The Gravity Project

Kickoff Meeting

May 2, 2019
Welcome

Thank you for joining the **Gravity Project** kick-off webinar!

Due to the large number of attendees, participants are muted upon entry.

- 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 Zoom chat feature (bottom of the Zoom Meeting window).

Please send all chats to Everyone.

We will review and address all comments submitted. If you are experiencing technical difficulties, please contact lynette.elliott@emiadvisors.net.
Today’s agenda

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<th>Topic</th>
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<td>Lynette</td>
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Please submit questions and comments using the Zoom chat feature (send to “Everyone”).
Meet the SIREN Gravity Team

Laura Gottlieb, MD, MPH
Director, SIREN

Caroline Fichtenberg, PhD
Managing Director, SIREN
Social Interventions Research & Evaluation Network

SIREN’s mission is to catalyze and disseminate high quality research that advances health care sector efforts to improve social conditions as part of a comprehensive strategy for improving health and health equity.

Activities include:

- Catalyzing high quality research
- Collecting & disseminating research findings
- Providing research consultation services

sirenetwork.ucsf.edu | siren@ucsf.edu | @SIREN_UCSF
Meet the EMI Gravity Team

Evelyn Gallego, Program Manager EMI Advisors

Lynette Elliott, Project Manager EMI Advisors

Lisa Nelson, Value Sets Lead MaxMD

Resham Saeed Project Analyst EMI Advisors
About EMI Advisors

EMI Advisors is a technology and innovation consulting firm that provides data interoperability advisory services across the health and human services sectors.

Exemplar national projects and deliverables include:

- Office of the National Coordinator (ONC) Tech Lab Initiatives: Longitudinal Coordination of Care (LCC), Structured Data Capture (SDC), electronic Long-Term Services & Supports (eLTSS)
- HL7® FHIR® Resources
- C-CDA and FHIR Value Sets

www.emiadvisors.net
Where are you joining us from?

Please indicate your expertise via the Zoom poll.
Background (WHY)
Growing interest in addressing SDH in clinical settings

Innovaccer Launches AI-Assisted Solution to Address the Social Determinants of Health
by Fred Pennic 04/04/2019 0 Comments

Combating Chronic Disease through the Social Determinants of Health
Reducing the impact of chronic diseases will require payers and providers to get to the root causes of long-term illness, many of which are attributable to the social determinants of health.

Humana Makes Progress on Social Determinants of Population Health
Humana’s ongoing Bold Goal initiative is helping to address the social determinants of health in communities with high-needs populations.

In Depth: Hospitals tackling social determinants are setting the course for the industry
STEVEN ROSS JOHNSON

Social determinants of health playing a bigger role in doctor visits
Social risk factors can impede one's ability to improve and maintain their health, and more health care providers are taking that into account.
by Katie Kuehner-Hebert January 01, 2019 at 10:48 AM

Solera Health, Blue Cross Blue Shield Institute team up on social determinants of health initiative
The two companies will work together to tailor a platform that will connect patients to community-based providers and other resources.

AMA, UnitedHealthcare Develop ICD-10 Codes to Support Social Determinants of Health

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.
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?
Z codes: Expanded social codes in ICD-10

<table>
<thead>
<tr>
<th>Lack of Adequate Food and Safe Drinking Water (Z59.4)</th>
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<tbody>
<tr>
<td>Extreme Poverty (Z59.5)</td>
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<tr>
<td>Low Income (Z59.6)</td>
</tr>
<tr>
<td>Insufficient Social Insurance and Welfare Support (Z59.7)</td>
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</tbody>
</table>
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

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<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>
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Codifiable domains in common social risk screening tools

Challenges: Missing codes

<table>
<thead>
<tr>
<th></th>
<th>Food Insecurity</th>
<th>Housing Instability</th>
<th>Transportation</th>
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<tbody>
<tr>
<td>AHC</td>
<td>✓</td>
<td>✗</td>
<td>✗</td>
</tr>
<tr>
<td>PRAPARE</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
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<tr>
<td>Health Leads</td>
<td>✗</td>
<td>✗</td>
<td>✗</td>
</tr>
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</table>
Challenges: Overlapping codes

SNOMED housing instability codes

- 5549007  Living in temporary quarters
- 406132007 Living temporarily with relatives
- 365510008 Finding of temporary shelter arrangements

SNOMED food insecurity codes

- 733423003  Food insecurity
- 706875005 Insufficient food supply
Gravity Project Goals

- What concepts need to be documented?
- What codes reflecting these concepts are currently available? What codes are missing?
- Standardizing coding to facilitate data use and interoperability
Project Scope (WHAT)
TARGET data-level interoperability by enabling electronic documentation and exchange of SDH data among all relevant users of data.
Gravity Project Deliverables (Phase 1)

- Use Cases
- Common data elements and associated value sets
- Coded data element capture and grouping recommendations
Out of Scope

- Evaluation, testing, or harmonization of existing social risk screening tools and instruments
- Data elements representing activities outside of clinical: screening, assessment/diagnosis, planning, and treatment/intervention
- Data elements for domains other than food, housing, and transportation
- Piloting and validation of identified SDH data elements
- Incentives and workflow issues related to implementation of identified SDH data elements
Interoperability Glide Path: Beyond Phase 1

Accelerate standards development and uptake

- Develop and test HL7® FHIR® coded value sets
- Refine, test, and ballot HL7® FHIR® SDH Implementation Guide

Phase 1 (2019)

Phase 2 (2020 +)

SDH Data Sets
- Food Insecurity
- Housing Instability & Quality
- Transportation Access

Regulators
- EHR Vendors
- Payers
- Patients
- Clinicians
- Registries/Researchers

USCDI (draft)
- The Office of the National Coordinator for Health Information Technology

EMI Advisors

siren UCSF
Lessons learned from other Coding Projects

**Smoking Status:**
- Current everyday smoker
- Current someday smoker
- Former smoker
- Never smoker

**Tobacco Use Status:**
- Unknown if ever smoked
- Heavy tobacco smoker
- Light tobacco smoker
- Never

**History of tobacco use:**
62 possible answers, no guidance on when or how to record usage rates.

**Tobacco Type:**
- Cigarette
- Cigar
- Pipe
- Smokeless
- E-Cigarette
- Chewing tobacco
- Snuff

7 possible answers, with guidance on when or how to record usage rates.

LOINC currently has 4 possible types.
Project Approach (HOW)
We are using an open and transparent process that promotes broad stakeholder engagement from diverse stakeholder groups.

ALL ARE WELCOME!

Gravity Project deliverables will be developed using nationally recognized standard development principles of openness and due process.
Governance Structure: Advisory Steering Committee

https://confluence.hl7.org/pages/viewpage.action?pageId=46891907#TheGravityProjectHome-SteeringCommitteeMembers
Project Approach

1. **Develop Use Case Document**
   - Personas
   - Patient Story
   - Use Case(s)

2. **Develop Data Sets & Value Sets**
   - Data Sets are groupings of data elements.
   - A value set is the possible values or responses for a data element.

3. **Identify Coding Gaps & Develop Recommendations**

Please see Gravity Glossary for definitions of these terms:
https://confluence.hl7.org/display/PC/Gravity+Project+Glossary
## Gravity Project Roadmap (Phase 1)

### 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 SDH Implementation Guide Development

*Kick-Off May 2, 2019*
Questions?

Please submit your questions and comments using the Zoom chat feature.
Project Approach

- Weekly 1 hour public meetings facilitated using Zoom platform
- Anyone can participate; do not have to become an HL7 member (but encouraged to do so!)
- Hosted every Thursday from 4:00 to 5:00 pm ET, 1:00-2:00 pm PST
- All meeting materials and project deliverables available on HL7 Confluence Site: https://confluence.hl7.org/display/PC/The+Gravity+Project+Home
- Following each weekly meeting, participants will be assigned homework to be completed by COB the Tuesday BEFORE the next scheduled Thursday meeting
  - Contribution to project deliverables in between weekly public calls is critical for the success of this project!
Levels of Participation

- **Committed Member**: participants who can regularly participate in weekly project meetings and actively contribute to the development and review of project deliverables. These individuals will be expected to vote on all project deliverables.

- **Other Interested Party**: participants who intend to follow the progress of the project as observers and participate in project discussions. These individuals will be able to submit comments on a project deliverable but not cast a vote during a deliverable consensus voting period.
Collaborative Consensus Process

- Consensus is a core value of HL7 and other ANSI accredited organizations governance process;
- Collaborative members will be given at least one week to vote on a Gravity Project deliverable and submit their relevant comments using the HL7 Confluence;
- All “No” votes (Formal Objections) and “Yes with Comments” votes are resolved in a timely manner;
- Only Committed Members can vote on deliverables.

To learn more about the Collaborative Consensus Process visit:
https://confluence.hl7.org/display/PC/Consensus+Process
Collaborative Norms

- Pausing
- Paraphrasing
- Posing Questions
- Putting Ideas on the Table
- Providing Data
- Paying Attention to Self and Others
- Presuming Positive Intentions

Source: https://iod.unh.edu/sites/default/files/3_norms_annotated.pdf
## Upcoming Schedule and Activities

<table>
<thead>
<tr>
<th>Week</th>
<th>Call Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework due following Tuesday COB</th>
</tr>
</thead>
</table>
| 1    | 5/2       | **Project Kick-Off & Overview**  
*Introduce:* Project Background, Scope and Approach | Join the Collaborative  
*Review:* Collaborative Norms  
*Review:* Project Deliverables |
| 2    | 5/9       | **Introduce:** Concepts & Coding Systems | *Review:* Data Element Submission Template |
| 3    | 5/16      | **Use Case Kick-Off & UC Process Overview**  
*Introduce:* User Personas, User Stories, Assumptions, Use Case Template | *Review:* User Personas; User Stories; Assumptions |
| 4    | 5/23      | **Pre/Post Conditions, Actors & Roles**  
*Review:* User Personas, User Stories, Assumptions | *Review:* Pre/Post Conditions; Actors & Roles |
| 5    | 5/30      | **Base Flow, Activity Diagrams, Functional Requirements**  
*Review:* Pre/Post Conditions, Actors & Roles | *Review:* Base Flow; Activity Diagrams; Functional Requirements |
Confluence Overview

https://confluence.hl7.org/display/PC/The+Gravity+Project+Home

The Gravity Project Home
Created by Laura Heermann-Langford, last modified by Lynette Elliott about 2 hours ago

Announcements

The Gravity Project has launched! To join the project, sign up here.

The success of the Gravity Project depends on the contribution of volunteers with health data. We need experts to contribute to and validate definitions for SDH.

Participants are asked to join the project either as a Committed Member or Other.

Join the Gravity Project
Created by Joshua Procius, last modified on Apr 25, 2019

Name:
Organization:
State:
Title/Role:
Email:
Industry:
Membership Status:

Committed Members are those that can regularly participate in weekly project meetings and active deliveries.
Confluence Overview, continued…

https://confluence.hl7.org/display/PC/The+Gravity+Project+Workgroup

Upcoming Workgroup Meeting

<table>
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<th>Date</th>
<th>Time</th>
<th>Topic</th>
<th>Webinar Information</th>
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<tr>
<td>Thursday, May 2, 2019</td>
<td>4:00-5:30pm ET / 1:00-2:30pm PT</td>
<td>Gravity Project Workgroup Kickoff Meeting</td>
<td>This meeting requires registration. Register in advance for this meeting at <a href="https://zoom.us/meeting/registration">https://zoom.us/meeting/registration</a>. After registering, you will receive information about joining the meeting.</td>
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</tbody>
</table>

Click here to access the Gravity Project Workgroup page for a full meeting schedule

Materials for Review Prior to Workgroup Meeting

Any working documents or materials that should be reviewed prior to the next workgroup meeting will be posted here. Click on any of the links below to download the documents:

- Draft Gravity Project Charter
- Gravity Project Charter Glossary
- Relevant Standards and Initiatives in Social Determinants of Health

Please click here to submit comments on materials
Questions?

Please submit your questions and comments using the Zoom chat feature.
Next Steps

- Join the Gravity Project either as a Committed Member or Other Interested Party
  https://confluence.hl7.org/display/PC/Join+the+Gravity+Project

- Review Collaborative Norms:
  https://iod.unh.edu/sites/default/files/3._norms_annotated.pdf

- Review and comment on existing project deliverables
  - Project Charter
  - Glossary
  - Related Initiatives

- General comments can be submitted directly on the Confluence page comment form

- Extensive comments or related initiative submissions can be emailed to gravityproject@emiadvisors.net

https://confluence.hl7.org/display/PC/The+Gravity+Project+Home
Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net