Consensus-driven Standards on Social Determinants of Health

Gravity Pilots Affinity Workgroup Kickoff
September 29, 2022
Welcome

Thank you for joining the Gravity Project Pilots Affinity Workgroup kickoff!

Due to the large number of attendees, participants are muted upon entry.
- This call is being recorded; recording will be available on the Workgroup Confluence page following the meeting.

You are encouraged to actively participate in the discussion using the Zoom chat feature (bottom of the Zoom Meeting window). You can also use the Reactions feature to raise your virtual hand and ask a question live.

Please send all chats to Everyone.

We will review and address all comments submitted. If you are experiencing technical difficulties, please contact Demri at demri.toop@emiadvisors.net.
## Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Time</th>
<th>Presenter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome and Introductions</td>
<td>10 mins</td>
<td>Gabriela Gonzalez</td>
</tr>
<tr>
<td>Gravity Project Scope</td>
<td>15 mins</td>
<td>Sarah DeSilvey</td>
</tr>
<tr>
<td>Gravity Project Pilots Three-Tiered Piloting Approach and Assessment Tool</td>
<td>20 mins</td>
<td>Sarah DeSilvey</td>
</tr>
<tr>
<td>Pilot Presentations:</td>
<td>30 mins</td>
<td>Partners:</td>
</tr>
<tr>
<td>a. Alliance Chicago</td>
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<td>a. Shannon Pohl, Nicole Padula</td>
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<tr>
<td>b. OCHIN</td>
<td></td>
<td>b. Ned Mossman</td>
</tr>
<tr>
<td>c. The University of Texas at Austin</td>
<td></td>
<td>c. Eliel de Oliveira</td>
</tr>
<tr>
<td>Open Discussion</td>
<td>10 mins</td>
<td>All</td>
</tr>
<tr>
<td>Next Steps</td>
<td>5 mins</td>
<td>Gabriela Gonzalez</td>
</tr>
</tbody>
</table>
Gravity Project Anti-Trust Practices

- Gravity Project participants have the responsibility to comply fully with federal and state antitrust laws.
- Individuals speaking or providing written communications shall refrain from any discussion which may provide the basis for an inference that they have agreed to take any action relating to prices, services, production and allocation of markets or any other matter having a market effect.
- Participants shall not discuss their pricing or others’ pricing or any term that might affect pricing or fees, such as costs, discounts, terms of sales or profit margins.
- Adherence to these guidelines involves not only avoidance of antitrust violations, but avoidance of behavior that might be so construed.
Introductions
**Audience Poll**

**What stakeholder group do you represent?**
Please indicate your stakeholder group via Zoom poll

| • Federal/State/Local Agency | • Research Organization |
| • Health Information Exchange (HIE) / Health Information Organization (HIO) | • Standards Organization |
| • Health IT Vendor (EHR, EMR, PHR) | • Service Provider (community-based) |
| • Health Professional | • Other System IT Vendor (community-based IT vendor) |
| • Healthcare Payer/Purchaser or Payer Contractor | • Other: please specify via chatbox |
Gravity Project Scope
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.

Physician-Focused Payment Model Technical Advisory Committee (2021) SDOH and Equity Report to the Secretary
Addressing SDOH Involves Coordination Across Sectors

Data standards to support health and human services integration

Challenges in SDOH Data Exchange

- Standardization of individual level social care Data Collection and Storage
- Data Sharing Between Ecosystem Parties
- Access & Comfort with Digital Solutions
- Concerns about Information Collection and Sharing and Duplicative Data Entry
- Social Care Sector Capacity and Capability
- Unnecessary Medicalization of SDOH
- Consent Management
- Competing State & Local Networks
- Managing Diverse Needs of Stakeholders
- Sustainable Funding Models

Project Scope

- **Develop data standards** to represent and exchange patient 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.

Domains grounded by those listed in the NASEM “Capturing Social and Behavioral Domains in Electronic Health Records” 2014
Gravity Conceptual Framework & Use Cases

1. Gather SDOH data in conjunction with a patient encounter.
2. Document and track SDOH related interventions to completion.
3. Gather and aggregate SDOH data for uses beyond point of care.

Gravity is AGNOSTIC to the systems and tools used to collect, exchange, aggregate, and analyze social care data.
Project Execution: Three Workstreams (Terminology, Technical, Pilots)

Terminology (SDOH Domains)
- Coding Gap Analysis & Recommendations
- Data Set Identification
- New Code Submissions

Technical
- FHIR IG Ballot & Publication
- FHIR IG Development

Pilots (Testing & Implementation)
- Publication in NLM VSAC & ONC ISA
- FHIR IG Testing

CODED VALUE SETS
Gravity Timeline

**Initiation**
- **November:** SIREN Exploration
- **November:** SIREN contracts with EMI to initiate the Gravity Project
- **August:** Gravity becomes an HL7 FHIR Accelerator Project

**2017**
- SIREN Exploration

**2018**
- RWJF funds SIREN to standup new coding collaborative

**2019**
- **Launch**
- Food Insecurity
- Housing Instability
- Homelessness
- Transportation Insecurity
- **Draft Gravity IG build**

**2020**
- Financial Insecurity
- Inadequate Housing
- Unemployment
- Veterans
- Education
- Material Hardship
- Intimate Partner Violence
- Elder Abuse
- Stress
- Social Isolation

**2021**
- November: Gravity Value Sets in VSAC
- August: Gravity IG STU1 Published (pending)

**2022**
- September: Gravity IG STU2 Published
- July: Gravity Data Sets in USCDI v2
- Digital Inequity (Pending)
- Medical Cost Burden
- Health Insurance Coverage Status
- Health Literacy

**2017-2022**
- Food Insecurity
- Inadequate Housing
- Transportation Insecurity
- Digital Inequity (Pending)

**2022**
- November: Gravity Value Sets in VSAC
- August: Gravity IG STU2 Published

**2022**
- July: Gravity Data Sets in USCDI v3
- September: Gravity IG STU2 Published

**2022**
- National Library of Medicine
- USCDI

**2022**
- U.S. Core Bundle Interoperability

**2022**
- DRAFT Gravity IG build

**2022**
- Gravity IG STU1 Published

**2022**
- Gravity IG STU2 Published (pending)
Gravity 2022 Roadmap

**Terminology & Technical Standards Testing**

- **FHIR Connectathons**
- **Reference Implementation Update**
- **Gravity FHIR IG STU2 Ballot**
- **FHIR IG STU2 Ballot Reconciliation**
- **FHIR IG STU2 Updates**
- **FHIR IG STU2 Publication**

**Build and Dissemination**

- **Health Literacy**
- **Health Insurance Coverage Status**
- **Medical Cost Burden**

**Build, Dissemination and Evaluation**

- **SNOMED Code Release (MAR/SEP)**
- **LOINC Code Release (MAR/OCT)**
- **ICD-10 Code Release (APR/OCT)**

**Terminology**

- **Digital Inequity**

**Key**

- PENDING
- WE ARE HERE
Interoperability Glide Path: Domain Data Sets & FHIR Implementation Guides

SDOH Data Sets

- Food Insecurity
- Transportation Insecurity
- Housing Instability
- Homelessness
- Inadequate Housing
- Education
- Elder Abuse
- Financial Insecurity
- Intimate Partner Violence (IPV)
- Social Connectedness
- Unemployment
- Stress
- Veterans

Develop and test coded value sets for use in FHIR

Refine, test, and ballot

HL7® FHIR® SDOH Clinical Care Implementation Guide

- Regulators
- EHR Vendors
- Payers & Providers
- Patients
- Registries/Trials
- Public Health
- Measure Developers
- Research

http://www.hl7.org/about/fhir-accelerator/
Pilots Affinity Workgroup Overview
Thank You Sponsors!
Pilot Affinity Workgroup 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).
- Create 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.
Workgroup Orientation

Pilots Affinity Workgroup is an open peer-to-peer learning forum for entities participating in the real-world testing of Gravity terminology and technical standards. We aim 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.
Levels of Participation

- **Observer**: These individuals actively participate in the monthly workgroup 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 workgroup here:

https://confluence.hl7.org/display/GRAV/Pilots+Affinity+Workgroup+List
Pilot Participant Roles

We seek entities that will serve in one or more of the following system roles for testing:

<table>
<thead>
<tr>
<th>System Role Types</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>Coordination Platform</td>
<td>Systems acting as SDOH clinical care 'coordination platforms' that receive information from partners and update information in SDOH clinical care referral sources.</td>
</tr>
<tr>
<td>Patient Application</td>
<td>Systems acting as apps for patients and caregivers who need to monitor progress on SDOH referrals and may need to take actions such as filling out forms, booking appointments, etc.</td>
</tr>
<tr>
<td>Referral Recipient</td>
<td>Community-based organization systems that receive requests from other systems to provide social services such as food bank access, housing remediation, and nutrition services.</td>
</tr>
<tr>
<td>Referral Recipient - Light</td>
<td>Systems that require access to information from referral recipients to update information in SDOH clinical care referral sources and/or coordination platforms that have solicited the filling of social care referrals.</td>
</tr>
<tr>
<td>Referral Source</td>
<td>These are typically EHRs or Payer systems that initiate the process of identifying patients with SDOH needs and request appropriate services.</td>
</tr>
</tbody>
</table>
Pilots Artifacts

- Gravity Pilots Tiered Testing Approach
- Gravity FHIR Implementation Readiness Assessment ("FHIR Assessment")
- Use Cases for testing
- Pilots Affinity Workgroup One Pager
- Pilots Presentation Template

Artifacts are available here: https://confluence.hl7.org/display/GRAV/Gravity+Project+Pilots+Affinity+Workgroup+Home
Next Steps for Pilot Participants

1. Confirm your capabilities and complete a pilot presentation template.
2. Identify system actors you need to partner with to complete the pilot.
3. Schedule and present your pilot project at an upcoming Pilots Affinity Workgroup meeting.
4. Attend monthly WG meetings and share updates as appropriate.
5. Complete real-world implementation of the standards.
6. Prepare a “Lesson’s Learned” and pilot closeout presentation.
Pilots Three-Tiered Piloting Approach and Assessment Tool
Gravity Three-Tiered Piloting Approach

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

• Entities may participate at any Tier.

<table>
<thead>
<tr>
<th>Tier I</th>
<th>Basic, information content verification</th>
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<tbody>
<tr>
<td></td>
<td>Establish information infrastructure and terminology for Tiers II and III</td>
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<tr>
<td></td>
<td>Information can be exchanged by any method or not at all</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Tier II</th>
<th>Secure, Electronic Information Exchange</th>
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<tbody>
<tr>
<td></td>
<td>Exchange data defined in Tier I</td>
</tr>
<tr>
<td></td>
<td>Leverage established content and transport standards (C-CDA, HL7 V2, Direct Transport)</td>
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<thead>
<tr>
<th>Tier III</th>
<th>Complete Gravity SDOH Data Model and Exchange</th>
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<tr>
<td></td>
<td>Implement complete Gravity FHIR IG data model</td>
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<tr>
<td></td>
<td>Implement Gravity FHIR IG exchange standards</td>
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<tr>
<td></td>
<td>Import/export SDOH datasets via robust technologies</td>
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</table>

* Minimum requirements for Gravity Pilots

Primary focus of FHIR Pilots
Tier-Level Self-Assessment Tool Overview

- **Tier I**: Social risk data (including screening, diagnoses, goals, and interventions) is documented in a simple method designed to evaluate the structure and value of the data, as well as the impact that collecting information in this format will have when compared to legacy systems.

- **Tier II**: Gravity-vetted terminology and value sets are exchanged within established content and transport standards.
  - Includes HL7 CDA, HL7 V2, and Direct Transport.

- **Tier III**: Gravity-vetted terminology is exchanged using the HL7 SDOH Clinical Care FHIR Implementation Guide (IG).

<table>
<thead>
<tr>
<th>Levels</th>
<th>Color Key</th>
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<tbody>
<tr>
<td>Planning - Not at Pilot Testing Level, but preparing</td>
<td></td>
</tr>
<tr>
<td>Tier I - using Gravity-vetted terminology</td>
<td></td>
</tr>
<tr>
<td>Tier II - exchanging Gravity-vetted terminology using any content and exchange standards</td>
<td></td>
</tr>
<tr>
<td>Tier III - using Gravity-vetted terminology and exchanging via the SDOH CC IG</td>
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</table>

Access the tool here: [https://bit.ly/3ChPspl](https://bit.ly/3ChPspl)
Food Insecurity Terminology Build

PROCEDURE: Education about Child and Adult Food Program 464201000124103 (SNOMED CT)

PROCEDURE: Provision of food voucher 464411000124104 (SNOMED CT)

PROCEDURE: Referral to Community Health Worker 464131000124100 (SNOMED CT)


Food Insecurity Screening/Assessment
Q. Within the past 12 months we worried whether our food would run out before we got money to buy more. 88122-7 (LOINC)
A. Often true, Sometimes true, Never true, don’t know/refused. LL4730-9 (LOINC)

Food Insecurity Diagnoses
Food Insecurity 733423003 (SNOMED CT)
Food Insecurity Diagnoses
Food Insecurity Z59.41 (ICD-10-CM)

Food Insecurity Goals
Food Security 1078229009 (SNOMED CT)
*Feels food intake quantity is adequate for meals

Food Insecurity Master List available at: https://confluence.hl7.org/display/GRAV/Food+Insecurity
Questions?

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Please send all chats to Everyone. We will review and address all comments submitted.
Pilot Presentations
Funded Pilots Testing Gravity Standards

ONC Awardees

• OCHIN
• Alliance Chicago
• UT Austin (Leading Edge Acceleration Projects (LEAP) Awardee)

ACL Phase 2 Social Care Referrals Challenge Teams

• Closing the Loop Together in Southeast Michigan
• FHIR-FLI
• Missouri Aging Services Data Collaborative
• Thrive Hub (South Carolina)
Presentation Outline

- Pilot Team
- Organization
- Business Drivers
- Pilot Overview
- Standards and Technologies Under Consideration
- Pilot Ecosystem
- Pilot Workflow
- Pilot Logistics
- Success Metrics
- Resources/References
AllianceChicago

Shannon Pohl, Project Lead
Nicole Padula, Project Manager
## Pilot Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Responsibility</th>
<th>Pilot Role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Hamilton, RN, BSN, MS</td>
<td>Project Sponsor</td>
<td>Product Lead, Clinical Subject Matter Expert</td>
</tr>
<tr>
<td>Shannon Pohl, RN, BSN, MS</td>
<td>Project Lead</td>
<td>Product Owner, Clinical Subject Matter Expert</td>
</tr>
<tr>
<td>Warria Esmond, MD</td>
<td>Clinical Advisor</td>
<td>Clinical Advisor &amp; Subject Matter Expert</td>
</tr>
<tr>
<td>Nicole Padula, MPH</td>
<td>Project Manager</td>
<td>Project Management, Health Center Engagement</td>
</tr>
<tr>
<td>Jeremy Carr</td>
<td>Technical Lead</td>
<td>Technical Subject Matter Expert &amp; Development</td>
</tr>
<tr>
<td>Mary Dudek, PA</td>
<td>FQHC Subject Matter Expert - Heartland Health Centers</td>
<td>FQHC Subject Matter Expert</td>
</tr>
<tr>
<td>Allison Halvorsen, RN, BSN</td>
<td>FQHC Subject Matter Expert - Heartland Health Centers</td>
<td>FQHC Subject Matter Expert</td>
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Organization

- AllianceChicago is a Health Center Controlled Network with a mission of improving personal, community and public health through innovative collaboration.
- Our work is focused in 3 core areas:
  - Health Care Collaboration
  - Health Information Technology
  - Health Research & Education
Business Drivers

• Business Driver
  • Achieving health equity and improving overall health outcomes by addressing SDOH.

• Business Use Case
  • Care coordination and communication of critical SDOH patient data for increased continuity of care of the patient.
  • Cooperation & coordination between CBO’s and health centers.
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
- Testing Period: August 2022-January 2023
- Pilot Location: Chicago, IL
- Pilot Scope: The project will test a FHIR data exchange between an AllianceChicago-hosted Health Center and a CBO that utilizes SDOH data.
- Participating Partners: Heartland Health Centers & a partner CBO
## Pilot Systems Roles

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<thead>
<tr>
<th>Tier I System Roles</th>
<th>Tier II &amp; III System Roles</th>
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## Standards and Technologies Under Consideration

<table>
<thead>
<tr>
<th>SDOH Domain</th>
<th>Gravity Terminology</th>
<th>Exchange Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDOH Domain to focus on for this project will be chosen in collaboration with pilot health center</td>
<td>• <strong>Current</strong>: PRAPARE Screening (*LOINC)&lt;br&gt;• <strong>Current</strong>: Diagnosis, ICD-10-CM&lt;br&gt;• <strong>Future</strong>: Interventions (CPT, HCPCS)</td>
<td><strong>Testing</strong>: FHIR Observation IG</td>
</tr>
</tbody>
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## Pilot Ecosystem

<table>
<thead>
<tr>
<th>Partner Type</th>
<th>Name of Partner</th>
<th>Pilot Electronic Systems/Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>FQHC Partner</td>
<td>Heartland Health Centers</td>
<td>EMR: athenaPractice</td>
</tr>
<tr>
<td>Third-party Partner</td>
<td>Chicago-based Community-Based Organization</td>
<td>Electronic documentation system</td>
</tr>
</tbody>
</table>
Pilot Workflow

- **Patient Workflow Focus** - The test data exchange will stem from a Heartland Health Centers clinical workflow existing currently, where SDOH information is gathered by the HHC team and communicated to the CBO.

- **Human-Centered Design** - Heartland Health Centers and AC see the value and importance of ensuring that best-practices of HCD are invoked in this project, to further ensure that the needs of the patient and participating organizations are met.
Pilot Logistics

• Timeline & Milestones
  • Health Center Kickoff Discussions: July 2022
  • Third-Party Organization Discovery and Workflow Design for the Test FHIR Exchange: August 2022 – September 2022
  • Technical Solution Development and Testing of FHIR Exchange: August 2022 – January 2023
  • Provide Summary of Findings: January 2023

• Challenges
  • Health Center and CBO burden
  • CBO readiness
  • Translating a FHIR IG to current systems
  • Patient willingness to share SDOH data
Success Metrics

The project should be based on an established solution architecture for how SDOH data will flow, agreed upon by both the pilot health center and the participating CBO

• Workflow involved should be a realistic patient workflow
• Key Performance Metrics:
  • Technical tasks completed during established timeframe
  • Test data exchange submitted during established timeframe
Resources/References

- CDC Tools for SDOH
- NACHC PRAPARE
- Journal of Ambulatory Care Management: *How 6 Organizations Developed Tools and Processes for Social Determinants of Health Screening in Primary Care*
Ned Mossman, Director of Social Determinants of Health
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<tr>
<td>Ned Mossman</td>
<td>Director of SDOH</td>
<td>Liaison for Gravity Pilot</td>
</tr>
<tr>
<td>Danielle Myers</td>
<td>Project Manager</td>
<td>Coordination and Communication</td>
</tr>
<tr>
<td>Leah Sands</td>
<td>Subject Matter Expert/Technical Lead</td>
<td>FHIR Integration</td>
</tr>
<tr>
<td>Anthony Radosti</td>
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<td>FHIR Integration</td>
</tr>
<tr>
<td>Rhonda Winchester</td>
<td>Epic’s Compass Rose Program Build</td>
<td>Referral source updated and requested via Compass Rose</td>
</tr>
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Organization

- OCHIN is a nonprofit health care innovation center designed to provide knowledge solutions that promote quality, affordable health care for all.
  - OCHIN’s solutions include Research, Hosted Epic EHR Services, Clinical Support Services
  - Have members in California.
- OCHIN aims to implement FindHelp’s Native+ FHIR Integration through OCHIN’s Epic instance via the Compass Rose programs to provide members with a closed loop referral service with CRN’s. OCHIN is also completing a gap analysis for the Gravity Project.
Business Drivers

- Health Equity,
- Virtual Health Systems,
- Data-driven Solutions,
- Technology Innovation,
- Clinical Support Services, and
- Research and Analytics.

Currently, members must go outside the OCHIN Epic system to place and receive referrals through the SSRL’s. With the new functionally, member care teams will be able to place the referral and close gaps in care management via bidirectional integration.
Pilot Overview

• Tier III Pilot Participant
• Pilot Use Cases:
  • OCHIN is focused on Gravity’s Use Case 2, which involves documenting and tracking SDOH related interventions to completion.
  • The testing period runs through November 2022.
• Participating Partners include:
  • Epic,
  • FindHelp, and
  • OCHIN Members Residing in California.
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<td>Screen tool: Protocol for Responding to &amp; Assessing Patients' Assets, Risks &amp; Experiences (PRAPARE)</td>
<td>Gravity FHIR IG: Task and Service Request Profiles (Direct Referral Light workflow)</td>
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<tr>
<td>Housing Instability</td>
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</tr>
<tr>
<td>Transportation Insecurity</td>
<td>ICD-10-CM Z codes (Diagnoses-Assessed Needs)</td>
<td></td>
</tr>
</tbody>
</table>
## Pilot Ecosystem

<table>
<thead>
<tr>
<th>Partner Type</th>
<th>Name of Partner</th>
<th>What electronic systems/vendors do they use to support Pilots?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical</td>
<td>Alliance – California</td>
<td>EMR: OCHIN Epic</td>
</tr>
<tr>
<td>SDOH Vendor</td>
<td>FindHelp</td>
<td>Native+ AppOrchard app</td>
</tr>
<tr>
<td>EMR</td>
<td>Epic</td>
<td>EMR: Epic</td>
</tr>
</tbody>
</table>
Pilot Workflow

Epic User

- User completes 5DNI screening flow sheet to determine resource needs
- Social service needs are identified in the patient's storyboard
- User can view and update documentation in Epic

Referral Source

- Referral is requested in Epic via Compass Rose

Data Transfer

- Task Update (Accepted) sent
- Task Update (In Progress) sent
- Task Update (Completed) sent

Referral Recipient

- FindHelp receives referral via API
- FindHelp sends Task, Read request, ServiceRequest, Read DocumentReference, Practitioner, Encounter, etc.
- FindHelp status updated (Accepted)
- FindHelp status updated (In Progress)
- FindHelp status updated (Completed)

Recipient

- Patient
  - Receives referral
  - Receives referral and patient info
  - Updates status
  - User works on services
  - User completes service
- CBO
  - User receives referral
  - User accepts referral
Pilot Logistics

- The testing period runs from April 2022 – January 2023.
  - FindHelp App Orchard FHIR Integration to OCHIN Epic: June - July 2022
  - Demo Data Elements in Epic EHR/Test in Non-PHI Environment: August 2022
  - Kickoff with Pilot Members: September 2022
  - Member Build: October 2022
  - Completion of technical design / workflow: November 2022
  - Test in PHI Environment: December 2022
  - Completion of Pilots: January 2023
- OCHIN’s current Pilot challenges:
  - Pilot member resource availability, and
  - Gaps in implementation steps being pilot members.
Success Metrics

• OCHIN utilizes key performance metrics.
  • Pilot members conduct closed loop referrals once live.
  • Additional OCHIN members work to move to bidirectional functionality.
  • The team also aims to implement bidirectional functionality with Unite Us for members to utilize.
Resources/References

- https://ochin.org/
- https://www.findhelp.org/
- https://www.epic.com/
Dell Medical School at the University of Texas at Austin

Eliel Oliveira, Project Lead
# Pilot Team

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

• We are the Health Informatics, Data Science and Epidemiology Division (HIDaSE) in the Department of Population Health at the Dell Medical School. We use data and information systems to transform and enhance the ways people get and stay healthy.

• Our projects include patient engagement technologies, blockchain healthcare identity management systems, SDOH data management systems, and Health Information Exchange (HIE) solutions among others.

• Austin, Texas will host our initial pilot which will then be expanded to New Orleans, Louisiana and El Paso, Texas.
The University of Texas at Austin’s FHIR-Enabled Social and Health Information Platform 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.
Business Drivers

• Equity, Diversity, and Inclusion are key to the school's mission to improve health in our community and nationally, accelerate innovation, and transform the academic health environment through research, education, and social and clinical solutions.

• Clinical and social data available to all care team members, patients, and stakeholders (with patient consent), creating a unified longitudinal client record, facilitating smoother referrals to social services, and ensuring that the status and outcomes of referrals are sent back to providers (i.e., “closing the loop”).
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 Sep 2021 to Aug 2023.
    - **Testing from Nov 2022 to Feb 2023.**
## Pilot Systems Roles

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

<table>
<thead>
<tr>
<th>SDOH Domain</th>
<th>Gravity Terminology</th>
<th>Exchange Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food Insecurity</td>
<td>• Screening (LOINC) &lt;br&gt;• Diagnosis (SNOMED-CT, ICD-10-CM) &lt;br&gt;• Goals (SNOMED CT) &lt;br&gt;• Interventions (SNOMED-CT, CPT/ HCPCS)</td>
<td>FHIR Core IG, FHIR SDOH Clinical Care IG, REST APIs, JSON, OAuth2, Web Sockets, SMTP and S/MIME, X.509</td>
</tr>
</tbody>
</table>
# Pilot Ecosystem

<table>
<thead>
<tr>
<th>Partner Type</th>
<th>Name of Partner</th>
<th>Pilot Electronic Systems/Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical - FQHC</td>
<td>People’s Community Clinic</td>
<td>EMR: NextGen</td>
</tr>
<tr>
<td>Clinical - LMHA</td>
<td>Integral Care</td>
<td>EMR: NetSmart</td>
</tr>
<tr>
<td>Community-Based Organization</td>
<td>Central Texas Food Bank</td>
<td>CRM: SalesForce</td>
</tr>
<tr>
<td>Patients</td>
<td>Recruited in Clinical Settings</td>
<td>PET: FHIRedApp</td>
</tr>
</tbody>
</table>
## Current Workflow

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

1. Patient downloads the App and consents to participate.
3. CHW places referral to CTBF on FHIREd-SHIP (if SNAP benefits need is expressed).
4. CTBF staff accepts the referral on FHIREd-SHIP and sends intake questions to patient.
5. Patient responds to questions on the App. If eligible, patient schedules a meeting with CTBF staff via the App.
6. Patient uploads required documents via the App. CTBF staff submits SNAP application on behalf of patient.
7. CTBF staff has access to patient’s SDoH assessment on FHIREd-SHIP (the one completed at the clinic).
Pilot Challenges

• Determining the end-to-end workflow for SNAP referrals across stakeholders and reaching agreement on the ideal way to enhance data exchange, visibility, and close referrals. Innovate when a solution does not currently exist.
• Staying within the timeline of the project given the number of stakeholders, administrative tasks, and unexpected software development needs.
• Recruiting participants (anticipated) and following each through systems interactions to determine success and to adjust as needed.
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.
Resources/References

Questions?

You are encouraged to actively participate in the discussion using the Zoom chat feature (bottom of the Zoom Meeting window).

You can also use the Reactions feature to raise your virtual hand and ask a question live. Please be mindful of your background noise.

Please send all chats to Everyone. We will review and address all comments submitted.
Next Steps
# Workgroup Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 29, 2022</td>
<td>Gravity Project Pilots Affinity Workgroup Kickoff</td>
</tr>
<tr>
<td>October 27, 2022</td>
<td><strong>Workgroup Meeting #2</strong></td>
</tr>
<tr>
<td></td>
<td>• Introduce Pilot Use Cases</td>
</tr>
<tr>
<td></td>
<td>• Introduce ACL Social Care Referral Challenge Projects</td>
</tr>
<tr>
<td>November 2022</td>
<td><strong>Workgroup Meeting #3</strong></td>
</tr>
<tr>
<td></td>
<td>• FHIR Assessment Tool Orientation</td>
</tr>
<tr>
<td></td>
<td>• SDOH Clinical Care FHIR IG Standard for Trial Use 2 Overview</td>
</tr>
<tr>
<td></td>
<td>• Pilot Partners Presentations</td>
</tr>
<tr>
<td>January 26, 2022</td>
<td><strong>Workgroup Meeting #4</strong></td>
</tr>
<tr>
<td></td>
<td>• Pilot Partners Presentations</td>
</tr>
<tr>
<td>February 23, 2022</td>
<td><strong>Workgroup Meeting #5</strong></td>
</tr>
<tr>
<td></td>
<td>• Pilot Partners Presentations</td>
</tr>
<tr>
<td>March 30, 2022</td>
<td><strong>Workgroup Meeting #6</strong></td>
</tr>
<tr>
<td></td>
<td>• Pilot Partners Presentations</td>
</tr>
</tbody>
</table>
Next Steps:

• If you are interested in piloting, please express your interest using the Confluence Interest Form: [https://confluence.hl7.org/display/GRAV/Pilots+Affinity+Workgroup+List](https://confluence.hl7.org/display/GRAV/Pilots+Affinity+Workgroup+List)
• Pilot presentations will be held during our workgroup meetings. There will be no meeting in December 2022.
• If you have any questions, please contact us:
  • Gabriela Gonzalez at gabriela.gonzalez@emiadvisors.net, and
  • Demri Toop Henderson at demri.toop@emiadvisors.net.
Thank you for participating in this national standards implementation process.
Gravity Project Community

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

Join us as a Gravity Project sponsor!

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