

COMMUNITY HEALTH CARE ASSOCIATION of New York State

CHCANYS NYS-HCCN presents

The Road to Interoperability: Connecting Data, Patients, and Policies

Day 4 - Health Equity January 20, 2023

For more information, please email Anita Li at ali@CHCANYS.org



This resource is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award to CHCANYS' New York State Health Center Controlled Network (NYS-HCCN) totaling \$3,666,000 with 0% financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit HRSA.gov.

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 webinar is being recorded.
- Slides and recording links will be sent following the event.



Agenda

- Welcome
- Health Equity
 - Consensus-driven Standards on Social Determinants of Health
 - Interoperability and Health Equity

Schedule of Events

Day 1 (1/17)

 National Perspective on Interoperability Day 3 (1/19)

- Patient Data
 - RPM
 - Patient Matching

Day 5 (1/23)

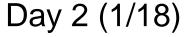
- National Data Modernizatio n Initiative
- Open Forum: **RPM**



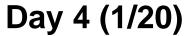








 State Perspective on Interoperability

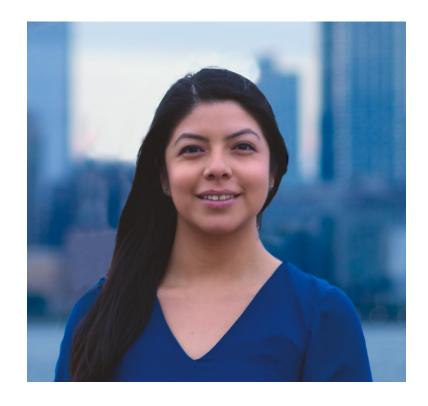


- Health Equity & Interoperability
- Open Forum: **SDOH**



Consensus-driven Standards on Social Determinants of Health

Gabriela Gonzalez, MAS
Health Equity Manager
EMI Advisors





CHCANYS NYS HCCN Virtual Workshop | January 20, 2023

Gabriela Gonzalez, Health Equity Manager at EMI Advisors LLC, Pilots Lead for the Gravity Project





Agenda

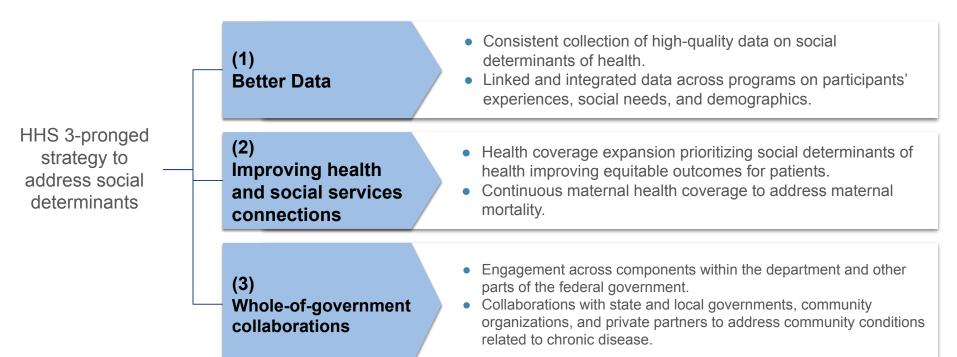


- Gravity Project Background
- Pilots Affinity Group Overview
- Call for Participation: Opportunities for Health Centers
- Questions and Answers

Growing Federal Investment in Data Driven Social Care Integration & Health Equity Initiatives



Integrating health services (both medical care and public health) with human services—and vice versa—is a critical step to addressing social determinants of health and improving equitable outcomes. This work is a major priority for the U.S. Department of Health and Human Services.



e.g., ONC USCDI, HRSA Uniform Data Systems, AHRQ Social Determinants of Health (SDOH) Database

e.g., Accountable Health Communities, Section 1115 Waiver Programs, Managed Care Contracts

e.g., National Strategy on Hunger, Nutrition, and Health, Coordinating Council on Access and Mobility,

Source: https://jamanetwork.com/journals/jama-health-forum/fullarticle/2790811

ROI in Social Care Interventions





- 12% to 52% lower Inpatient Hospital Readmissions (median 44%)
- 37% shorter Hospital Average Length of stay
- 28% to 72% lower SNF admissions rate
- 3% to 24% lower (median 16%) overall medical costs (\$156 to \$753 PMPM)



- 14% to 54% lower (median 29%) in ED visits.
- 15% to 42% lower (median 31%) Hospital Admission rates.
- 14% shorter Hospital Average length of stay.



 149% ROI on program costs through recovered payments for services in one hospital study.

Economic Stability

Source: https://www.commonwealthfund.org/sites/default/files/2022-09/ROI_calculator_evidence_review_2022_update_Sept_2022.pdf

SIREN Study: Uses for Social Risk Data in Clinical Settings





Challenges in SDOH Data Capture and Exchange



- Standardization of SDOH Data Collection and Storage
- Data Sharing Between Ecosystem Parties
- Access & Comfort with Digital Solutions
- Concerns about Information Collection and Sharing and Duplicative Data Entry

- Unnecessary Medicalization of SDOH
- Consent Management
- Competing State & Local Networks
- Managing Diverse Needs of Stakeholders
- Sustainable Funding Models
- Social Care Sector Capacity and Capability





Gravity Project Mission

Advance and promote equitable health and social care by leading the development and validation of consensus-driven interoperability standards on social determinants of health.

A Social Determinants of Health Lexicon



- **Health Equity** is "achieved when every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances".
- Social Determinants of Health: "the conditions in which people are born, grow, live, work and age," which are "shaped by the distribution of money, power and resources.
 - **Protective Factors:** characteristics or strengths of individuals, families, communities or societies that act to mitigate risks and promote positive well-being and healthy development.
 - Social Risks: Adverse social conditions associated with poor health.
 - Social Needs: Patient-prioritized social factors that impact health.

Health Equity is advanced by addressing social determinants of health, such as access to safe and stable food, water, housing, and improving access and quality of care.

Alderwick and Gottlieb (2019) Meanings and Misunderstandings: A Social Determinants of Health Lexicon for Health Care Systems Center for the Study of Social Policy (2018) About Strengthening Families™ and the Protective Factors Framework Physician-Focused Payment Model Technical Advisory Committee (2021) SDOH and Equity Report to the Secretary

Project Scope



- Develop data standards to represent and exchange patient/individual level SDOH data documented across four clinical activities:
 - Screening,
 - Assessment/diagnosis,
 - Goal setting, and
 - Treatment/interventions.
- 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.

SDOH Domains FOOD INSECURITY TRANSPORTATION INSECURITY HOUSING INSTABILITY **HOMELESSNESS** INADEQUATE **EDUCATION** FINANCIAL INSECURITY **ELDER ABUSE MATERIAL** INTIMATE PARTNER VIOLENCE (IPV) **HARDSHIP** SOCIAL CONNECTEDNESS UNEMPLOYMENT **STRESS** Health Insurance Coverage Status Medical Cost

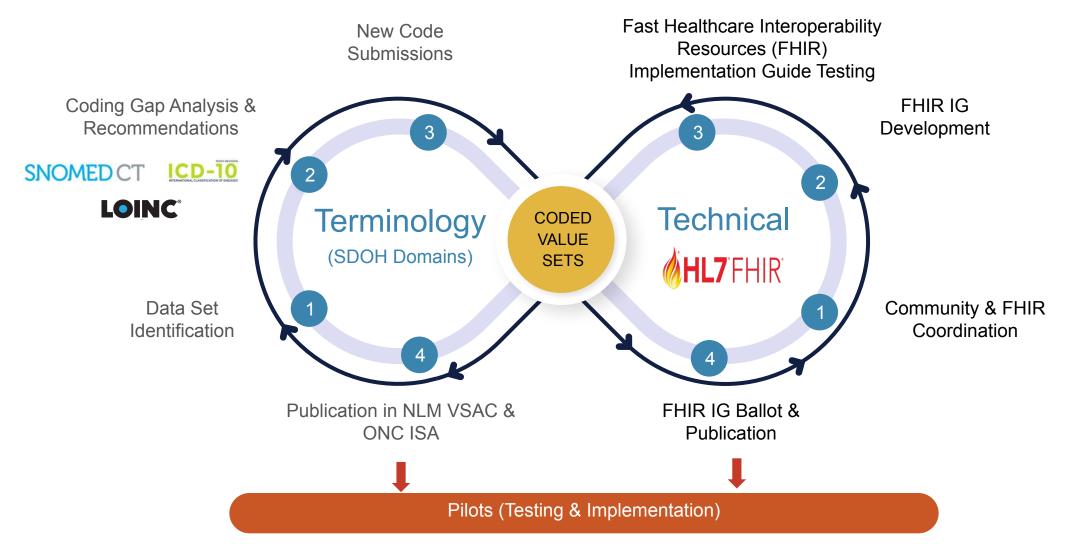
Burden

Domains grounded by those listed in the NASEM "Capturing Social and Behavioral Domains in Electronic Health Records" 2014

Project Execution: Three Workstreams (Terminology, Technical, Pilots)

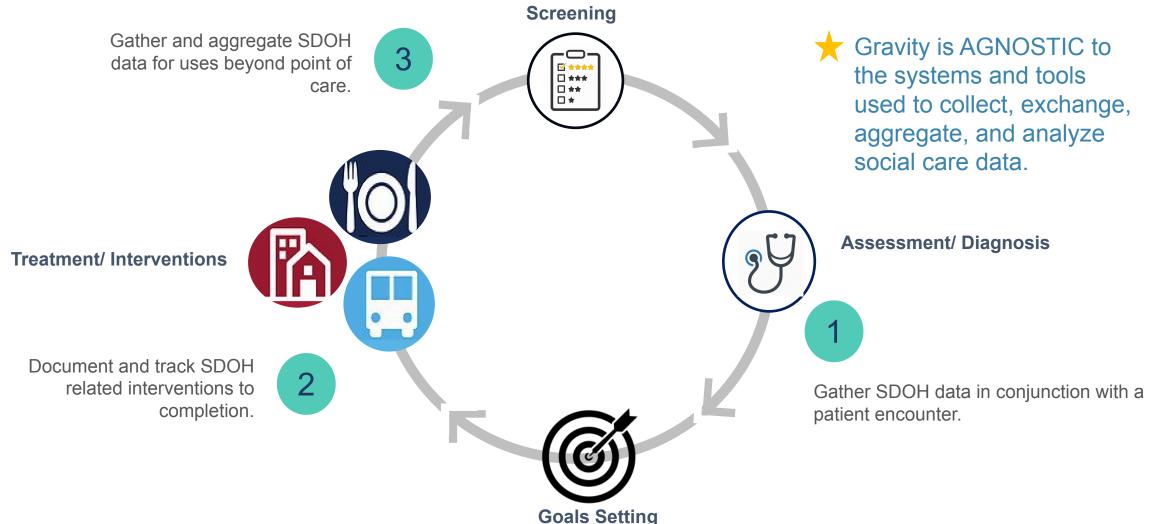


10



Gravity Conceptual Framework & Use Cases





Gravity PROJECT®

Pilots Affinity Group Overview



Pilots Affinity Group



13

- Gravity Pilots Affinity Group officially launched on September 29, 2022.
 - Pilots Affinity Group meetings are monthly on the last Thursday 2:30-4:00 pm ET.
- The Pilots Affinity Group serves as a peer-to-peer learning forum for entities participating in the real-world testing of Gravity terminology and technical standards.
- It aims to foster a collaborative learning experience for pilot participants and the Gravity community at large to share successes and ongoing challenges, seek/find partnerships, and learn together while testing and piloting Gravity standards. Confluence site:

https://confluence.hl7.org/display/GRAV/Gravity+Project+Pilots+Affinity+Group+Home









ONC Blog: https://www.healthit.gov/buzz-blog/health-equity/moving-standards-to-support-sdoh-data-capture-from-the-sandbox-to-production

Pilot Affinity Group Goals



- Establish a pilot community to test and validate Gravity Project standards.
- Accelerate real-world testing of the Gravity SDOH Clinical Care FHIR Implementation Guide (IG).
- Facilitate a forum to engage community-based organizations in standards-based data exchange with clinical systems.
- Demonstrate how to share clinical data to support upstream data use for population health, public health, quality improvement, and research.

Levels of Participation



- Observer: These individuals actively participate in the monthly Group meetings and follow the progress of the pilot participants. There is no commitment to testing the standards.
- **Pilot Participant**: These are entities that commit to testing the Gravity standards in real-world settings. At a minimum, participants will test one primary use case within a 6-to-12-month period. Interested entities must assess their terminology implementation and FHIR adoption and capabilities.

All are invited to officially join the Group here:

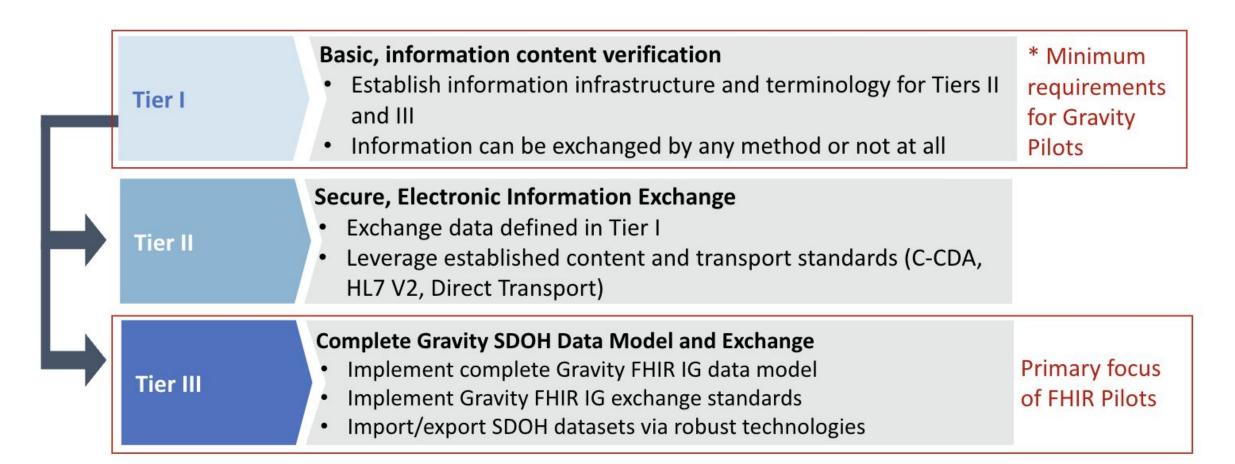
https://confluence.hl7.org/display/GRAV/Sign-Up+for+the+Pilots+Affinity+Group

Gravity Three-Tiered Piloting Approach



Defines incremental tiers for testing Gravity standards (terminology and technical)

Entities may participate at any Tier.



Gravity Pilot: Dell Medical School at the University of Texas at Austin







Pilot Team



Name	Responsibility	Pilot Role
Eliel Oliveira, MS, MBA	Project Lead	Devise priorities and lead team
Vishal Abrol	Technical Lead	Technical development and standards alignment
Vidya Lakshminarayanan	Subject Matter Expert	Project management lead and partnerships management
Anjum Khurshid, MD, PhD	Clinical Informaticist Consultant	Expert community and strategy guidance
Ricardo Garay	Community Engagement Lead	Convene and manages patient and advisory boards
William Tierney, MD	Clinical Informaticist Consultant	Expert community and strategy guidance

ONC Leading Edge Acceleration Projects (LEAP) Awardee



- The University of Texas at Austin's <u>FHIR-Enabled Social and Health Information</u> <u>Platform</u> project aims to demonstrate a comprehensive integrated information system to manage social needs identified in clinical settings through bi-directional information exchange between clinical providers and community-based organizations delivering social care.
- A standards-based closed-loop referral management system to pilot the Gravity Project Use Case Package in real clinical settings using Clinical Decision Support (CDS), patient engagement technology (PET), and other digital tools.
- Pilot Partners: People's Community Clinic (FQHC), Integral Care (LMHA), Central Texas Food Bank, EMI Advisors, Office of the National Coordinator for Health IT (ONC), Greater New Orleans HIE, El Paso HIE, Connxus HIE Austin.

Pilot Overview



- Tier III Pilot Participant
- Pilot Use Cases:
 - Document SDOH Data in Conjunction with a Patient Encounter
 - Document and Track SDOH Related Interventions to Completion
 - Gather and Aggregate SDOH Data for Uses beyond Clinical Care
 - Research, Education, and Dissemination.
- Executing Pilot as part of the ONC Leading Edge Acceleration Projects (LEAP) in Health Information Technology (Health IT) from September 2021 to August 2023.
 - Testing from November 2022 to February 2023.

Pilot Systems Roles



	Tier I System Roles		Tier II & III System Roles
8	Ability to capture coded data: structure data (e.g., ICD-10, LOINC, etc.)	8	Care Coordination Platform: System managing referrals and ensuring they are executed by appropriate service delivery organizations.
8	Ability to store coded data: (e.g., ICD-10, LOINC, etc.)	8	Patient Application: Apps for patients and caregivers who need to monitor progress on SDOH referrals.
8	Ability to use coded data: (e.g., mapping to native vocabulary, associate data with voucher/interventions, etc.)	8	Referral Source: System sending referral request, typically EHR or Payer systems.
8	Ability to support internal intervention workflows: (e.g., a voucher linked to a patient/customer).	8	Referral Recipient: System receiving referral request, typically community-based organizations.
	pation addition j.		Referral Recipient Light: Query for tasks on initiating referral source or Coordination Platform.

Standards and Technologies Under Consideration



SDOH Domain	Gravity Terminology	Exchange Standards
Food Insecurity	 Screening (LOINC) Diagnosis (SNOMED-CT, ICD-10-CM) Goals (SNOMED CT) Interventions (SNOMED-CT, CPT/ HCPCS) 	FHIR Core IG, FHIR SDOH Clinical Care IG, REST APIs, JSON, OAUTH2, Web Sockets, SMTP and S/MIME, X.509

Pilot Ecosystem



Partner Type	Name of Partner	Pilot Electronic Systems/Vendors
Clinical - FQHC	People's Community Clinic	EMR: NextGen
Clinical - LMHA	Integral Care	EMR: NetSmart
Community-Based Organization	Central Texas Food Bank	CRM: SalesForce
Patients	Recruited in Clinical Settings	PET: FHIRedApp

Current Workflow



Step	Limitations
Community Health Worker/Social Worker completes the SDOH assessment on behalf of the patient on a referral platform.	Patient has NO access to their SDOH assessment.
Community Health Worker/Social Worker places the referral to Central Texas Food Bank if the need is expressed in the SDOH form.	Patient does NOT receive any notification or follow up about the referral.
Central Texas Food Bank staff reaches the patient either via email or phone.	If patient responds, the patient answers pre-screener questions on the phone or patient makes a in-person visit to respond to pre-screener questions.
Central Texas Food Bank staff follows up with the patient either via email or phone to schedule an appointment if the patient qualifies.	Patient brings the documents to the appointment.
Central Texas Food Bank staff submits SNAP application to HHSC. The staff does not have access to patient's SDOH assessment from the clinic.	Patient is re-assessed for their social needs.
Central Texas Food Bank staff does not receive notification about SNAP application status. They follow up with the patients via email or phone to check on the SNAP application status after 45-60 days.	NO message communication between the patient and staff. Clinical providers may only get a status of referral completed or not during the next patient clinical visit.

Proposed Workflow



7

CTBF staff has access to patient's SDoH assessment on FHIRed-SHIP (the one patient completed at the clinic)

(6

Patient uploads required documents via the App. CTBF staff submits SNAP application on behalf of patient

(5)

Patient responds to questions on the App. If eligible, patient schedules a meeting with CTBF staff via the App



Central Texas Food Bank (CTBF) Staff Patient

Patient downloads the App and consents to participate

(2)

Patient completes SDoH assessment on the App

3)

25

CHW places referral to CTFB on FHIRed-SHIP (if SNAP benefits need is expressed)

Community
Health
Worker
(CHW) at
clinic



CTBF staff accepts the referral on FHIRed-SHIP and sends intake questions to patient

Success Metrics



- Attaining the ability to access real-time metrics on all steps of the referral process and understanding which ones may be preventing referral completion.
- Providing meaning assistance to families in need of nutritional help that is dignifying and free of burdens.
- Learning a pathway to design, develop, and demonstrate additional use cases to solve other SDOH challenges.
- Transition the solution from a pilot to real-world evidence and implementation that the community can leverage.
- Inform industry approaches to further advance the collection and sharing of SDOH data.

References



- Office of the National Coordinator for Health IT (ONC). By LEAPs and Bounds: Newest Round of Awardees Seek to Advance Health Equity and Research, Health IT Buzz, Aug 11, 2021. https://www.healthit.gov/buzz-blog/interoperability/by-leaps-and-bounds-newest-round-of-awarde-es-seek-to-advance-health-equity-and-research
- Hirsch, M. *LEAP award focuses on SDOH and referral management*. Health Data Management. https://info.healthdatamanagement.com/leap-award-focuses-on-sdoh-and-referral-management
- Dell Medical School. New Digital Tool Closes the Loop, Helps Clinicians Follow Up on Patient Care Referrals.
 - https://dellmed.utexas.edu/news/new-digital-tool-closes-the-loop-helps-clinicians-follow-up-on-patient-care-referrals
- Gravity Project. Gravity Use Case Package.
 https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package
- Khurshid A, Oliveira E, Nordquist E, Lakshminarayanan V, Abrol V. FHIRedApp: a LEAP in health information technology for promoting patient access to their medical information. JAMIA Open. 2021 Dec 28;4(4):ooab109. doi: 10.1093/jamiaopen/ooab109. PMID: 35155997; PMCID: PMC8826978. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8826978/

Pilot Partnership Opportunities





Humana



- Humana (health insurance) is seeking clinical partners using Epic System to join their Pilot.
 - **Pilot Scope:** Tier II Interoperability by electronic medical records (EMR).
- Pilot Timeline: 3-6 months, regional or nationwide.
- Pilot Lead: Pete Womack at ewomack@humana.com.



Bitfocus



- Bitfocus is seeking partners to demonstrate interoperability through Homeless Management Information System (HMIS) software.
 - Pilot Scope: Tier I, SDOH Domain: Housing Instability.
- Pilot Timeline: 4-month period
 - Identification of partners/providers: January 2023
 - Completion of technical design/workflow: February 2023
 - Completion of Pilot testing: March-April 2023
- Pilot Lead: Eric Jahn at ericj@bitfocus.com.



Mulesoft / Salesforce



- Mulesoft is looking for providers and community organizations that collect social risk / social needs data. Mulesoft can support data exchange and potentially provider interfaces.
 - **Pilot Scope:** Tier III to collaborate with partners' support the expansion of SDOH management.
- Pilot Timeline: Discovery conversations in January and February 2023.
- Pilot Lead: Peter Hermann at peter.hermann@mulesoft.com.



Open City Labs



- Open City Labs is seeing partnerships with coordination agencies (e.g. AAAs, state agencies), and community based organizations (CBO), and service provider partners to integrate with referral platforms, EMRs, and health information exchanges (HIEs).
 - Pilot Scope: Tier III to contribute to the development and validation of the SDOH Clinical Care FHIR IG.
- Pilot Timeline: Flexible
- Pilot Leads: Matt Bishop at <u>matt@opencitylabs.com</u> and Brian Handspicker at <u>bd@handspicker.net</u>.



Next Steps:



- If you are interested in piloting, please express your interest using the Confluence Interest Form: https://confluence.hl7.org/display/GRAV/Sign-Up+for+the+Pilots+Affinity+Group
- If you have any questions, please contact me.
 - Gabriela Gonzalez at gabriela.gonzalez@emiadvisors.net

Gravity Pilots Team





Senior Advisor

Evelyn Gallego

emi



Gabriela GonzalezPilots Lead

: elimu



::elimu

Demri Toop Henderson Analyst



emi

Himali Saitwal
Terminology Subject
Matter Expert (SME)



The University of Vermont





Bret Heale Technical SME



emi

Jim Shalaby
Chief Informatics
Consultant



emi

Corey Smith
VP, Informatics and
Digital Products

AMA



AMA S

Monique van Berkum Director, Global Terminology Content Development



Gravity Project Community

URL: https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project



Join us as a Gravity Project sponsor!

Partner with us on development of blogs, manuscripts, dissemination materials. https://thegravityproject.net/sponsors/

Help us with Gravity Education & Outreach

Use Social Media handles to share or tag us to relevant information:



@thegravityproj



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

Interoperability and Health Equity





Rachel Kramer

Senior Vice President, Population and Public Health Services

HealtheConnections



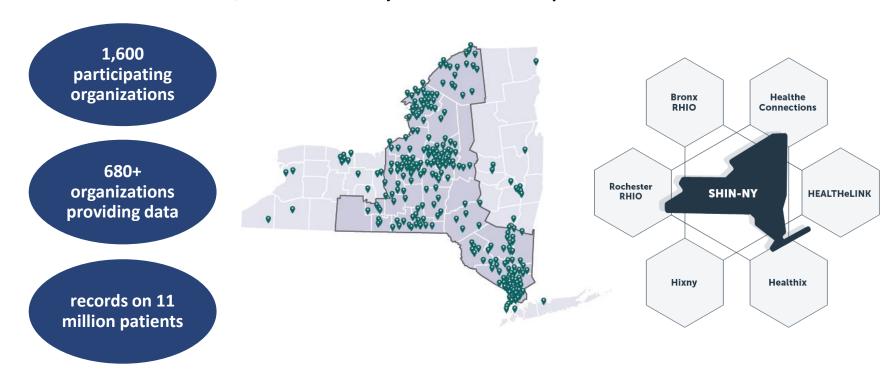
Jeremy Smelski
Director, HIE Solutions
HealtheConnections





HealtheConnections: who we are

- HealtheConnections is accredited by the NYS Department of Health to operate the regional health information exchange (HIE) for 26 counties of NYS
- We help enable <u>interoperability</u> and the meaningful use of data for clinical care, community health and public health



supporting health equity

HIE data can help support health equity

- <u>Identify disparities</u> –timely and comprehensive data to document disparities
- SDoH data source z-codes and other SDoH data
- Focus the solutions identify those in need
- Track progress towards health equity reduction in disparities

Who can use HIE data to support health equity

- HIE participants
- Health departments

HealtheConnections initiatives

- Data quality project
- Data tools
- Future use cases

data quality project

- In 2021, HealtheConnections partnered with the Bronx RHIO, CHCANYS, and the Institute for Family Health
- Overall goal: improve the capture and completeness of race, ethnicity, and SDoH data
 - Race/ethnicity data are critical for stratifying populations and measures, to identify gaps in care
 - Community Health Centers lack complete and consistent race/ethnicity and SDoH data
 - These data are needed to quantify disparities and focus interventions
 - HIEs can help fill some gaps
 - But need to enforce the importance of accurate data collection

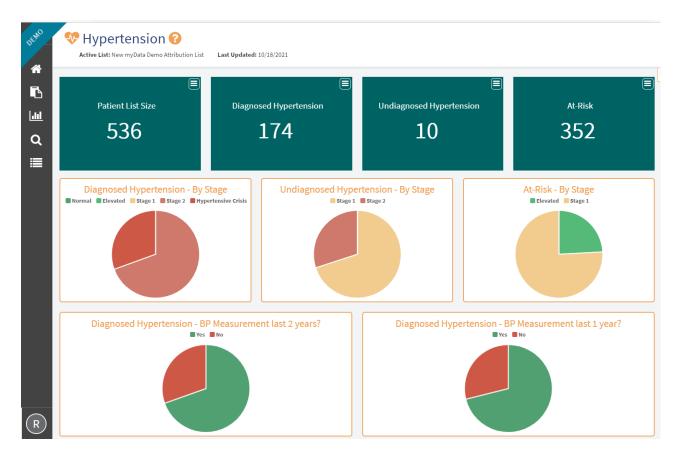
data quality project (cont.)

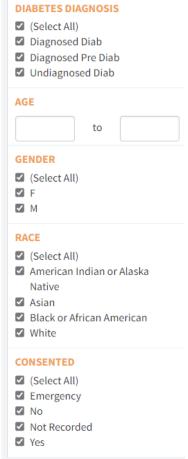
Results and Conclusions

- HIEs have blank, unknown and invalid race/ethnicity values
- We can fill some gaps by sharing data across HIEs and using community data, depending on the location
 - we realized a 40-50% gap closure among overlap population
- Need for more training and use of advanced data strategies at Community Health Centers to improve data collection
- Need for standard policy to deal with discordant values, more than one value per person, and misspellings
- Need for more SDoH data z-codes and survey data were sparse

tools: myData

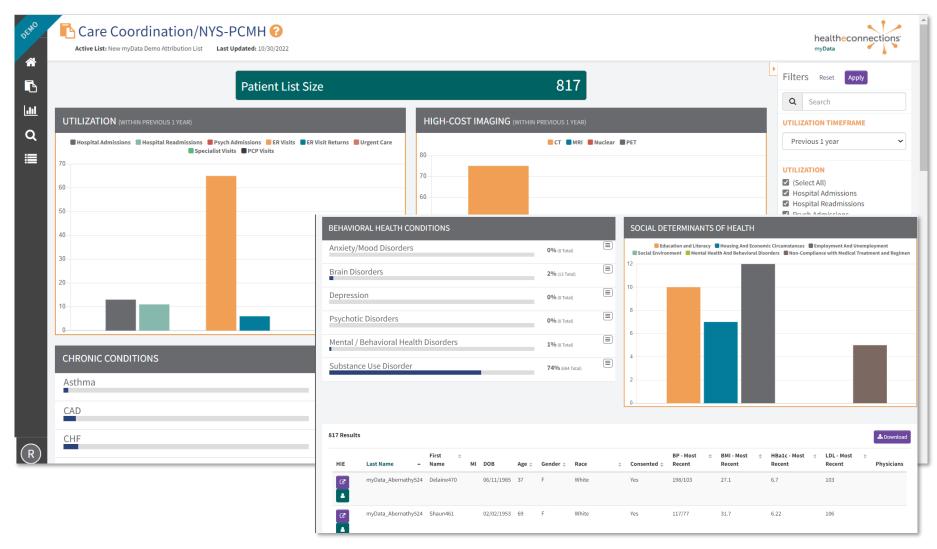
myData registries provide filters by race/ethnicity





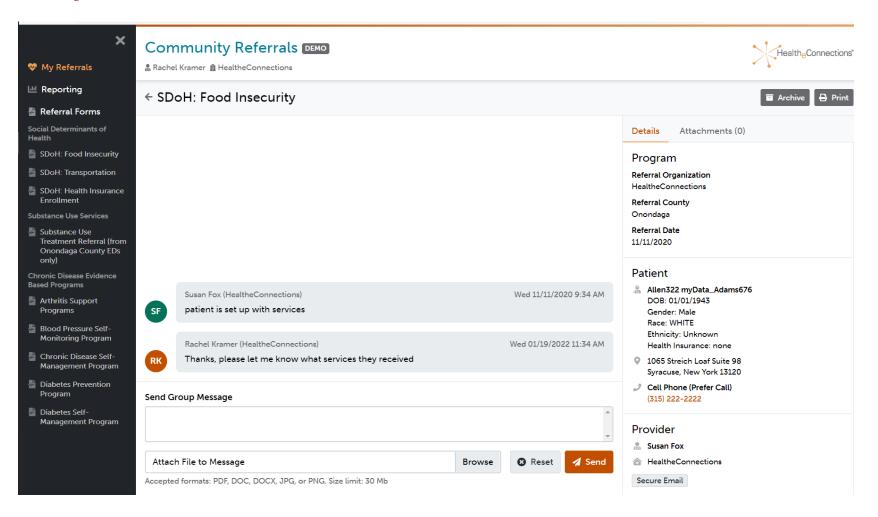
tools: myData

myData registries also provide z-codes



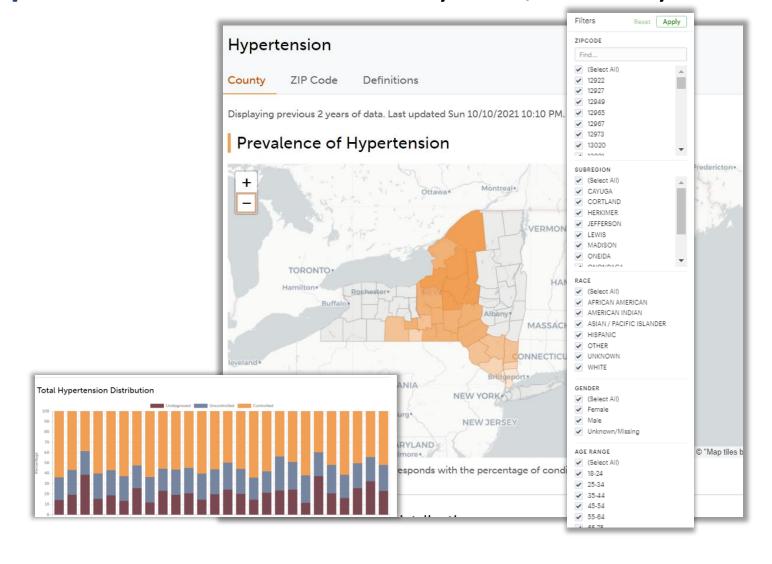
tools: Community Referrals

Community Referrals for SDoH



tools: myPopHealth

• myPopHealth with stratification by race/ethnicity



new use cases

- Z-codes and beyond
 - HIE can be central repository of SDoH data
 - Promote increased use of z-codes
 - Assessment results- e.g., AHC HRSN, PRAPARE

- Medicaid 1115 Waiver
 - Infrastructure of the Statewide Health Information Network for New York (SHIN-NY) – will provide a statewide data store for SDoH data and referral information





Thank you!

315-671-2241 x5 healtheconnections.org







Continue the Conversation

Day 5 and the final session of this virtual event is taking place **Monday**, **January 23rd from 1:00 – 2:00 pm**

We hope to see you then!

Thank you for joining us today. Please share your feedback using the survey link in the chat, the QR code below, or the link in the follow up email!





