The Gravity Project

Housing Data Concept Review
June 25, 2020
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.

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 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.
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:

- For **all other Gravity Project information**, please visit:
  https://confluence.hl7.org/display/GRAV/The+Gravity+Project
Project Founders and In-Kind Support To-Date

Robert Wood Johnson Foundation  
The University of Vermont  
LARNER COLLEGE OF MEDICINE  
Yale School of Nursing  
siren  
UCSF  
BlueCross BlueShield Association  
AMA  
AmeriHealth Caritas  
UnitedHealthcare  
HIGHMARK  
The Office of the National Coordinator for Health Information Technology  
Humana  
Children's HealthWatch  
Blue Sky  
eat right.  
Academy of Nutrition and Dietetics  
AAFP  

https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors
Gravity Project Sponsorship

- The Gravity Project is currently seeking additional sponsors for our 2020 operations
  - This is an opportunity to be a recognized contributor to our critical national work
- If you are interested in learning more about sponsoring opportunities, please send an email to GravityProject@emiadvisors.net or visit https://confluence.hl7.org/display/GRAV(Gravity+Project+Sponsors)
We’re Hiring!
Comprehensive Project Manager

- If you are here, you already care about addressing social risk and good data
- We are looking for a new PM to help organize and integrate both of our project streams: terminology and FHIR IG
- Application is on the confluence!
- Or, email - gravityproject@emiadvisors.net
**Agenda**

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<th>Presenter</th>
</tr>
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<td>Lynette</td>
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<td>Project Roadmap and Upcoming Schedule</td>
<td>Lynette</td>
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<td>Update: Food Insecurity Terminology Submission Status</td>
<td>Linda</td>
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<tr>
<td>Update: Housing Instability and Homelessness Data Concepts Submission Status</td>
<td>Linda</td>
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<td>End to End Review: Housing Diagnoses and Goals</td>
<td>Sarah</td>
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<tr>
<td>Update: Inadequate Housing Data Concepts Submission Status</td>
<td>Linda</td>
</tr>
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<td>Discussion: Inadequate Housing</td>
<td>Sarah</td>
</tr>
<tr>
<td>Community Homework and Next Steps</td>
<td>Sarah</td>
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<td>Overview: Gravity Terminology Development Process</td>
<td>For Review</td>
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*Please submit questions and comments using the Webex chat feature.*
Gravity Project Schedule and Activities (June through July)

<table>
<thead>
<tr>
<th>Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework</th>
</tr>
</thead>
</table>
| 06/11 | *Phase I Review:* End-to-End Review of Housing Instability and Homelessness Data Elements | Review and submit comments: Housing Instability and Homelessness Master List  
Submit: Inadequate Housing Concepts |
|       | *Phase II: Inadequate Housing Kickoff*                                                    |                                               |
| 06/25 | *Phase I Review:* End-to-End Review of Housing Instability and Homelessness Data Elements | Review and submit comments: Housing Instability and Homelessness Master List  
Submit: Inadequate Housing Concepts |
|       | *Phase II: Inadequate Housing Data Element Concepts*                                      |                                               |
| 07/09 | *Phase I Review:* End-to-End Review of Housing Instability and Homelessness Data Elements | Review and submit comments: Housing Instability and Homelessness Master List  
Submit: Inadequate Housing Concepts |
|       | *Phase II: Inadequate Housing Data Element Concepts*                                      |                                               |
| 07/23 | *Phase I Review:* End-to-End Review of Housing Instability and Homelessness Data Elements | Review and submit comments: Housing Instability and Homelessness Master List  
Submit: Inadequate Housing Concepts |
|       | *Phase II: Inadequate Housing Data Element Concepts*                                      |                                               |
| 08/06 | *Phase I Review:* End-to-End Review of Housing Instability and Homelessness Data Elements | Review and submit comments: Housing Instability and Homelessness Master List  
Submit: Inadequate Housing Concepts |
|       | *Phase II: Inadequate Housing Data Element Concepts*                                      |                                               |
Gravity Timeline (tier 1 with code submissions)

1. Public Collaborative (Ongoing)
   - Launch: MAY 2, 2019

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

   Food Insecurity
   - a) Data Set Identification
   - b) Coding Recommendations
   - Data Element Identification, Adjudication, and End-to-End Review
   - Coding Gap Analysis & Recommendations for Coding Systems
   - c) New Code Submissions & Publication in VSAC & ISA

   Housing Instability
   - a) Data Set Identification
   - b) Coding Recommendations
   - Data Element Identification, Adjudication, and End-to-End Review
   - Coding Gap Analysis & Recommendations for Coding Systems
   - c) New Code Submissions & Publication in VSAC & ISA

   Transportation Access
   - a) Data Set Identification
   - b) Coding Recommendations
   - Data Element Identification, Adjudication, and End-to-End Review
   - Coding Gap Analysis & Recommendations for Coding Systems
   - c) New Code Submissions

SDOH Domain Projects (3)

FHIR IG Development & Testing (5)

- 5.2a FHIR Implementation Guide Development V.1.0
- 5.2b FHIR IG Ballot Reconciliation & Publication
- 5.3 Connectathon Testing

Feb 20, May 20, Sept 20, Jan 21
Gravity Overview: Two Streams

SDOH Domains (Terminology)

1. Data Set Identification
2. Coding Gap Analysis & Recommendation
3. New Code Submissions
4. Code Value Sets

技术 (FHIR)

1. FHIR IG Testing
2. FHIR IG Development
3. Community & FHIR Coordination
4. FHIR IG Ballot & Publication

Publication in NLM VSAC & ONC ISA
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.
Update: Food Insecurity Terminology Submission Status
Update: Food Insecurity Terminology Submission Status

- 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.
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.
Update: Housing Instability and Homelessness Data Concepts Submission Status
Housing Instability Data Element Submitters
# 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>CPT/HCPCS – Add – 3</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>Duplicates – 0</td>
</tr>
<tr>
<td>Park – 13 Tools/52 Questions</td>
<td>Park – 2</td>
<td>Park – 3</td>
<td>Synonymous – 0</td>
</tr>
<tr>
<td>Hold – 3 Tools/4 Questions</td>
<td>Hold – 0</td>
<td>Hold – 4</td>
<td>Park – 5</td>
</tr>
</tbody>
</table>

## Total Submissions Returned* = 10

* Adjudication completed and file returned to submitter with dispositions
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.
End-to-End Review: Diagnoses and Goal
ICD-10 Diagnoses
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 (mental behavioral health, disease management, etc)
How to Submit End-to-End Review Comments

- Download latest Housing Instability Master List: https://confluence.hl7.org/display/GRAV/Housing+Instability+and+Homelessness+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 Housing Instability and Homelessness

- 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 screening elements, attach a copy or link to the tool
  • **Comments regarding Diagnoses and Goals submissions due: 7/23/2020**
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.
Update: Inadequate Housing Data Concepts Submission Status
### Inadequate Housing Data Element Submissions Summary

#### Total Submissions Received = 3

<table>
<thead>
<tr>
<th>Screening Tool/ Questions</th>
<th>Diagnosis</th>
<th>Goal</th>
<th>Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 Tools / 44 Questions</td>
<td>3</td>
<td>0</td>
<td>33</td>
</tr>
</tbody>
</table>

#### Submissions Reviewed = 3

<table>
<thead>
<tr>
<th>Disposition</th>
<th>Disposition</th>
<th>Disposition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add – 8 Tools/10 Questions</td>
<td>Add – 1</td>
<td>SNOMED Add – 23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>CPT/HCPCS – Add –</td>
</tr>
<tr>
<td>Duplicates –</td>
<td>Duplicates –</td>
<td>Duplicate –0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Duplicates – Synonymous –</td>
</tr>
<tr>
<td>Do Not Add –</td>
<td>Do Not Add –</td>
<td>Do Not Add – 6</td>
</tr>
<tr>
<td>Park – 3 Tools/16 Questions</td>
<td>Park –</td>
<td>Park –</td>
</tr>
<tr>
<td>Hold – 4 Tools/18 Questions</td>
<td>Hold – 2</td>
<td>Hold</td>
</tr>
</tbody>
</table>

#### Total Submissions Returned* =

* Adjudication completed and file returned to submitter with dispositions
## Adjudication Dispositions

<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 to 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>
<tr>
<td>Withdrawn</td>
<td>After discussion between submitter and SMEs, concept was withdrawn by submitter</td>
<td>Will be noted on adjudication file with reason</td>
</tr>
</tbody>
</table>
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.
Discussion: Inadequate Housing
### Inadequate Housing

<table>
<thead>
<tr>
<th>SCREENING</th>
<th>DIAGNOSES- ICD</th>
<th>Diagnoses- SNOMED</th>
<th>GOALS</th>
<th>INTERVENTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narruzzuman (And adapted)</td>
<td>Z59.1 Inadequate Housing</td>
<td>Inadequate Housing (Subdomains)</td>
<td></td>
<td>NOW- General SDOH concepts carried over from previous domains</td>
</tr>
<tr>
<td>American Housing Survey</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Inadequate housing –

- **House-** An occupied housing unit that has moderate or severe physical problems (e.g., deficiencies in plumbing, heating, electricity, hallways, and upkeep) (HUD, 2010)

- **Person-** *(In process)*- Living within housing that has physical problems (deficiencies in plumbing, heating, electricity, hallways, and upkeep) *(affecting health)*
Inadequate Housing- Screening, Narruzzuman

Narruzzuman et al, 2015 – Joint project of Norwalk Community Health Center and Medical Legal Partnership

- Is your health or your family’s health affected by conditions at home?
  - Yes/No

- Check all the conditions that exist in the patient’s home
  - Bug infestation
  - Mold
  - Lead Paint/Pipes
  - Inadequate Heat
  - Non-Functioning Oven/Stove
  - No or Non-Working Smoke Detectors
  - Water Leaks
**Inadequate Housing- Screening, AHS**

Narruzzuman et al, 2015 – Joint project of Norwalk Community Health Center and Medical Legal Partnership

- Is your health or your family’s health affected by conditions at home?  
  - Yes/No
- Check all the conditions that exist in the patient’s home  
  - Bug infestation  
  - Mold  
  - Lead Paint/Pipes  
  - Inadequate Heat  
  - Non-Functioning Oven/Stove  
  - No or Non-Working Smoke Detectors  
  - Water Leaks
Data Submission Framework

• Screening tools
• Assessments/Diagnoses
• **Goals of care**
• **Interventions**
  ▪ Program Names and Definitions
  ▪ Provider/Practitioner Roles (e.g. community health navigator)
  ▪ Applicable Intervention Activities/Services
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.
Community Homework and Next Steps
Homework

- **General**
  - Catch up as needed on materials and recordings on Gravity Project Materials Confluence page

- **Housing Instability and Homelessness**
  - Review the Master and Screening Summary
    - [https://confluence.hl7.org/pages/viewpage.action?pageId=76157877#HousingInstabilityandHomelessnessDomain-CommunityHomework](https://confluence.hl7.org/pages/viewpage.action?pageId=76157877#HousingInstabilityandHomelessnessDomain-CommunityHomework)
    - Send comments

- **Inadequate Housing**
  - Submit new concepts
    - Online tool
    - Excel
    - Email
    - [https://confluence.hl7.org/pages/viewpage.action?pageId=76157877#HousingInstabilityandHomelessnessDomain-CommunityHomework](https://confluence.hl7.org/pages/viewpage.action?pageId=76157877#HousingInstabilityandHomelessnessDomain-CommunityHomework)
Next Steps

- Sign up to join the **2020 September Connectathon**: https://confluence.hl7.org/display/GRAV/Connectathon+Participation+Sign-Up
  - Looking for implementers across the health ecosystem—EHRs, HIEs, PHRs, digital health platforms, community-based services and referral platforms, system integrators
  - **Ideal to have both clinical and non-clinical participants**
- Join the Gravity Project as a Committed Member or Other Interested Party:
  - [https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project](https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project)
Overview: Gravity Terminology Development Process
Gravity Terminology Development Process

A. Community Terminology Development
B. Publication of ONC Gap Analysis and Recommendations Manuscript
C. New Code Submissions (LOINC, SNOMED, ICD-10-CM)
D. Development of Coded Value Sets
E. Value Set Publication
Gravity Terminology Development Process

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Community Terminology Development

A. Community Terminology Development

1. The anchor of every domain is the SIREN compendium of existing SDOH terminology – a study of what exists

2. Domain relevant terms are gleaned from the compendium and adjudicated against the literature

3. A collective brainstorming enriches the Master List
   1. Always published on Confluence

4. Concepts are added, refined, and defined, until we’ve a representative set aligned with literature and practice

5. Consensus Review and Voting
Gravity Overview: Two Streams

SDOH Domains
(Terminology)

Data Set Identification

Coding Gap Analysis & Recommendation

New Code Submissions

FHIR IG Testing

Publication in NLM
VSAC & ONC ISA

FHIR IG Development

Community & FHIR Coordination

FHIR IG Ballot & Publication

CODIFIED VALUE SETS
Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net