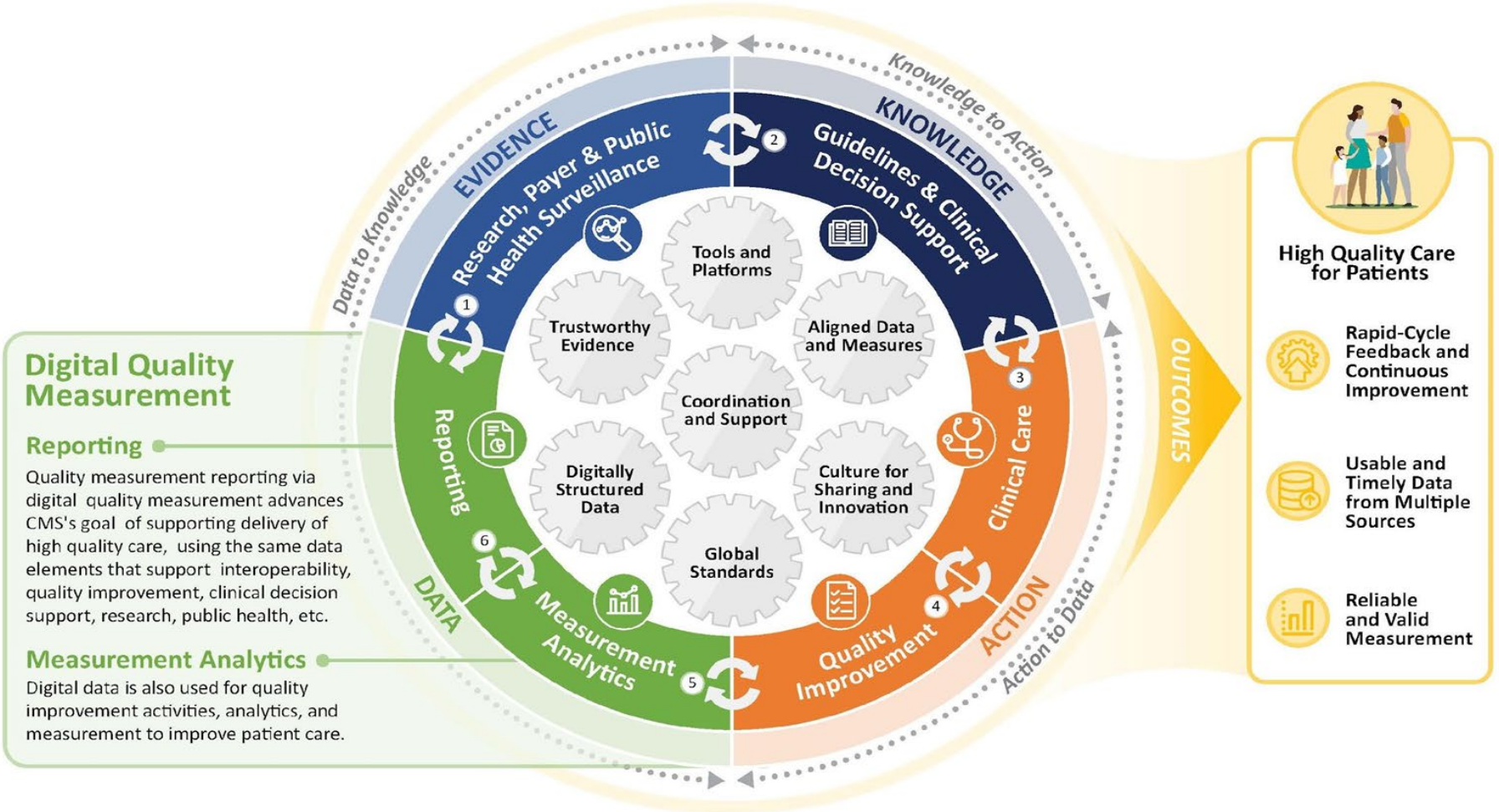
- **The included social domains apply definitions from the HL7® Gravity Project** (see Appendix)
  1. Food insecurity
  2. Housing insecurity (housing instability and homelessness)
  3. Utility insecurity
  4. Transportation insecurity
- **The qualifying standardized screening instruments for the domains must**
  - **Be digitally encoded** in instrument terminology standards
    - Currently LOINC; in future, other code sets (e.g., SNOMED) may apply
    - Goal is to promote digital measurement and alignment with US Health Information Technology (HIT) standards, and to align with the CMS dQM Strategic Roadmap
  - **Meet validation criteria**
    - Base threshold of validity is face validity with assessment by subject matter experts
    - If domain has recognized gold standard instrument, threshold rises to require screening instruments must demonstrate published evidence of being tested against the standard and meet industry standards of sensitivity (70%) & specificity (70%)
    - If no validated instruments meet gold standard are practical for clinical use, postpone requirement until tools available
- **The qualifying follow-up actions are based on work by the HL7 Gravity Project**
  - See definitions in Appendix

Measures under development:
(2) Language services summary survey measure

- **Measure type: patient-reported outcome performance measure (PRO-PM)**
  - Patient experience of care
  - Summary Survey Measure (SSM; component measure of larger survey-based PRO-PM)
- **Data source:** CAHPS for MIPS survey
  - CAHPS for MIPS measure (Quality ID 321) is a composite of 9 other current SSMs
- **Measure focus:** Communication and Language Assistance domain of National Culturally and Linguistically Appropriate Services (CLAS) Standards
  - Patient access to and quality of appropriate interpreter services
  - Receipt and quality of translated forms and educational materials
- **Measure status:** under development

CMS’ Efforts to Advance SDOH Data Standardization

A learning health system uses data to drive health care



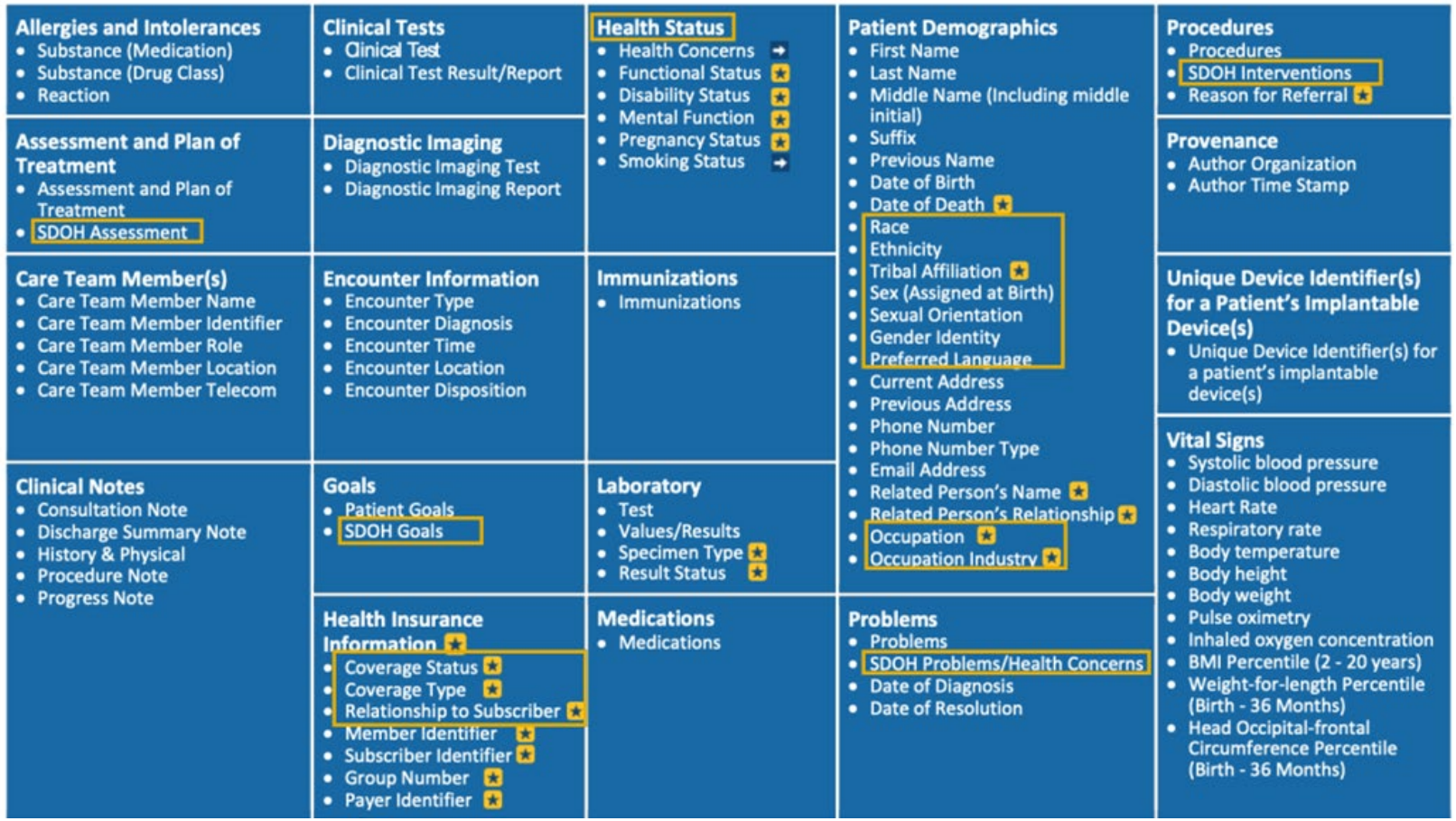
Sponsoring HL7 Workgroups: Clinical Decision Support (CDS) | Clinical Quality Information (CQI) | Public Health (PH)

Adapted from HL7 Clinical Quality Information (CQI) Workgroup by Maria Michaels, Centers for Disease Control and Prevention

One of CMS' primary area of focus for data standardization has been social determinants of health

- CMS' data standardization efforts include contributing to ONC's USCDI and USCDI+ Quality

SDOH Data Elements in USCDI v3



Key: ★ New Data Class or Element ➡ Data Element Reclassified

ONC Social Determinants of Health (SDOH) Information Exchange Learning Forum (July 19th, 2022)

CMS focus areas among USCDI SDOH data elements

- CMS' currently uses the following
  - Race
  - Ethnicity
  - Sex
  - Gender Identity
  - Coverage type
  - Health Status
- CMS' SDOH priorities for future measurement
  - SDOH Assessment
  - SDOH Goals
  - SDOH Problems/Health Concerns
  - SDOH Interventions
  - Preferred Language

CMS’ support for the HL7® Gravity project

- The Gravity Project is a collaborative public-private initiative that develops consensus-driven data standards to support the collection, use, and exchange of data to address SDOH
- CMS has previously supported the inclusion of several Gravity Project data elements in the USCDI v2 including SDOH Assessment, SDOH Interventions, SDOH Goals, and SDOH Problems/Health Concerns.
- CMS continues to monitor the progress of the Gravity Project's SDOH IG to identify opportunities for alignment of standards necessary for quality measurement.

The Gravity Project - Gravity Project - Confluence (hl7.org)

CMS' support for HL7® Gender Harmony Project

- The HL7 Gender Harmony project developed standards for sex and gender including a series of specific "context of use definitions" and additional information required for use-based collection of specified sex and/or gender codes
- CMS supports the alignment of the USCDI sex and gender data elements with the project's recommendations as they are aligned with CMS current and future digital data needs
  - Addition of Gender Harmony project's Recorded Sex or Gender (RSoG) and Sex for Clinical Use (SFCU) to existing standards for sex
    - Rationale: Further specification of data elements related to the concept of sex is necessary to improve health equity, represent diversity, and improve care, specifically for historically vulnerable and/or underserved populations
  - Expansion of the Gender Identity data element definition to include the Gender Harmony Project's minimum value set, with ISWG refinements
    - Rationale: The additional values in the defined terminology work collectively with the sex data element to represent sex and gender diversity that supports improved care for vulnerable or underserved populations.

The Gender Harmony Project - Terminology Infrastructure - Confluence (hl7.org)

The round-up: why do standardized data matter?

- CMS aims to leverage the interoperability data requirements for standardized APIs in certified health IT as it transitions full digital quality measurement
- CMS is contributing to the establishment of a functional learning health system, with standardized data as the foundation
  - Aligns with CMS' Framework for Health Equity and CMS' National Quality Strategy
  - Learning health systems generate knowledge from data captured during routine care
- Data standardization
  - Transforms data into a common format
  - Ensures data quality
  - Allows for data flow
  - Supports program alignment
- Standardized data connect quality data with the broader healthcare data system
  - Patient health data access
  - Big data analytics
  - Research

Thank you!

- CMS dQM
  - Joel Andress, Joel.Andress@cms.hhs.gov
  - Bridget Calvert, Bridget.Calvert@cms.hhs.gov

Appendix

Measures under development:
(1) *Addressing social needs electronic clinical quality measure*

Social Domains and Definitions

Domain	Definition from Gravity Project*
(1) Food Insecurity	Food insecurity is defined as a household-level economic and social condition of limited or uncertain access to adequate food
(2) Housing Insecurity	Screening for housing insecurity requires assessments for housing instability and homelessness
Housing Instability	Currently housed but experiencing any of the following circumstances in the past 12 months: being behind on rent or mortgage, multiple moves, cost burden, or risk of eviction
Homelessness	Living in a place not meant for human habitation. Includes living on the street, in cars, emergency shelters, transitional housing, or hotels and motels paid for by an organization or government program
(3) Transportation Insecurity	A condition in which one is unable to regularly move from place to place in a safe and timely manner because one lacks the material, economic or social resources necessary for transportation
(4) Utility Insecurity	Limited or uncertain access to home utilities (such as energy, water, electricity) to sustain a healthy and safe life in the geographic area where a household is located

*Gravity Project, https://confluence.hl7.org/display/GRAV/The+Gravity+Project

Measures under development:
(1) Addressing social needs electronic clinical quality measure

Qualifying Standardized Screening Instruments

- **Must be digitally encoded in instrument terminology standards**
  - Currently LOINC; in future, other code sets (e.g., SNOMED) may apply
  - Goal is to promote digital measurement and alignment with US Health Information Technology (HIT) standards, and to align with the CMS dQM Strategic Roadmap
- **Must meet validation criteria**
  - For most social risk domains, the base threshold of validity is face validity as assessed by domain subject matter experts. If a domain has a recognized gold standard instrument, the threshold rises to require that screening instruments must demonstrate published evidence of being tested against the standard and meeting at least industry standards of sensitivity (70%) and specificity (70%). This is consistent with recent guidance from the National Quality Forum around social data collection.
- If no validated instruments meet the gold standard that are practical for clinical use, postpone requirement until pragmatic tools are available

Measures under development:
(1) Addressing social needs electronic clinical quality measure

- **Qualifying Follow-Up Actions From Gravity Project**

Action	Definition*
Adjustment	Activities that focus on altering clinical care to accommodate identified social barriers
Assistance/Assisting	To give support or aid to; help
Coordination	Process of organizing activities and sharing information to improve effectiveness.
Counseling	Psychosocial procedure that involves listening, reflecting, etc., to facilitate recognition of course of action/solution.
Education	Procedure that is synonymous with those activities such as teaching, demonstration, instruction, explanation, and advice that aim to increase knowledge and skills, change behaviors, assist coping and increase adherence to treatment.
Evaluation of eligibility	Process of determining eligibility by evaluating evidence.
Evaluation/Assessment**	Determination of a value, conclusion, or inference by evaluating evidence.
Provision	To supply/make available for use.
Referral	The act of clinicians/providers sending or directing a patient to healthcare professionals and/or programs for services (e.g., evaluation, treatment, aid, information etc.)

*Gravity Project, https://confluence.hl7.org/display/GRAV/Food+Insecurity
**This action type will be excluded as it is satisfied by screening

Questions and Discussion

Overview of SDOH Information Exchange Foundational Element: Implementation Services

Foundational Element: Implementation Services

Inclusive of technical and programmatic services as well as support for adoption and utilization by individuals and the community.

This includes, but is not limited to:

- Defining and prioritizing requirements
- Developing use cases
- Aligning with standards specifications
- Integrating platforms and systems
- Designing workflows
- Providing technical support and training opportunities for end users

Questions to consider

- What technology systems are already implemented in the community, region or state?
- What are the priority system capabilities, use cases and requirements?
- How can existing systems be integrated to enable sharing and reuse of data by authorized personnel?
- What incentives are available to encourage adoption and use of SDOH information exchange solutions?
- What resources are available to build community capacity and support workflow redesign?
- What technical support and training can be provided during implementation and into operations phase?

Spotlight: MAC, Inc. & CRISP

CRISP and MAC SDOH Data Sharing

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Sue Lachenmayr, MPH

~CHES State Program Coordinator, Maryland Living Well Center of Excellence

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Agenda

- Problem Statement
- Overview of CRISP Information Exchange Technical Infrastructure
- Overview of MAC & Collaboration
- Headwinds & Tailwinds
- Future Work

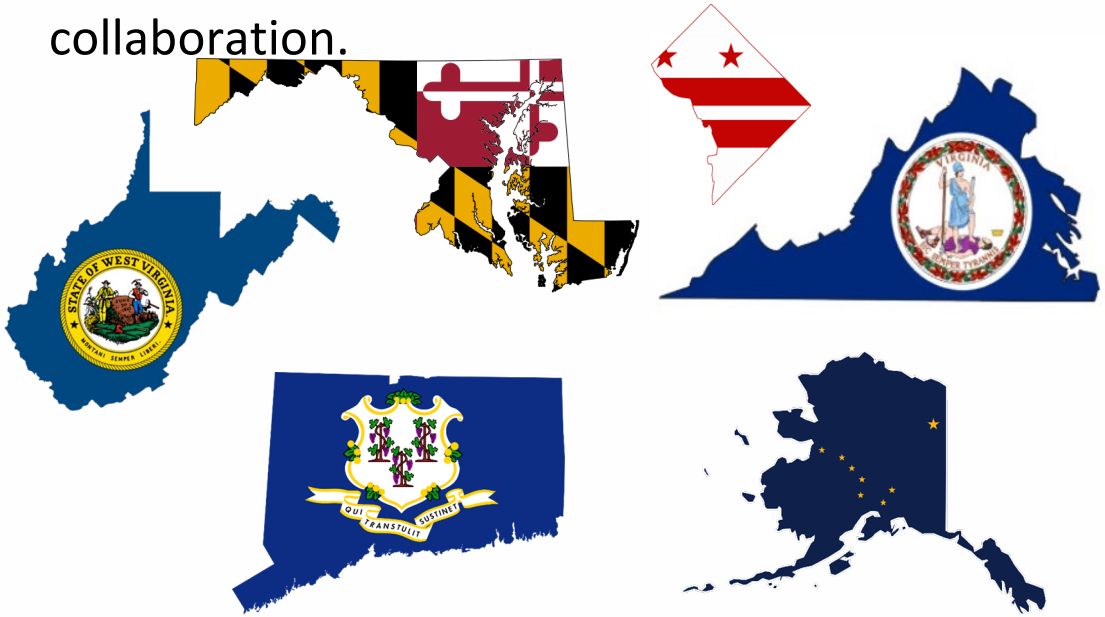
Problem Statement

Understanding what services a CBO provides, as well as it's value to a patient is difficult to share back to clinical care teams and health care systems.

About CRISP (Chesapeake Regional Information Systems for Patients)

Regional Health Information Exchange (HIE) serving Maryland, West Virginia, the District of Columbia, Connecticut, Virginia and Alaska

Vision: To advance health and wellness by deploying health information technology solutions adopted through cooperation and collaboration.



	Maryland
Live hospitals	All acute care hospitals
Provider Orgs using ENS or Query Portal	1,350+
Unique patients in our index	+17.9 million
Patient searches	+363,000/month (337k found)
Encounter alerts sent	+2.5MM/month (4MM 6/2019)
PDMP Queries	2.5MM/month

CRISP and SDOH Interoperability

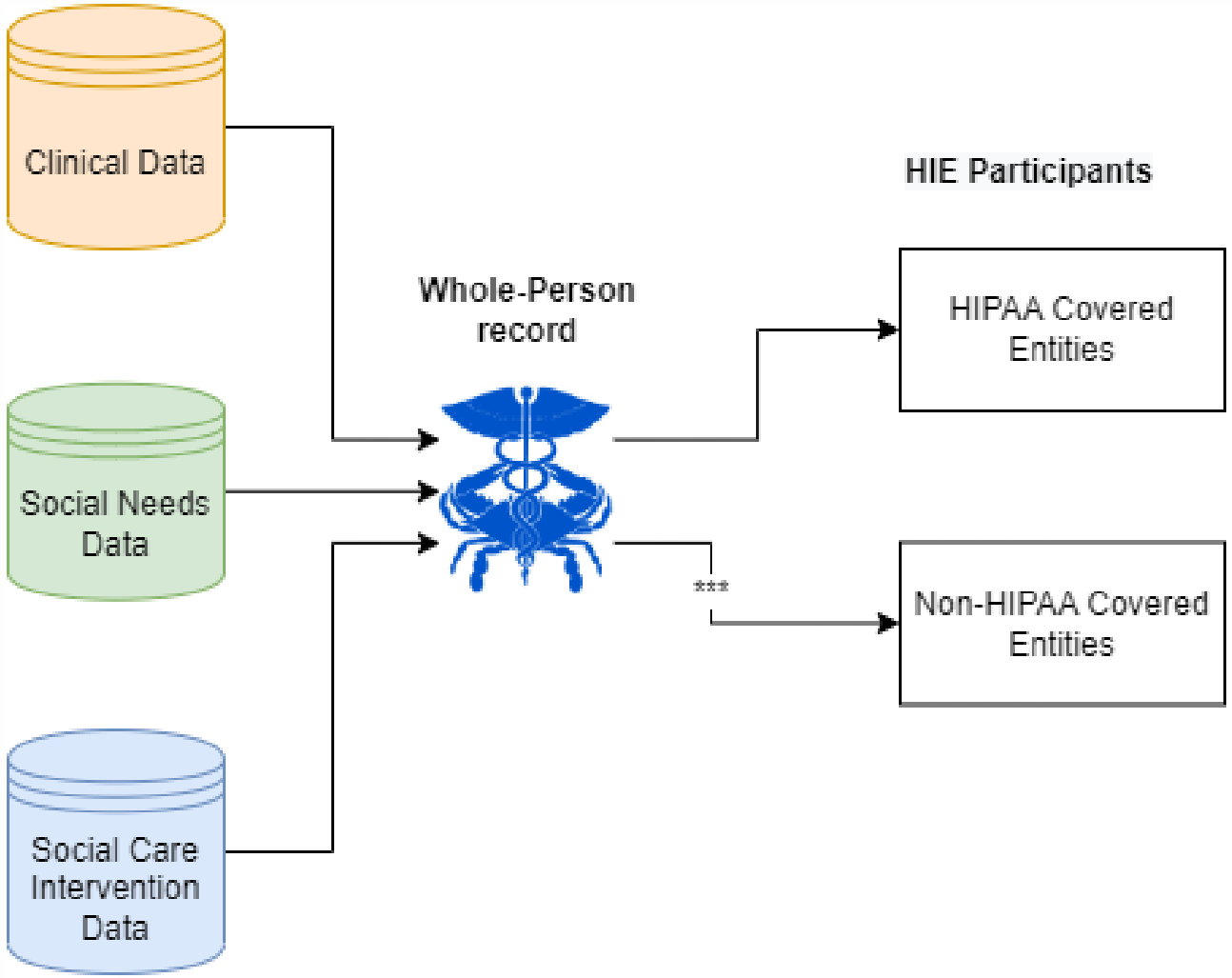
Challenges

- Regions with heterogenous needs.
- Stakeholders have made existing investments in tools, workflows, and systems.
- Clinical and social care systems and data are siloed.

Key Features

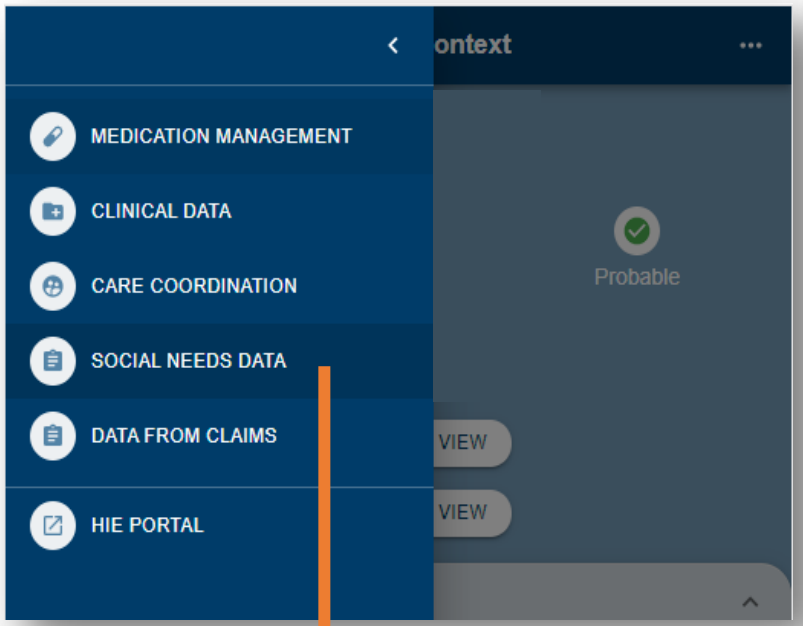
- Support interoperability and integrations first.
- Be agnostic to vendor, tool, and workflow.
- Create a whole-person record that includes clinical and social care data.

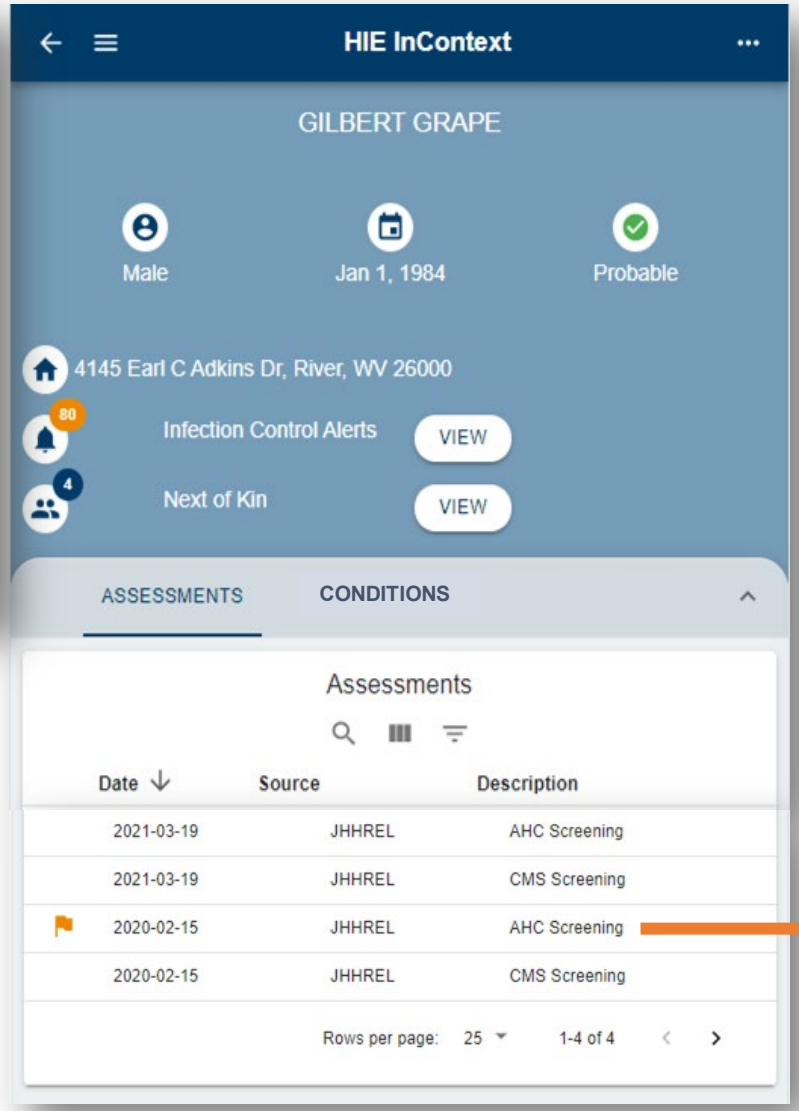
Whole Person Record

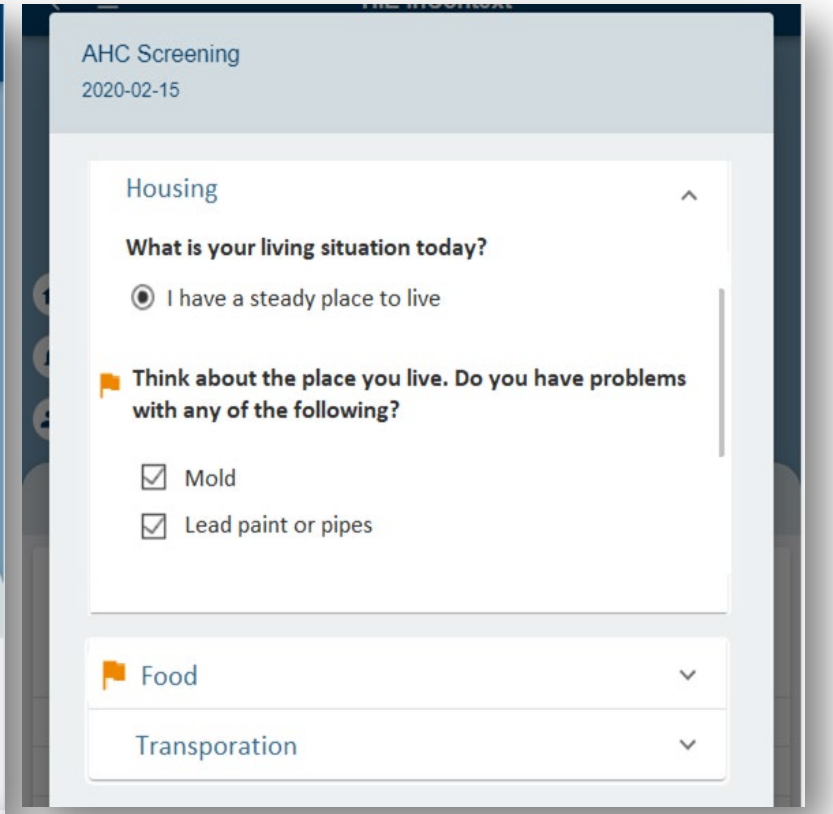


*** Specific Policy & Data Governance Controls Applied

Identifying Social Needs (Assessments & Conditions)



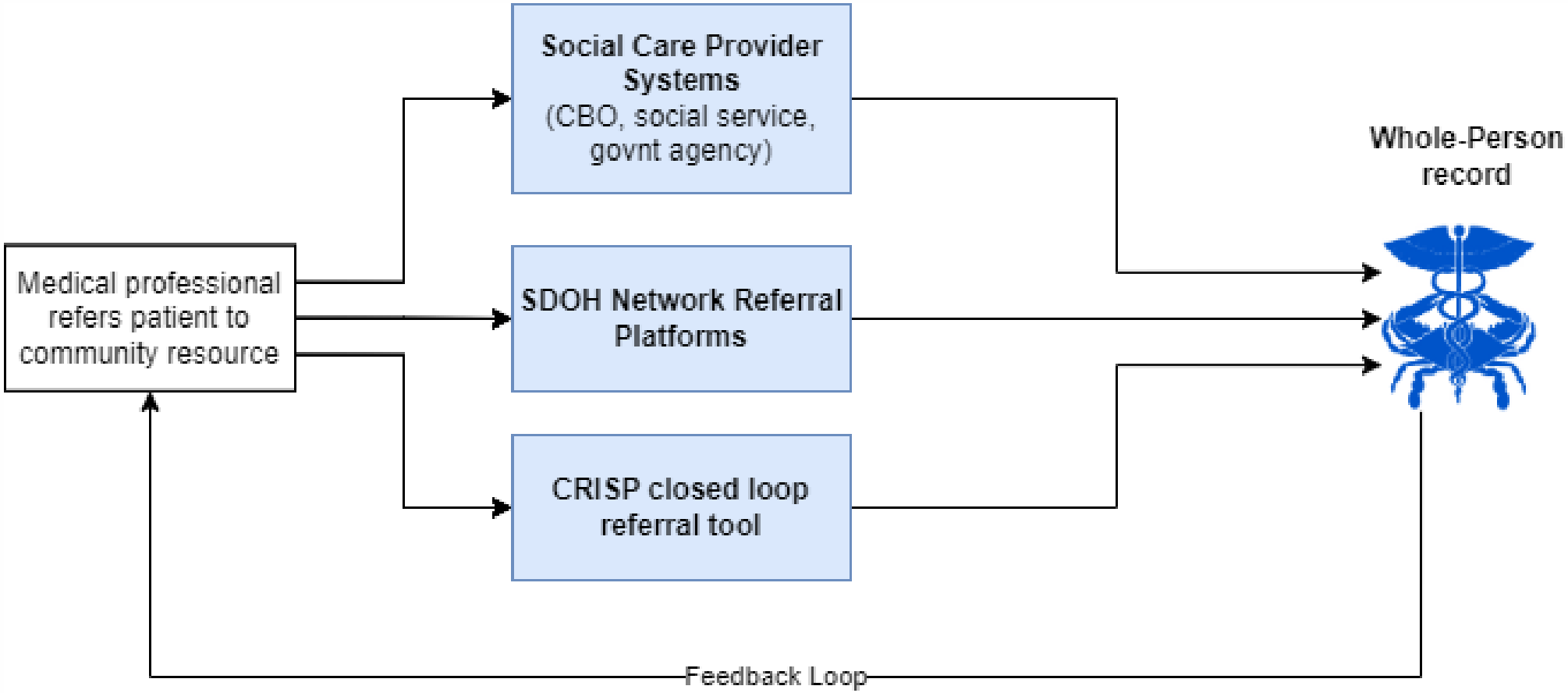




Use Case #1: Members of the care team understand a patient's social needs, no matter where they were captured.

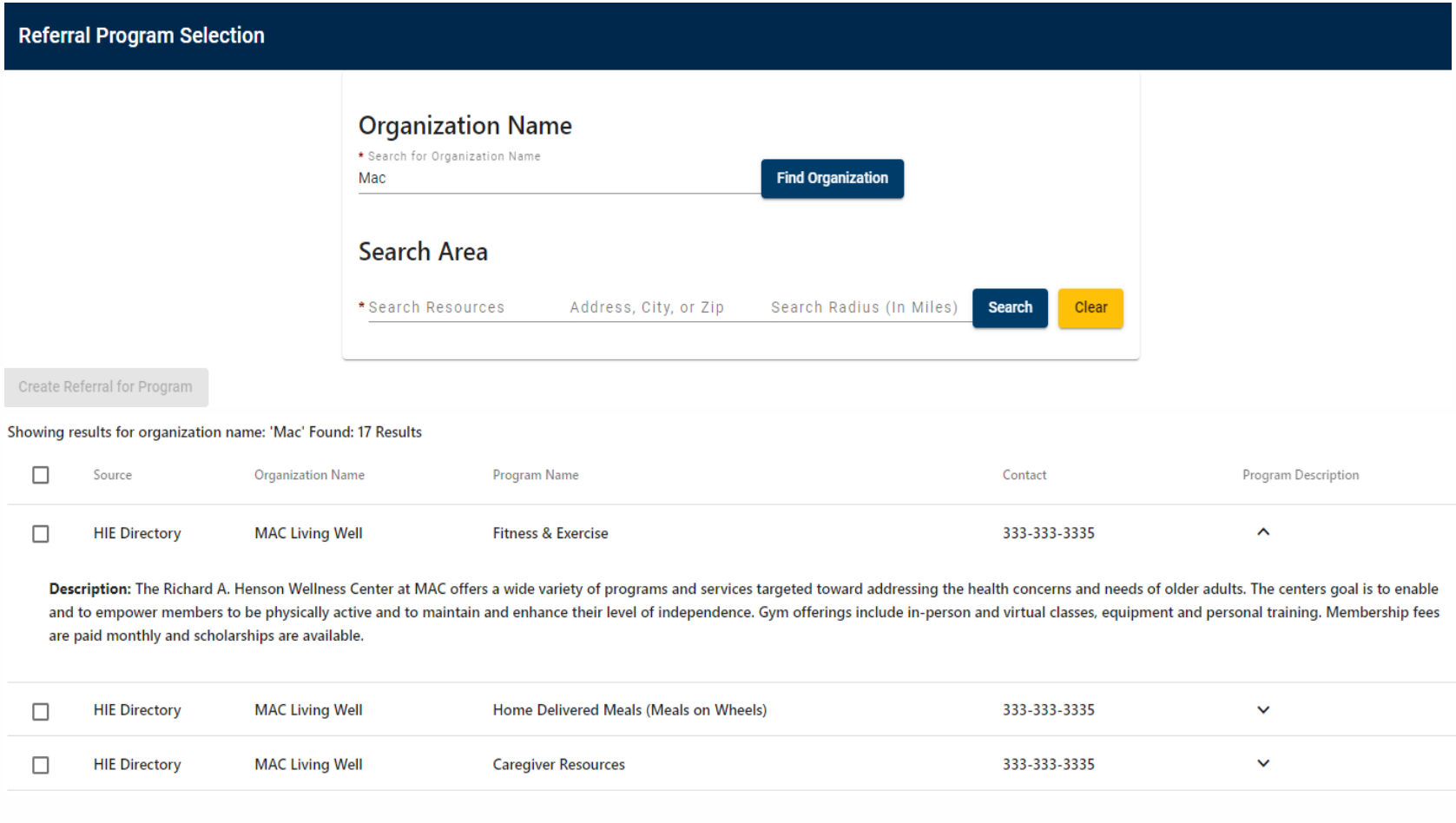
Addressing Social Needs (Referral data)

<u>Use Case #2</u>: Members of the care team can view the social services and resources patients are receiving in the community.

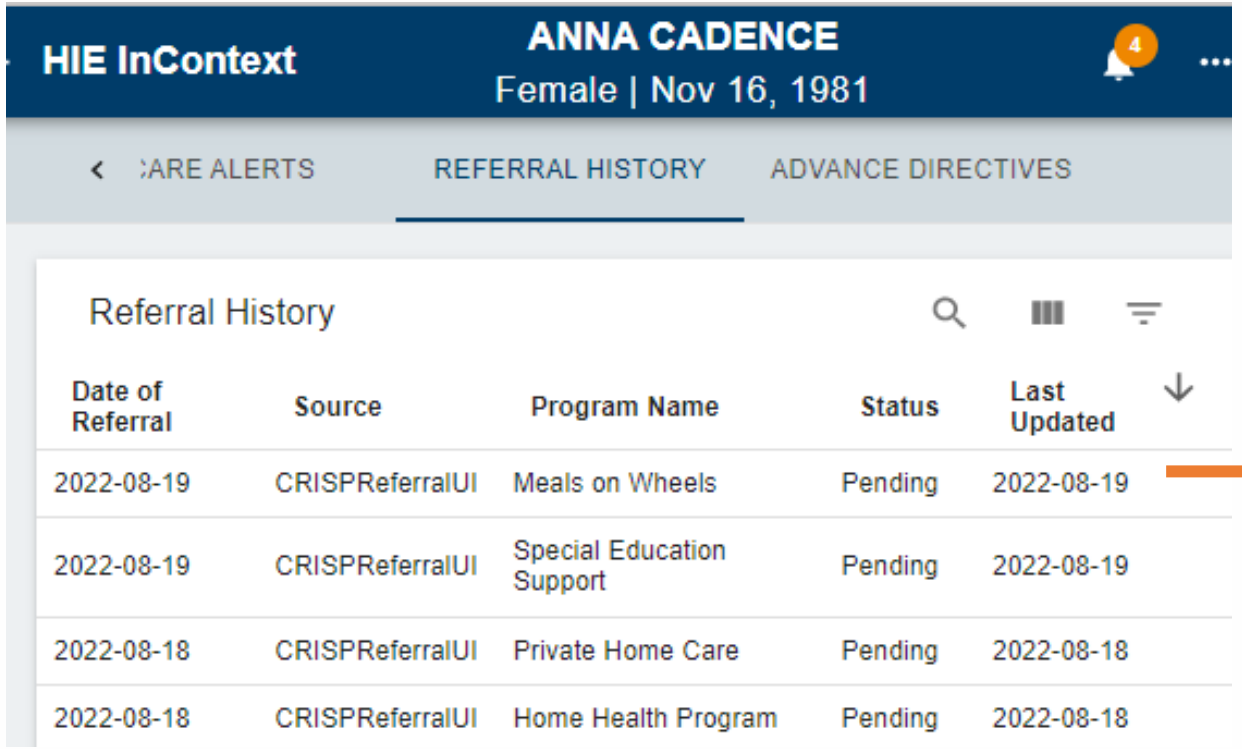


Identifying Resources

<u>Use Case #3</u>: Members of the care team can easily identify community resources to address a patient's social needs.

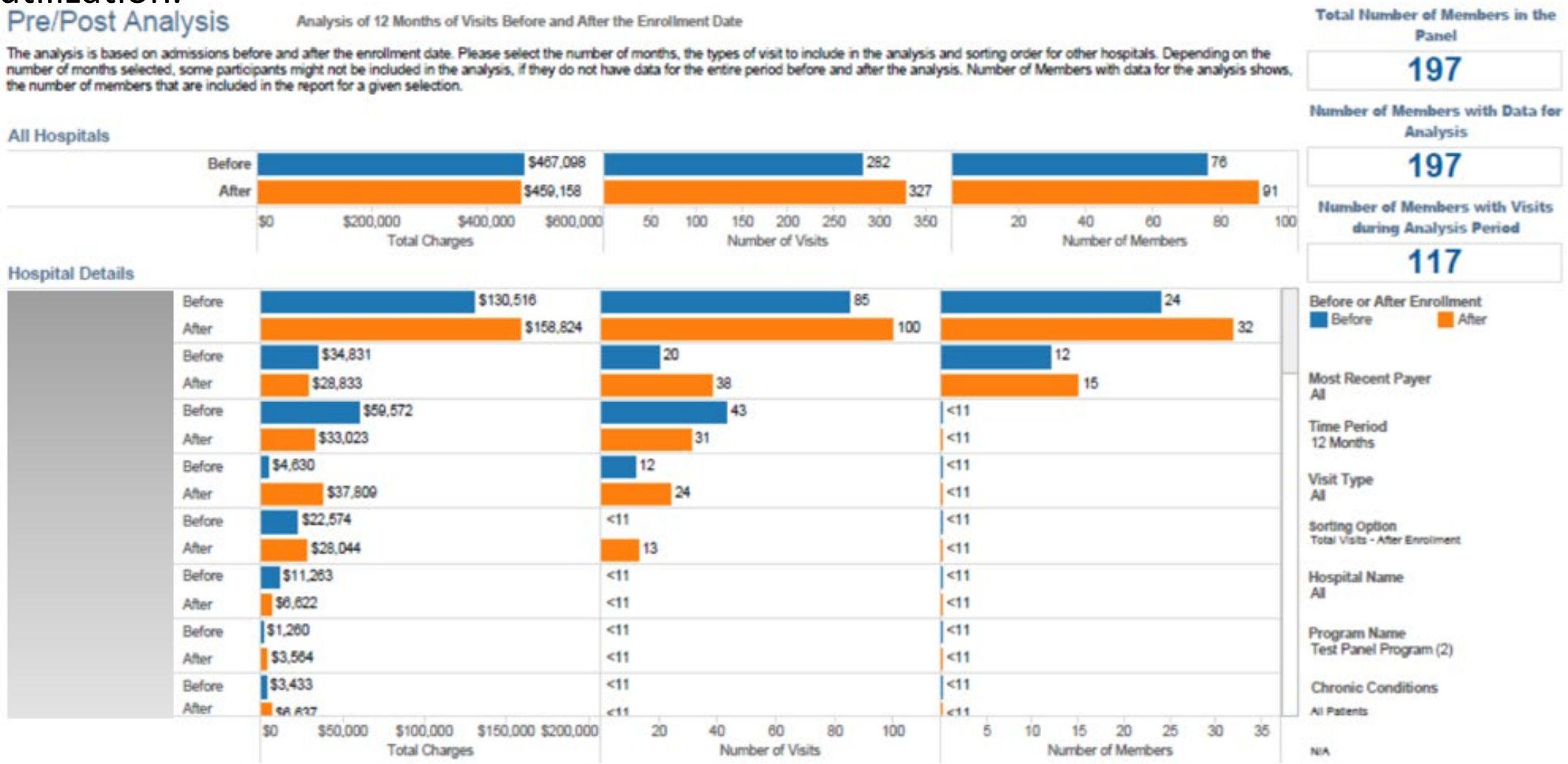


Addressing Social Needs – Feedback Loop



Evaluation – Pre/Post Reports

Use Case #4: Community organizations can demonstrate their impact on healthcare costs and utilization.



National Network of Area Agencies on Aging (1 in every county)

- The aging network was established at the same time as Medicare and Medicaid with the goal of ensuring older adults are able to stay in their homes and communities as long as possible. Services are also available for individuals with disabilities (age 18 and older).
- Nationally, AAAs provide a wide array of social needs services.
- These services and programs are critical to ensure the health, safety and well-being of our aging population, especially those who are low income, live in rural areas.
- Finally, addressing social needs is recognized as a critical component for overall health.

Why Partner with MD Living Well Center of Excellence and/or Other Community-Based Organizations?

- Trusted provider to screen for Social Needs, Social Isolation/ Loneliness/Depression
- Ability to help resolve social needs such as food insecurity, housing, home repair, assistance with utility bills, transportation, daily or weekly friendly callers, etc.
- Referral/enrollment in Evidence-Based Chronic Disease Self-Management and Falls Prevention Programs
- Key to demonstrating impact is the ability to bi-directionally link to referring providers to document screenings, programs and services provided to the client

Headwinds & Tailwinds for Data Sharing

- Headwinds:
  - Community-Based Organizations do not have sustainable funding mechanisms or incentives for increasing capacity.
  - Closed loop data remains challenging without the right incentives or use cases.
  - Healthcare systems are still early in adopting their internal strategy to identify and address social needs and interoperability becomes de-prioritized.

- Tailwinds:
  - Upcoming regulatory requirements incentivizes more social needs data collection and referrals.
  - Integrations and interoperability allow users want to stay in their workflows and use the tools and systems that work best for them.
  - Increased state and federal recognition that CBOs play an important roll in addressing social needs and improving health equity.

Future Work

- MAC sharing assessment data with CRISP
- MAC integrating internal referral system with CRISP
- CRISP connecting with other referral partners and CBOs through API to show referral data
- CRISP connecting with additional health systems to display assessments
- Onboarding new CBO's to receive referrals through CRISP system
- As healthcare applies standards to social needs data CRISP will adapt to the changing landscape.

Questions?

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Michelle Nnorom (CRISP): Michelle.Nnorom@crisphealth.org
Sue Lachenmayr (MAC): bslach@earthlink.net

Questions and Discussion

Learning Forum Series and Small Group Opportunities

Feedback

You may enter into the chat your thoughts on these two questions:

- How useful did you find today's ONC SDOH Information Exchange Learning Forum webinar on Measurement and Evaluation and Implementation Services?
- What other content or information would be useful for you in your efforts?

Other feedback or suggestions?

Email: **oncsdohlearningforum@hhs.gov**

Webinar series schedule

DESCRIPTION	Meeting Date/Time (EST)	Registration Link
Phase I Webinars		
Introduction to SDOH Information Exchange and the Learning Forum	March 2022	View past meeting materials and recordings here
Vision, Purpose, and Community Engagement	April 2022	
Governance	May 2022	
Technical Infrastructure and Interoperability	June 2022	
Policy and Funding	July 2022	
Phase II Webinars		
Community-level Governance	Thur, February 23,12-1:30pm	View past meeting materials and recordings here
Values, Principles, and Privacy	Tue, March 28, 2-3:30pm	View past meeting materials and recordings here
Implementation, Measurement, and Evaluation	Tue, May 23, 1-2:30pm	View past meeting materials and recordings here
SDOH Information Exchange Learning Forum Summary	Thur, June 29, 12-1:30pm	Register here

Small group opportunity: update

Join us on June 1st from 3-4pm ET to engage a small group conversation on the topic of Implementation, Measurement, and Evaluation Services.

- Groups of approximately 10-15 individuals across a diverse set of stakeholder groups.
- Paired with a facilitator and subject matter experts who will guide and support learning and engagement.
- Discussion questions and focus areas will be collaboratively developed.
- Topics will align with the Learning Forum webinar series.

To express interest in small group participation, please email oncsdohlearningforum@hhs.gov for more information on how to join.

Office of the National Coordinator for Health Information Technology

THANK YOU!

Office of the National Coordinator for Health Information Technology

Contact ONC

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Phone: 202-690-7151

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