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

FEHRM Town Hall
July 16, 2020
Meet Our Speakers

Evelyn Gallego
Gravity Project
Program Manager

Sarah DeSilvey
Gravity Project Clinical
Informatics Director
Agenda

- Gravity Team Intro
- Project Background (the WHY)
- Project Scope (the WHAT)
- Project Approach (the HOW)
- Project Deliverables to-date
- Federal SDOH Standardization Initiatives
- How to Engage
Gravity Project Team

- **Caroline Fichtenberg**, Managing Director, UCSF/SIREN
- **Mark Savage**, SDOH Policy Lead, USCF/SIREN
- **Sarah DeSilvey**, Clinical Informatics Director, University of Vermont
- **Evelyn Gallego**, Program Manager, EMI Advisors
- **Bob Dieterle**, Technical Director, EnableCare
- **Linda Hyde**, Coding Systems Expert, EMI Advisors
- **Donna G. Pertel**, Food Insecurity Co-Lead, Academy of Nutrition and Dietetics
- **Becki Gradl**, Food Insecurity Tech Lead, Academy of Nutrition and Dietetics
- **Monique Van Berkum**, FHIR Modeling Lead, AMA
- **Corey Smith**, FHIR IG Project Coordination, AMA
- **Megan Sandel**, Housing Domain Lead, Children’s Health Watch
- **Allison Bovell-Ammon**, Housing Domain Lead, Children’s Health Watch
- **Richard Sheward**, Children’s Health Watch
Gravity Project Sponsorship (Financial & In-Kind)

https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors
Background
Growing Interest in Addressing SDOH in Clinical Settings

What Goes Into Your Health?

- **Socioeconomic Factors**
  - Education
  - Job Status
  - Family/Social Support
  - Income
  - Community Safety

- **Physical Environment**

- **Health Behaviors**
  - Tobacco Use
  - Diet & Exercise
  - Alcohol Use
  - Sexual Activity

- **Health Care**
  - Access to Care
  - Quality of Care

Source: Institute for Clinical Systems Improvement, Going Beyond Clinical Walls: Solving Complex Problems (October 2014)
Adapted from The Bridgespan Group
Uses for Social Risk Data in Clinical Settings

- Medical Care
- Social Risk Interventions
- Population Health Management
- Risk Adjustment
- Community Health Improvement
- Research
If it isn’t documented, it never happened.
Why capture social risk data in a standardized and structured way?

1. To promote collection and use of the data
2. To facilitate sharing of the data across organizations
3. To facilitate payment for social risk data collection and intervention activities
What Codes Exist to Capture Social Risk Data?
ONC 2015 Edition Certification Criterion for Social, Psychological, and Behavioral Data

- Financial resource strain
- Educational attainment
- Stress
- Social isolation
- Intimate Partner Violence

SIREN Social Risk Codes Review

SIREN Social Risk Codes Review

- IOM
- AHC
- PRAPARE
- Health Leads
- SEEK
- WE CARE

20 Social Risk Domains

### SIREN Social Risk Codes Review

#### 20 Social Risk Domains

- Access to health care
- Child Care
- Clothing
- Education
- Finances
- Food
- Housing
- Immigration/migration
- Incarceration
- Primary Language
- Race/ethnicity
- Residential address
- Safety
- Social connections/isolation
- Stress
- Transportation
- Utilities
- Veteran status
- General SDOH (not domain specific)

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## SIREN Social Risk Codes Review

<table>
<thead>
<tr>
<th>No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>133</td>
<td>Screening question panel codes</td>
</tr>
<tr>
<td>33</td>
<td>Screening procedure codes</td>
</tr>
<tr>
<td>686</td>
<td>Assessment/Diagnosis codes</td>
</tr>
<tr>
<td>243</td>
<td>Treatment/Intervention codes</td>
</tr>
<tr>
<td>1095</td>
<td>SDH Codes</td>
</tr>
</tbody>
</table>

Enter the Gravity Project...

Goal

Develop consensus-driven data standards to support use and exchange of social determinants of health (SDOH) data within the health care sectors and between the health care sector and other sectors.
Project Scope
Gravity Overview: Two Streams

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

**Technical (FHIR)**
- FHIR IG Development
- FHIR IG Ballot & Publication
- FHIR IG Testing
- Publication in NLM VSAC & ONC ISA

**CODED VALUE SETS**
Terminology Workstream: Data Element and Gaps Analysis Work

For each domain:

- What concepts need to be documented across the following activities?
- What codes reflecting these concepts are currently available? What codes are missing?
Technical Workstream: HL7® FHIR® Accelerator Program

- Designed to assist implementers across the health care spectrum in the creation of FHIR Implementation Guides or other informative documents

- Gravity Project became an official Accelerator in August 2019: [http://www.hl7.org/documentcenter/public_temp_3840821C-1C23-BA17-0C64E3ACBE05D630/pressreleases/HL7_PRESS_20190820.pdf](http://www.hl7.org/documentcenter/public_temp_3840821C-1C23-BA17-0C64E3ACBE05D630/pressreleases/HL7_PRESS_20190820.pdf)

[http://www.hl7.org/about/fhir-accelerator/](http://www.hl7.org/about/fhir-accelerator/)
Interoperability Glide Path: Domain Data Sets & IGs

Accelerate standards development and uptake

SDOH Data Sets
- Food Insecurity
- Housing
- Instability & Quality
- Transportation
- Access
- New Domain

Develop and test coded value sets for use in FHIR
Refine, test, and ballot HL7® FHIR® SDOH Implementation Guide

Regulators
EHR Vendors
Payers & Providers
Patients
Clinicians
Registries/Researchers
Implementers

Gravity Project

HL7 International
Project Approach
Public Collaborative Process

The Gravity Project
Created by Laura Heermann-Langford, last modified by Marissa Rice about 2 hours ago

Consensus-driven standards on social determinants of health

Announcements

1. END TO END HOUSING DATA ELEMENTS READY FOR REVIEW! The Housing Instability and Homelessness Master List is now available here for end-to-end review and comments. Please email your end-to-end review comments to gravityproject@em tidvisors.net by no later than the close of business on Thursday, July 9, 2020.

2. NEW Food Insecurity Coding Submissions
   a. The Gravity Project recently completed submissions for new food insecurity codes to LOINC, ICD-10, and SNOMED-CT based on the coding gaps identified in the final food insecurity master list. View the latest coding submissions here.

3. SEND US YOUR DATA ELEMENTS for Inadequate Housing and Transportation
   a. Please continue to send us your data element concepts for Inadequate Housing and Transportation. Click here to submit your data element concepts.

4. JOIN OUR NEXT Gravity Project Community Collaborative Meeting
   a. Please join us for the bi-weekly Gravity Project Community Meeting Thursday, July 9th from 4:00 - 5:30 pm ET (1:00 - 2:30 pm PT). The web meeting URL and dial-in information are available here. If you are unable to attend the meeting, materials and recordings are posted here. For further information, please visit the Gravity Project Meeting Schedule.

5. The Gravity Project is HIRING!
   a. The Gravity Project is looking for a new Senior Project Manager to manage all the Gravity workstreams and coordinate across our three Governance Committees. Please see job posting here. Qualified candidates can send their resumes to hello@em tidvisors.net.

6. May FHIR IG Connectathon Reports Available
   a. View Lessons Learned slides from the MHIN Interopathon here.
   b. View Lessons Learned slides from HL7 May FHIR Connectathon here.

COVID-19 and SDOH
We have stood up a public collaboration space where everyone can share ideas and resources around COVID-19 and SDOH efforts. Please visit and contribute to the new Gravity Project SDOH COVID-19 Response page, where you’ll find a blog and other resources. Anyone can view the blog, but a Confluence login is required for those who wish to post blog content. Click here for instructions on how to request a Confluence login. Email webmaster@hl7.org for login and technical support.

Gravity Events and Newsletter
Gravity Project will be participating WEDI Forum virtually on Tuesday, August 2020. Please view event details here.

- Visit the Gravity Project Events Page to keep track of the latest events and news items for the Gravity Project.

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

1,100+ Participants

https://confluence.hl7.org/pages/viewpage.action?pageId=46892669#JointheGravityProject-
GravityProjectMembershipList
Gravity Governance Structure

Executive Committee
15 members, at least 2 from each of:
1. Patients/Consumers 4. HIT Vendors (3)
2. Providers (3) 5. Community Based Orgs
3. Payers (3) 6. Federal Government

Program Management Office

Workstreams

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

CODED VALUE SETS

FHIR IG Ballot & Publication
FHIR IG Development
Community & FHIR Coordination
FHIR IG Testing

Gravity Public Collaborative
Elastic: 1,000+ members

Strategic Advisory Committee
All Financial Sponsors & Invited In-Kind Contributors. At least 2 of:
1. Patients/Consumers 4. HIT Vendors
2. Providers 5. Community Based Orgs

Technical Advisory Committee
At least 2 representatives from:
1. Patients/Consumers 4. HIT Vendors
2. Providers 5. Community Based Orgs

https://confluence.hl7.org/display/GRAV/The+Gravity+Project
Terminology Development Process

Community Terminology Development Process
1. Start with SIREN compendium of existing SDOH terminology—a study of what exists
   https://sirenetwork.ucsf.edu/tools-resources/mmi/compendium-medical-terminology-codes-social-risk-factors
2. Glean relevant terms from the compendium and adjudicate against the literature
3. Develop and refine Master List based on collective brainstorming with 1000+ Public Collaborative
   • Regularly publish latest version on Confluence
4. Add, refine, and define concepts until we have a representative set aligned with literature and practice
5. Review and achieve consensus on Master List; publish on Confluence
What kinds of data does the provider need to care for their patients?

- the hospital need to study the effects of provider interventions?
- the WIC office or food bank need to address the need of their clients?
- the state need to plan for population health needs?

And what are the principles we need to consider to keep patients at the center?

https://confluence.hl7.org/display/GRAV/Gravity+Data+Principles
Data Element Submission & Adjudication Process

Process/Data Collection over time

Contributors recommend potential data elements

Submitted Form

Potential Stewards

Adjudicator harvests new ideas from the Current Submitted Form, making them Candidates and promotes new data elements to Master List.

Adjudication Form

Adjudicate

Promote

Community votes to affirm or reject data elements on Master List to move them to the Consensus List.

Adjudicator promotes adjudicated data elements from a Current Adjudicated Form. Merges/Removes data elements

Vote

Community approves recommended data elements.

Committed Participants

Adjudicated Master List: https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain
Project Status
Data elements Consensus Process

- Public collaborative convened over **1,082** participants from May 2019 to June 2020
- Achieved total membership of **795** members: [Join the Gravity Project - Gravity Project Membership List](#)
  - **272** Committed Members
  - **523** Other Interested Party
- Average of 100 participants on biweekly calls.
Gravity Project Accomplishments to Date

- Developed consensus-approved **Use Case Package**: https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package

- Developed consensus-approved **Food Insecurity Data Set**: https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain

- Developed Food Insecurity **Gap Analysis & Coding Recommendations Report**.

- Submitted new code applications for Food Insecurity concepts to Regenstrief, ICD-10, and SNOMED CT.

- Developed **Gravity Manuscript Outline (ONC Deliverable)**

- Developed draft **SDOH FHIR Implementation Guide (IG)**: https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG

- **Completed two SDOH IG Connectathons**: https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+Connectathons

- Developed draft **Housing Instability and Homelessness Data Set**: https://confluence.hl7.org/display/GRAV/Housing+Instability+and+Homelessness+Domain
Gravity Timeline

1. Public Collaborative (Ongoing)

Launch MAY 2, 2019

2. Use Case Development & Functional Requirements
   Personas, Patient Story, Use Cases (X3)

- a) Data Set Identification
- b) Coding Recommendations
- c) New Code Submissions & Publication in VSAC & ISA
  
SDOH Domain Projects (3)

- Food Insecurity
- Housing Instability
- Transportation Access

- a) Data Set Identification
- b) Coding Recommendations
- c) New Code Submissions & Publication in VSAC & ISA

SDOH Domain Projects (3)

- a) Data Set Identification
- b) Coding Recommendations
- c) New Code Submissions

FHIR IG Development & Testing (5)

- 5.2a FHIR Implementation Guide Development V.1.0
- 5.2b FHIR IG Ballot Reconciliation & Publication
- 5.2c Reference Implementation Development

- 5.3 Connectathon Testing

Feb 20 | May 20 | Sept 20 | Jan 21
Gravity Project National Recognition


Use Cases & Terminology
Structure
Gravity Use Cases

1. Document SDOH data in conjunction with the patient encounter.

2. Document and track SDOH related interventions to completion.

3. Gather and aggregate SDOH data for uses beyond the point of care (e.g., population health management, quality reporting, and risk adjustment/risk stratification).

https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package
Intervention Structure: 8 Types

- **Referral** - The act of clinicians/providers sending or directing a patient to professionals and/or programs for services (e.g., evaluation, treatment, aid, information, etc.)

- **Provision** - To supply/make available for use

- **Counseling** – Psychosocial procedure that involves mental/behavioral strategies such as 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

- **Assessment** – Determination of a value, conclusion, or inference by evaluating evidence.
  - **Evaluation**- Process of determining eligibility by evaluating evidence

- **Assistance** - To give support or aid to; help

- **Coordination**- Process of organizing activities and sharing information to improve effectiveness
Food Insecurity
Submitting Organizations: Food Insecurity Data Sets

https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain
# Food Insecurity Data Element Submissions: Total 423 Data Elements

## Total Submissions Received = 19

<table>
<thead>
<tr>
<th>Screening Tool/Questions</th>
<th>Diagnosis</th>
<th>Goal</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>203 (56 Tools)</td>
<td>60</td>
<td>13</td>
<td>147</td>
</tr>
</tbody>
</table>

## Submissions Reviewed = 19

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Disposition</th>
<th>Disposition</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add – 16 Tools/102 Questions</td>
<td>Add – 4</td>
<td>Add - 1</td>
<td>Add - 23</td>
</tr>
<tr>
<td>Do Not Add – 18 Tools/82 Questions</td>
<td>Do Not Add – 11</td>
<td>Do Not Add - 3</td>
<td>Do Not Add – 21</td>
</tr>
<tr>
<td>Park - 2 Tools/4 Questions</td>
<td>Park - 2</td>
<td></td>
<td>Park - 2</td>
</tr>
</tbody>
</table>

## Total Submissions Returned* = 19

* Adjudication completed and file returned to submitter with dispositions
Food Insecurity: Establishing a Consensus Definition

- **Common definition July 18, 2019** “An economic and social condition of limited or uncertain access to adequate food for an active, healthy life” (United States Department of Agriculture, 2017)

- **Consensus definition**- Uncertain, limited, or unstable access to food that is: adequate in quantity and in nutritional quality; culturally acceptable; safe and acquired in socially acceptable ways
  - Includes the primary domains of food insecurity: quantity, quality, cultural acceptability, safe and being acquired in socially acceptable ways
  - Includes the modifiers of food insecurity status: uncertainty in the present, limitation, and stability (which allows for fluctuations over time)
  - Logically inverse and computable.

[https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain](https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain)
Food Insecurity Coding Gap Analysis

- Total **224** data elements identified; **only 25** of these have applicable codes to represent them electronically!

<table>
<thead>
<tr>
<th>Activity</th>
<th>Total # of Concepts</th>
<th># Current Codes</th>
<th># Requiring Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening</td>
<td>24 Screeners, 77 Questions</td>
<td>2 Screeners, 6 Questions</td>
<td>22 Screeners, 71 Questions</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>8</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>Goals</td>
<td>6</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Interventions</td>
<td>109</td>
<td>12</td>
<td>97</td>
</tr>
</tbody>
</table>
Food Insecurity Data Concepts

**Question:** Within the past 12 months we worried whether our food would run out before we got money to buy more [U.S. FSS]?
**Answer:** Often true, Sometimes true, Never true, Don’t Know/Refused

**Screening Result Observation:** Food Insecurity (At Risk, Not at Risk)

**Clinical Finding:**
- Food Insecurity
- Mild Food Insecurity
- Moderate Food Insecurity
- Severe Food Insecurity

**Screening**

**Assessment Observation**

**Diagnosis**

**Goal Setting**

Food Insecurity intervened

Food Insecurity screened

Food Security Present

https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain
Update: Food Insecurity Terminology Submission

- **LOINC V2.68 released 6/17/20**
  - The three USDA Screeners submitted by Gravity are included in this release (U.S. Household Food Security (18), U.S. Adult Food Security (10), U.S. Household Short Form (6))
  - Additional screeners from the Food Insecurity Master List are being prepared to submit for consideration in the December LOINC release.

- **SNOMED CT**
  - Food insecurity diagnoses and interventions from the master list for consideration in the September release
  - Submitted concepts are currently being reviewed by SNOMED

- **ICD-10**
  - Food insecurity diagnoses from the master list have been submitted for review at the September ICD-10 Coordination and Maintenance meeting.
Housing Instability and Homelessness
Submitting Organizations: Housing Instability Data Sets

- Allscripts® / All possible
- NCDHHS
- Washington Association for Community Health
  Community Health Centers • Advancing Quality Care for All
- National Institute of Nursing Research
- School of Medicine
  UNIVERSITY OF COLORADO ANSCHUTZ MEDICAL CAMPUS
- HUD EXCHANGE
- Providence St. Joseph Health
- IBM Watson Health
  PULSE® Health Polls
- HL7 International
# Housing Instability Data Element Submissions Summary

**Total Submissions Received = 14**

<table>
<thead>
<tr>
<th>Screening Tool/ Questions</th>
<th>Diagnosis</th>
<th>Goal</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>29 Tools / 360 Questions</td>
<td>15</td>
<td>14</td>
<td>74</td>
</tr>
</tbody>
</table>

**Submissions Reviewed = 13**

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Disposition</th>
<th>Disposition</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duplicates –5 Tools/7 Questions</td>
<td>Duplicates – 1</td>
<td>Duplicate – 0</td>
<td>Duplicates – 0 Synonymous – 0</td>
</tr>
<tr>
<td>Do Not Add – 7 Tools/164 Questions</td>
<td>Do Not Add – 11</td>
<td>Do Not Add – 0</td>
<td>Do Not Add – 9</td>
</tr>
<tr>
<td>Hold – 3 Tools/4 Questions</td>
<td>Hold – 0</td>
<td>Hold – 4</td>
<td>Hold – 4</td>
</tr>
</tbody>
</table>

**Total Submissions Returned* = 10**

* Adjudication completed and file returned to submitter with dispositions
## Screening Questions and Panels- Simplified

<table>
<thead>
<tr>
<th>id</th>
<th>Relevant Screening Tool</th>
<th>Comp?</th>
<th>LOINC Panel Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>PRAPARE</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>VA Homelessness Screening Clinical Reminder (HSCR)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>NC Healthy Opportunities Screening</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>Accountable Health Communities (AHC) Health related social needs screening tool</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>CHW Housing Instability Vital Sign</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>We Care</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>Health Leads</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>KP Your Current Life Situation</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S9</td>
<td>Well Rx</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>AAFP Social Needs Screening Tool</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S11</td>
<td>American Housing Survey</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>S12</td>
<td>Childrens Healthwatch</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S13</td>
<td>Foundational Community Supports: Supported Housing Assessment</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>S14</td>
<td>Pulse Outcome Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S15</td>
<td>Homeless Management Information System (HMIS)</td>
<td>N</td>
<td></td>
</tr>
<tr>
<td>S16</td>
<td>SDOH Tool CHCW Internally developed)</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S17</td>
<td>CHSCNO Quick Check</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S18</td>
<td>CHFC SDH All Domains</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>S19</td>
<td>Wellness and life experiences survey YVFWC</td>
<td>Y</td>
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</tbody>
</table>
Diagnoses- Homelessness

<table>
<thead>
<tr>
<th>ICD-10- CM Claims and Orders</th>
<th>SNOMED Problem List, History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z59.0 Homelessness</td>
<td>Homelessness (Δ from homeless)</td>
</tr>
<tr>
<td>Z59.0x Sheltered Homelessness</td>
<td>Sheltered homelessness</td>
</tr>
<tr>
<td>Z59.0x Unsheltered Homelessness</td>
<td>Unsheltered homelessness</td>
</tr>
</tbody>
</table>

Homelessness-
- lacking a fixed, regular, and adequate nighttime residence ([HUD, 2012](#));
- living in a place not meant for human habitation (including the streets or in their car), emergency shelter, transitional housing, and hotels paid for by a government or charitable organization ([HUD, 2014](#))
## Diagnoses- Housing Instability

<table>
<thead>
<tr>
<th>ICD-10- CM Claims and Orders</th>
<th>SNOMED Problem List, History</th>
</tr>
</thead>
<tbody>
<tr>
<td>Z59.? Housing instability related to limited economic resources</td>
<td>At risk of eviction</td>
</tr>
<tr>
<td></td>
<td>Behind on rent</td>
</tr>
<tr>
<td></td>
<td>History of multiple moves</td>
</tr>
<tr>
<td></td>
<td>Doubled-Up</td>
</tr>
<tr>
<td></td>
<td>Housing Cost Strain</td>
</tr>
<tr>
<td>(Z __) History of Homelessness</td>
<td>History of homelessness</td>
</tr>
</tbody>
</table>
Goals- Housing Instability and Homelessness

In consideration- Goal related to the supportive activities required to maintain qualifications for housing (e.g., mental behavioral health, disease management).
FHIR IG Development
Setting the Stage for SDOH FHIR IG Development

Persona Development

Patient Story Creation

Use Cases:
1. Gather SDOH data in clinical encounter
2. Track SDOH interventions to completion
3. Aggregate SDOH data

Master List:
• Screening
• Assessment/Diagnosis
• Goal
• Interventions (Planned, Requested, Completed)
Gravity Project Connectathon Activities

- The Gravity Project led two tracks during the May 13th to 15th 2020 Virtual HL7 Connectathon:
  - **Gravity SDOH Track:** Tested Implementation Guidance documented in the SDOH Clinical Care (CC) IG; focus on Use Case 1 (Screening Data Exchange)
  - **Care Coordination Track:** Tested multiple IGs specific to patient/person level data across the continuum of care: SDOH screening, functional assessments, care planning, and eReferrals

- Gravity participated in the Michigan Health Information Network (MiHIN) 2020 Virtual InterOpathon May 27th and 28th
  - Tested suite of applications to gather SDOH information within clinical context for exchange with outside organizations
  - Event details available [here](#)
  - Gravity Project received 1st prize!!!!
FHIR IG Next Steps

- FHIR IG development and balloting approach currently under review by new Gravity Technical Director

- Under consideration: Changes to FHIR IG timeline and scope
  - Comment only ballot vs STU ballot
  - Multiple SDOH domains in sequence vs parallel
  - Prioritization of screening and diagnosis SDOH data capture, exchange, and aggregation
Federal SDOH Data Standardization Initiatives
Gravity Value Areas: What does success look like?

- **POLICY:** Gravity identified standards inform new policy development and incorporation of standards in federal (e.g. ONC USCDI, CMS Promoting Interoperability) and state (e.g. State Medicaid Director Letters) policies.

- **PAYMENT MODELS:** Federal Payers (CMS, DoD, VA, IHS) and Private Health Plans incorporate SDOH data capture, exchange, aggregation, and analytics in new payment models (e.g. CMMI SDOH Model).

- **PROGRAM:** Gravity identified standards incorporated in Program conditions of participation (e.g. Medicare Advantage, Medicaid Managed Care) and Quality Reporting Programs (e.g. Hospital QRRP, MIPS).

- **GRANTS:** Gravity identified standards incorporated in application requirements (e.g. ACL Challenge Grant, ONC Health IT LEAP, RWJF SDOH Integration in Clinical Care).

- **PRACTICE:** Gravity work facilitates repeatable process for adoption, implementation, and use of SDOH data at practice level.

- **INNOVATION:** New tools introduced into market to support SDOH data capture, aggregation, analytics, and use.
Opportunities...

- **Gravity Identified Opportunities**
  - LOINC Panels for program eligibility and program enrollment
  - Provider Taxonomy to encompass emerging clinical and community roles
  - Patient privacy concerns
  - Individual to Population Health Based Data Capture

- **Collective Opportunities**
  - Coordinate terminology build across public and private initiatives
  - Coordinate SDOH data capture and use across Federally sponsored initiatives
SNAPHSOT: Federal SDOH Standards Based Initiatives

- **ACL**: [Innovative Technology Solutions for Social Care Referrals Challenge Grant](#)
- **CMS**: [Accountable Health Communities Model](#)
- **ONC/CMS**: [electronic Long-Term Services & Supports](#)
- **ONC**: [Advancing Standards for Precision Medicine](#)
- **AHRQ/NIDDK**: [Multiple Chronic Conditions eCare Plan Project](#)
- **CDC**: [Bidirectional Services electronic Referral (BSeR)](#)
- **National Information Exchange Model (NIEM)**
- **HRSA**: [MIECHV Data Exchange](#)
- **DoD/Humana**: [Comprehensive Social Needs Survey Channel Test](#)
- **VA**: [Getting Results In Transition (GRIT)](#)
- **VA**: [Homelessness Screening Clinical Reminder (HSCR)](#)
SDOH FHIR IG Development Glide Path

One Overarching IG

With a set of IGs for the distinct Use Cases in different settings

SDOH Comm. Setting Use Cases  SDOH Clinical Care Use Cases  SDOH Research Use Cases  SDOH Quality Measure Use Cases  SDOH Risk Adjust. Use Cases  SDOH Pop/Pub Health Use Cases

Each IG defines Use Cases and Data Elements for the set of SDOH Domains covered by Gravity.

Promotes alignment and reuse of consistent data representations and fosters greater interoperability across settings and different data users.
How to engage!
Join our Project!

- Join the Gravity Project: [https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project](https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project)

- Review and incorporate **Food Insecurity Data Set** definitions: [https://confluence.hl7.org/pages/viewpage.action?pageId=55938680#FoodSecurityDomain-FinalFoodInsecurityMasterList-Published16April2020](https://confluence.hl7.org/pages/viewpage.action?pageId=55938680#FoodSecurityDomain-FinalFoodInsecurityMasterList-Published16April2020)

- Review and comment on the **Housing Instability and Homelessness Data Set**: [https://confluence.hl7.org/pages/viewpage.action?pageId=76157877#HousingInstabilityandHomelessnessDomain-HousingInstabilityandHomelessnessDataElements](https://confluence.hl7.org/pages/viewpage.action?pageId=76157877#HousingInstabilityandHomelessnessDomain-HousingInstabilityandHomelessnessDataElements)

- Submit **inadequate housing** and **transportation access** data elements: [https://confluence.hl7.org/display/GRAV/Data+Element+Submission](https://confluence.hl7.org/display/GRAV/Data+Element+Submission)

- Commit to test the Gravity FHIR IG at the September 2020 HL7 FHIR Connectathon: [https://confluence.hl7.org/display/FHIR/2020-09+Connectathon+25](https://confluence.hl7.org/display/FHIR/2020-09+Connectathon+25)
Join the National Call to Action

Recommendations from Nov. 2019 “Roundtable on Leveraging Data on the SDOH”

1. Improve and Align Open Source Assessment Tools
2. **Adopt Standards and Definitions (as defined and published by the Gravity Project!)**
3. Develop a Governance Body
4. Improve Financial Alignment for Providers and Community Based Organizations (CBOs)
5. Empower and Strengthen CBO Data-Gathering Capacity.
6. Develop Hyper-Local Snapshots of Communities.
7. Create State-Level SDOH Strategy Toolkits

http://reports.opendataenterprise.org/Leveraging-Data-on-SDOH-Summary-Report-FINAL.pdf
Questions?

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