The Gravity Project

Food Insecurity Data Set Identification
October 10, 2019

SIRENetwork.ucsf.edu
Welcome

Thank you for joining the **Gravity Project Workgroup** meeting!

Due to the large number of attendees, participants are **muted upon entry**. Please remain muted to avoid background noise.

- This call is being recorded; recording will be available on the Gravity Confluence page following the meeting.

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

Please send chats to “Everyone.”
Gravity Project Participation

- If you have not already done so, we invite you to officially join the project here: https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project

- If you want to check whether you have already signed up or if others from your organization have signed up, please review the existing membership here: https://confluence.hl7.org/pages/viewpage.action?pageId=46892669#JointheGravityProject-GravityProjectMembershipList

- For all other Gravity Project information, please visit: https://confluence.hl7.org/display/GRAV/The+Gravity+Project
## Agenda

<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welcome &amp; Announcements</td>
<td>Evelyn</td>
</tr>
<tr>
<td>Data Element Submission Status</td>
<td>Linda</td>
</tr>
<tr>
<td>End to End Review – Screening Submissions</td>
<td>Sarah</td>
</tr>
<tr>
<td>Introduction to FHIR IG Development Process</td>
<td>Lisa</td>
</tr>
<tr>
<td>Next Steps</td>
<td>Evelyn</td>
</tr>
</tbody>
</table>

Please submit questions and comments using the Webex chat feature.
Announcements

- Final Use Case Package Published
  https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package

- Total Consensus Votes = 61
  - Yes = 36
  - Yes with Comments = 18
  - Abstain = 7

- Participating Organization Types:
  - Consultants (2)
  - Federal/State/Local Agency (6)
  - Health IT Vendor (EHR, EMH, PHR, HIE) (5)
  - Health Professional (7)
  - Health Care Payer/ Purchaser or Payer Contractor (1)
  - Licensing/ Certification Organization (1)
  - Other System IT Vendor (Community-Based) (5)
  - Provider Association (3)
  - Provider Organization (Institution/Clinically Based) (13)
  - Research Organization (10)
  - Service Provider (Community-Based) (5)
Announcements

- Released Sept. 25, 2019.
- Examines the potential for integrating services addressing social needs and the SDOH into the delivery of health care.
- Includes recommendation: “Develop a digital infrastructure that is interoperable between health care and social care organizations”.
- References the work of SIREN and the Gravity Project in helping to build capacity for this recommendation (see page 94).
## Gravity Project Schedule and Activities (Sept to Oct)

<table>
<thead>
<tr>
<th>Week</th>
<th>Target Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>9/12</td>
<td><strong>Food Insecurity Data Sets &amp; Value Sets Gaps</strong></td>
<td>Review Food Insecurity Master List</td>
</tr>
<tr>
<td>17</td>
<td>9/26</td>
<td><strong>CANCELED</strong></td>
<td>Review Food Insecurity Master List</td>
</tr>
<tr>
<td>18</td>
<td>10/10</td>
<td><strong>Begin End-to-End Review: Working Session</strong></td>
<td>Review Master List and Gravity Project Food Insecurity Definitions</td>
</tr>
<tr>
<td>19</td>
<td>10/17</td>
<td><strong>End-to-End Review Working Session</strong></td>
<td>Review Master List and Gravity Project Food Insecurity Definitions</td>
</tr>
<tr>
<td>20</td>
<td>10/24</td>
<td><strong>End-to-End Review Working Session</strong></td>
<td>Review Master List and Gravity Project Food Insecurity Definitions</td>
</tr>
<tr>
<td>21</td>
<td>10/31</td>
<td><strong>End-to-End Review Working Session</strong></td>
<td>Review Master List and Gravity Project Food Insecurity Definitions</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Introduction: SDOH FHIR Implementation Guide (IG)</strong></td>
<td>Review Master List and Gravity Project Food Insecurity Definitions</td>
</tr>
<tr>
<td>Week</td>
<td>Target Date</td>
<td>Gravity WG Meeting Tasks</td>
<td>Homework</td>
</tr>
<tr>
<td>------</td>
<td>-------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
</tr>
<tr>
<td>22</td>
<td>11/7</td>
<td>Consensus Voting: Food Insecurity Data Set and Definitions</td>
<td>Submit Consensus Votes</td>
</tr>
<tr>
<td></td>
<td>11/14</td>
<td>Consensus Voting: Food Insecurity Data Set and Definitions</td>
<td>Submit Consensus Votes</td>
</tr>
<tr>
<td></td>
<td>11/21</td>
<td>Overview of Consensus Voting Results and Dispositions</td>
<td>Submit: Housing Instability Data Elements</td>
</tr>
<tr>
<td>25</td>
<td>11/28</td>
<td><strong>NO MEETING THANKSGIVING HOLIDAY</strong></td>
<td>Happy Thanksgiving! Enjoy your holiday!</td>
</tr>
</tbody>
</table>
Data Elements Submission Status
Submitting Organizations
## Data Concept Submissions by Type

<table>
<thead>
<tr>
<th>Type</th>
<th># Organizations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening</td>
<td>15</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>11</td>
</tr>
<tr>
<td>Goal</td>
<td>6</td>
</tr>
<tr>
<td>Intervention</td>
<td>11</td>
</tr>
</tbody>
</table>
Data Element Submissions Summary

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>56 Tools / 203 Questions</td>
<td>60</td>
<td>13</td>
<td>147</td>
</tr>
</tbody>
</table>

Submissions Reviewed = 17

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Disposition</th>
<th>Disposition</th>
<th>Interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add – 12 Tools/95 Questions</td>
<td>Add – 1</td>
<td></td>
<td>Add - 22</td>
</tr>
<tr>
<td>Do Not Add – 17 Tools/80 Questions</td>
<td>Do Not Add – 6</td>
<td>Do Not Add - 2</td>
<td>Do Not Add – 8</td>
</tr>
<tr>
<td>Info Needed – 1 Tools/2 Questions</td>
<td>Info Needed - 4</td>
<td></td>
<td>Info Needed – 11</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* = 12

* Adjudication completed and file returned to submitter with dispositions
# Adjudication Disposition Recap

<table>
<thead>
<tr>
<th>Adjudication Status</th>
<th>Definition</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duplicate Data Element</td>
<td>Conceptually similar, same code(s), same answers for questions</td>
<td>Submitter will be added as contributor for the data element in the Master file</td>
</tr>
<tr>
<td>Add Data Element</td>
<td>In scope, fit for purpose, not too broad and not too narrow</td>
<td>Data element will be added to the Master file</td>
</tr>
<tr>
<td>Do Not Add - Park</td>
<td>Not in scope for this domain but may be useful for another Gravity Domain (housing insecurity, transportation)</td>
<td>Will be added to a Parking File for future review</td>
</tr>
<tr>
<td>Do Not Add</td>
<td>Not in scope for this domain or another Gravity domain, not well formed, not fit for purpose</td>
<td>Will be noted on adjudication file with reason</td>
</tr>
<tr>
<td>On-Hold (Info Needed)</td>
<td>Need additional clarification from submitter</td>
<td>Will be noted on adjudication file with additional information needed</td>
</tr>
</tbody>
</table>
End to End Review: Screening Submissions
Methodology

- Screeners and questions were only included if the answer created a clear match with the concept of food insecurity and could serve as a primary assessment of the concern
  - food insecurity - yes
  Or
  - food insecurity - no
- This was done to 1) stay within in scope, and 2) allow any answer to speak to an eventual value set.
- Examples of concepts not included (though important!!)
  - Food Deserts
  - Nutrition Knowledge
  - Food Preparation Resources
  - Malnutrition
Data Presentation

- The full master list is expanded to correspond with eventual LOINC submission requirements

- We have crafted a condensed version for End to End Review
  - To allow for easier grasp of proposed terms
  - To offer details on validation and references when this was available
  - To clarify when questions presented were part of comprehensive panels
<table>
<thead>
<tr>
<th>ID</th>
<th># Orgs</th>
<th>Validated: &gt; USDA</th>
<th>Relevant Screening Tool</th>
<th>Comp?</th>
<th>LOINC Panel Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1</td>
<td>6</td>
<td>x</td>
<td>Hunger Vital Sign</td>
<td></td>
<td>88121-9</td>
</tr>
<tr>
<td>S-4</td>
<td>4</td>
<td>x</td>
<td>AHC</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-5</td>
<td>1</td>
<td></td>
<td>Medicare THA</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-6</td>
<td>1</td>
<td></td>
<td>IHELP</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-7</td>
<td>5</td>
<td></td>
<td>PRAPARE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-9</td>
<td>4</td>
<td>x</td>
<td>US household food security six item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-15</td>
<td>3</td>
<td>x</td>
<td>US household food security ten item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-20</td>
<td>3</td>
<td>x</td>
<td>US household food security ten item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-28</td>
<td>1</td>
<td>x</td>
<td>FIES-SM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-36</td>
<td>2</td>
<td>x</td>
<td>SWYC</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-37</td>
<td>3</td>
<td>x</td>
<td>Health Leads</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-38</td>
<td>1</td>
<td></td>
<td>We Care</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-41</td>
<td>1</td>
<td>x</td>
<td>HFIAS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-59</td>
<td>1</td>
<td></td>
<td>Kaiser YCLS</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-61</td>
<td>1</td>
<td>x</td>
<td>Household Food Security Survey Module (HFSSM) (NOTE: Canadian survey adapted from the US food security measurement method)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-77</td>
<td>2</td>
<td>x</td>
<td>USDA Youth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-86</td>
<td>1</td>
<td></td>
<td>Health Information National Trends Survey</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-90</td>
<td>1</td>
<td>~</td>
<td>NC/SEEK</td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>S-91</td>
<td>1</td>
<td>x</td>
<td>Kleinman</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S-92</td>
<td>1</td>
<td></td>
<td>CommunityConnect Social Needs Screening Tool</td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>
Screening Questions and Panels - Simplified II

<table>
<thead>
<tr>
<th># Organizations</th>
<th>Relevant Screening Tool</th>
<th>LOINC Panel Code</th>
<th>LOINC Panel Name</th>
<th>Question Concept</th>
<th>LOINC Question Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Hunger Vital Sign</td>
<td>88121-9</td>
<td>Hunger Vital Sign (HVS)</td>
<td>Within the past 12 months we worried whether our food would run out before we got money to buy more [U.S. FSS]</td>
<td>88122-7</td>
</tr>
<tr>
<td>5</td>
<td>Hunger Vital Sign</td>
<td>88121-9</td>
<td>Hunger Vital Sign (HVS)</td>
<td>Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more [U.S. FSS]</td>
<td>88123-5</td>
</tr>
<tr>
<td>1</td>
<td>Hunger Vital Sign</td>
<td>88121-9</td>
<td>Hunger Vital Sign (HVS)</td>
<td>Do you eat fewer than 2 meals a day</td>
<td>88124-3</td>
</tr>
<tr>
<td>4</td>
<td>AHC</td>
<td></td>
<td></td>
<td>Do you always have enough money to buy the food you need</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>AHC</td>
<td></td>
<td></td>
<td>Do you have any concerns about having enough food?</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Medicare THA</td>
<td></td>
<td></td>
<td>● Have you ever been worried whether your food would run out before you got money to buy more?</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>IHELP</td>
<td></td>
<td></td>
<td>● Within the past year has the food you bought ever not lasted and you didn’t have money to get more?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>PRAPARE</td>
<td>93025-5</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the past year, have you or any family members you live with been unable to get any of the following when it was really needed? Check all that apply</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>US household food security six item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>The food that (I/we) bought just didn’t last, and (I/we) didn’t have money to get more.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>(I/we) couldn’t afford to eat balanced meals</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>US household food security six item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, since last (name of current month), did (you/you or other adults in your household) ever cut the size of your meals or skip meals because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>US household food security six item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>If Yes How often did this happen</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, were you ever hungry but didn’t eat because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, which of these statements best describes the food eaten in your household in the last 12 months</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>If (I/We) worried whether (my/our) food would run out before (I/We) got money to buy more.*</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, did you lose weight because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, did (you/you or other adults in your household) ever not eat for a whole day because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>If Yes How often did this happen</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>(I/We) relied on only a few kinds of low-cost food to feed (my/our) child(ren) because (I was/we were)</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>(I/We) couldn’t feed (my/our) child(ren) a balanced meal, because (I/We) couldn’t afford that.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>My/Our child/children were not eating enough because (I/We) just couldn’t afford enough food.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, since (current month) of last year, did you ever cut the size of (your child/s/any of the children’s) meals because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, did (CHILD’S NAME/any of the children) ever skip meals because there wasn’t enough money for food?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>If Yes How often did this happen</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>US household food security ten item</td>
<td>93031-3</td>
<td>Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences</td>
<td>In the last 12 months, (was your child/ were the children) ever hungry but you just couldn’t afford more food?</td>
<td></td>
</tr>
</tbody>
</table>
How to Submit End-to-End Review Comments

- Download Food Insecurity Screening Summary List (will be posted on Oct 11):
  https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain

- Email all comments regarding data elements to gravityproject@emiadvisors.net

- For data elements currently ON the Master List
  - Include data element ID # and reason(s) you do not feel the element is appropriate for Food Insecurity

- For data elements NOT ON the Master List
  - Submit the data element type (Screening, Diagnosis, Goal, Intervention)
  - Include a description for the data element you propose
  - For a screening element, attach a copy or link to the screening tool

- Comments regarding Screening submissions due: October 24, 2019
Questions?

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

Please send all chats to Everyone.
Introduction to FHIR IG Development
Agenda

- Creation of a FHIR IG (the WHAT)
- Purpose of FHIR IG (the WHY)
- Project Approach (the HOW and When)
- How to express interest in participating
Gravity Project: Interoperability Glide Path

Accelerate standards development and uptake

SDoH Data Sets

Food Insecurity

Housing Instability & Quality

Transportation Access

Develop and test coded value sets for use in FHIR

Refine, test, and ballot HL7® FHIR® SDH Implementation Guide

Phase 1 (2019)

Phase 2 (2020+)

Regulators

EHR Vendors

Payers/Providers

Patients

Clinicians

Registries/Researchers

USCDI

Argonaut Project

DA VINCI Project

carin

HSPC

CIIC

http://www.hl7.org/about/fhir-accelerator/
What is a FHIR?

Fast Healthcare Interoperability Resources

This is the current officially released version of FHIR, which is R4 (v4.0.0). For a full list of all versions, see the Directory of publish.

0 Welcome to FHIR®

FHIR is a standard for health care data exchange, published by HL7®.

First time here?
See the executive summary, the developer's introduction, clinical introduction, or architect's introduction, and then the FHIR overview / roadmap & Timelines. See also the open license (and don't miss the full Table of Contents and the Community Credits or you can search this specification).
FHIR Implementation Guidance

Open, Free, Web-Accessible Specifications for creating and using FHIR Application Interfaces (APIs)

Da Vinci Clinical Data Exchange (CDex) Implementation Guide Release 0.1.0

Implementation Guide HomePage

Contents:
- Description
- Authors

Description

The CDex implementation guide defines combinations of exchange methods (push, pull, etc.), specific payloads (Documents, Bundles, and Individual Resources), search criteria, conformance, provenance, and other relevant requirements to support the exchange of clinical information between provider and other providers and/or payers. The goal is to identify, document and constrain specific exchange patterns so that providers and payers can reliably exchange information for patient care (including coordination of care), risk adjustment, quality reporting, identifying that requested services are necessary and appropriate (e.g. should be covered by the payer) and other uses that may be documented as part of this effort. Clinical data payloads will include C-CDA, C-CDA on FHIR, compositions, bundles, and discrete resources conforming to the US Core specification.

http://www.fhir.org/guides/registry/
Background (WHY)
Mission

To create and maintain a consensus-building community to expand available SDOH Core Data for Interoperability and accelerate standards-based information exchange by using HL7 FHIR.

Create & Maintain Consensus-building Community

Expand Core Data for Interoperability to include SDOH elements

Accelerate Standards-based Info Exchange
Approach (HOW and WHEN)
Gravity Project Roadmap (Phase 1)

May - Jun 19

Task 1: Collaborative Launch
- Project Charter Introduction and Coding Concept Orientation

Task 2: Use Case Development & Functional Requirements
- Use Case Development & Consensus (HL7 Cross-Paradigm Storyboard)

Task 3: Data Set Identification By Domain
- Food Insecurity Data Set Identification
- Housing Instability & Quality Data Set Identification
- Transportation Access Data Set Identification

Task 4: Coding Recommendations
- Terminology & Code Harmonization Report Development

Task 5: HL7 FHIR Integration
- HL7 FHIR SDOH Implementation Guide Development

Kick-Off May 2, 2019
Gravity Project Roadmap (Task 5: HL7 FHIR Integration)

- **Draft SDOH Implementation Guide Development for Feb Testing**
- **IG revisions based on Community Feedback and Additional Development**
- **IG revisions based on Connectathon Testing, Development**
- **Comment Only IG Ballot Reconciliation**
- **Sept STU Ballot Reconciliation**

**FHIR IG Development**

- **Connectathon Testing**
  - **Gravity Connectathon UC 1, 3 (Feb 20)**
  - **HL7 Connectathon, San Antonio, UC 1, 2, 3 (May 20)**
  - **HL7 Connectathon, Baltimore, UC 1, 2, 3 (Sept 20)**

**HL7 Balloting**

- **HL7 Comment Only Ballot (May 20)**
- **HL7 STU Ballot (Sept 20)**

★ **FHIR Community Kick-Off Oct 10, 2019**
Gravity Project Use Cases

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

2. Track SDOH Interventions
   Document and track SDOH related interventions to completion.

3. Aggregate SDOH Data Elements
   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
Use Case 1:  
Document SDOH During Clinical Encounter

https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package
Use Case 2: Document and Track SDOH Interventions to Completion

https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package
Use Case 3: Gather SDOH Information for Secondary Uses

https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package
Gathering, Tracking and Sharing Food Insecurity Data Concepts

**Goal Setting**

- Food Security

**Diagnosis**

- Food Insecurity
- Lack of adequate food and safe drinking water

**Intervention**

- Counseling about nutrition (procedure)
- Meals on wheels provision education (procedure)
- Evaluation of eligibility for home delivered meals

**Screening**

**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

**Clinical Observation:**

- Food Security – Present;
- Food Insecurity - Present

https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain
HL7 FHIR Acceleration

- **Reuse:**
  - **C-CDA on FHIR:** H&P, Progress Note, Referral Note, Consultation Note, Care Plan, CCD,
  - **US Core:** Patient, Practitioner, PractitionerRole, Organization, Coverage
  - **Da Vinci:** Cdex- Solicited and Unsolicited Clinical Data Exchange
  - **Other IGs:** SDC, BSeR
  - **FHIR:** Goal, Questionnaire, QuestionnaireResponse, Observation, Consent, Bundle(Document), Bundle(Transaction), CarePlan

- **Profile: SDOH Clinical Assessments for Food Insecurity**
  - Food Insecurity Observation
  - Food Security Observation
Incremental Approach to FHIR IG Development

Care Plan

- Header
- Health Concerns
- Goals
- Interventions
- Health Status Evaluations & Outcomes

SDOH Data Elements

- Risks & Barriers
- Diagnoses 2
- Patient Centered Goals 4
- Completed Interventions
- Planned Interventions 5
- Screenings 3
- Clinical Observations 1
- Outcome Observations
# Enriching the Amount and Type of Patient-Centered Information Available for Sharing Across the Healthcare Ecosystem

<table>
<thead>
<tr>
<th><strong>Patient Summary</strong>*</th>
<th><strong>Encounter Summary</strong>**</th>
<th><strong>Referral Note</strong>****</th>
<th><strong>SDOH Data Elements</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Header</strong></td>
<td><strong>Header</strong></td>
<td><strong>Header</strong></td>
<td><strong>Risks &amp; Barriers</strong></td>
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<td><strong>Health Concerns</strong></td>
<td><strong>Health Concerns</strong></td>
<td><strong>Health Concerns</strong></td>
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<td><strong>Problem Section</strong></td>
<td><strong>Problem Section</strong></td>
<td><strong>Problem Section</strong></td>
<td><strong>Diagnoses</strong></td>
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<tr>
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<td><strong>Nutrition</strong></td>
<td><strong>3</strong></td>
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<td><strong>Social History</strong></td>
<td><strong>Screenings</strong></td>
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<tr>
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<tr>
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<td><strong>Goals</strong></td>
<td><strong>Goals</strong></td>
<td><strong>Clinical Observation</strong></td>
</tr>
<tr>
<td><strong>Procedures</strong></td>
<td><strong>Procedures</strong></td>
<td><strong>Procedures</strong></td>
<td><strong>Patient Centered Goals</strong></td>
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<tr>
<td><strong>Plan of Treatment</strong></td>
<td><strong>Plan of Treatment</strong></td>
<td><strong>Plan of Treatment</strong></td>
<td><strong>4</strong></td>
</tr>
</tbody>
</table>

**Encounters Section**

* Continuity of Care Document

** Progress Note, H&P Document, Referral Summary, Consultation Note, Discharge Summary

*** Progress Note, H&P Document, Referral Summary, Consultation Note, Discharge Summary
**Use Case 1**

**Screening App**
- Find Pt, create Questionnaire1, Consent1
- Prepop with supplied data
- Administer Questionnaire and collect consent to share.

**EHR App**
- Find Pt

**CommunicationRequest**
- Screen using SDOH Questionnaire1, pre-pop data

**Option #1**
- Transaction Bundle using Conditional Reference to Patient

**Option #2**
- Unstructured Documents

**Use CR**
- Use CR to Find Pt, complete the CR
- Attach QR, Csig to Pt. Record
- Start Encounter

**Clinician**
- Clinician Reviews SDOH screen, discusses with Pt. Uses clinical judgement to make a Clinical Assessment about food security of the Pt.
- Add SDOH Clinical Assessment Observation
- Clinical discusses situation with Pt.
- If a need/risk to be tracked, add Diagnosis or Health Concern
- Clinical finishes the visit with the Pt.
- End the encounter
- Generate Encounter Summary Doc. Or Care Plan Doc.
Use Case 3

Screening App

EHR

Aggregator App

Loop

Retrieve Data

Process Data

Produce Report

Use Case 1

Function:
Send all Pt. Encounter Summaries or Quality Doc for a selected range of time.
EHR gives Agg App access to Doc Ref and Binary.

Batch Bundle

Repeat: Get Encounter Docs

Consider use of Da Vinci DEQM
ANSI Antitrust Policy

ANSI neither develops standards nor conducts certification programs but instead accredits standards developers and certification bodies under programs requiring adherence to principles of openness, voluntariness, due process and non-discrimination. ANSI, therefore, brings significant, procompetitive benefits to the standards and conformity assessment community.

ANSI nevertheless recognizes that it must not be a vehicle for individuals or organizations to reach unlawful agreements regarding prices, terms of sale, customers, or markets or engage in other aspects of anti-competitive behavior. ANSI’s policy, therefore, is to take all appropriate measures to comply with U.S. antitrust laws and foreign competition laws and ANSI expects the same from its members and volunteers when acting on behalf of ANSI.

Approved by the ANSI Board of Directors (May 22, 2014)
Gravity Connectathon Testing

1. Visit new Confluence Page:
https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FH+IR+IG

2. Sign-up:
https://confluence.hl7.org/display/GRAV/Connectathon+Testing+Sign-Up

3. What to expect:
1. Read the IG as it is being developed
2. Prepare your system’s capability
3. Attend a scheduled Connectathon and perform testing
4. Provide feedback that will improve the IG
5. Repeat

Additional Questions: Contact Lisa Nelson: lnelson@max.md
Next Steps
Next Steps

- Review Master List and submit comments for Screening data elements by October 24 to: gravityproject@emiadvisors.net

- Begin to plan for upcoming Connectathon testing
  - Looking for implementers across the health ecosystem—EHRs, HIEs, PHRs, digital health, community-based services, system integrators
  - Ideal to have both clinical and non-clinical participants
Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net