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:

- 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
Yale School of Nursing
siren UCSF
BlueCross BlueShield Association
AAFP
AmeriHealth Caritas
The Office of the National Coordinator for Health Information Technology
Humana
Lyft

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
# Agenda

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<th>Topic</th>
<th>Presenter</th>
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<tr>
<td>Welcome</td>
<td>Lynette</td>
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<td>Project Roadmap and Upcoming Schedule</td>
<td>Lynette</td>
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<td>Housing Domain Data Concepts: Draft Master List Overview</td>
<td>Sarah, Linda Housing Leads</td>
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<td>SDOH FHIR IG Updates</td>
<td>Lisa</td>
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<tr>
<td>Community Homework and Next Steps</td>
<td>Sarah</td>
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Please submit questions and comments using the Webex chat feature.
## Gravity Project Schedule and Activities (Feb to May)

<table>
<thead>
<tr>
<th>Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework</th>
</tr>
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</table>
| 02/13  | *Review:* Consensus Voting and Dispositions Results  
          *Review:* Data Element Concept Submissions To-Date  
          *Overview:* Coding Work                      | *Submit:* Housing Instability Data Elements  
          *Review:* Coding Systems                      |
| 03/19  | Housing Instability Domain Kickoff  
          SDOH FHIR IG and Connectathon Updates        | *Submit:* Housing Instability Data Elements   |
| 04/02  | *Review:* Housing Instability Data Element Concepts  
          SDOH FHIR IG and Connectathon Updates        | *Submit:* Housing Instability Data Elements   |
| 04/16  | *Review:* Housing Instability Data Element Concepts  
          SDOH FHIR IG and Connectathon Updates        | *Submit:* Housing Instability Data Elements   |
| 04/30  | *Review:* Housing Instability Data Element Concepts  
          SDOH FHIR IG and Connectathon Updates        | Housing Instability Data Element Submission  
          *Deadline May 1*                              |
| 05/14  | *Review:* Housing Instability Data Element Concepts  
          SDOH FHIR IG and Connectathon Updates        |                                               |
| 05/28  | *Review:* Housing Instability Data Element Concepts  
          *Overview:* End-to-End Review Process  
          SDOH FHIR IG and Connectathon Updates        |                                               |
Gravity Timeline (High Level)

1. Collaborative Launch
   - Project Charter, Coding Systems Education

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

3a. Data Set Identification
   - Data Element Identification, Adjudication, and End-to-End Review

4a. Coding Recommendations
   - Coding Gap Analysis & Recommendations for Coding Systems

3b. Data Set Identification (Mar to June 20)

4b. Coding Recommendations (June to Jul 20)

3c. Data Set Identification (Aug to Oct 2020)

4c. Coding Recommendations (Nov to Dec 20)

5a. FHIR Implementation Guide Development V.1.0 (Dec 19 to Aug 20)

5b. FHIR IG Ballot Reconciliation & Publication

SDOH Domain Projects

a) Food Insecurity

b) Housing Instability

c) Transportation Access

HL7 Connectathon Testing (Feb 20)
HL7 Connectathon Testing (May 20)
HL7 Connectathon Testing (Sept 20)

Public Collaborative Kick-Off 02MAY2019

WE ARE HERE
Brainstorm: SDOH Data and Pandemics

- **In the News and Resources**
  - Underlying Health Disparities Could Mean Coronavirus Hits Some Communities Harder - NPR
  - How the Coronavirus Affects Social Determinants of Health – Patient Engagement HIT
  - For Millions of Low-Income Seniors, Coronavirus is a Food Insecurity Issue - Brookings
  - Webinars: Coronavirus and Homelessness/Housing- Disaster recovery Housing Coalition/NLIHC
  - COVID 19- Local Housing Solutions
  - COVID 19 HMIS Resources – HUD
    - COVID 19 HMIS Data Sharing Practices
Housing Domain Data Concepts: Draft Master List Overview
# Data Element Submissions Summary

**Total Submissions Received = 4**

<table>
<thead>
<tr>
<th>Screening Tool/ Questions</th>
<th>Diagnosis</th>
<th>Goal</th>
<th>Intervention</th>
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<tbody>
<tr>
<td>14 Tools / 207 Questions</td>
<td>5</td>
<td>1</td>
<td>38</td>
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**Submissions Reviewed = 1**

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<td>Duplicates – 0 Synonymous – 0</td>
</tr>
<tr>
<td>Park – 1 Question</td>
<td>Park – 0</td>
<td>Park – 0</td>
<td>Park – 5</td>
</tr>
<tr>
<td>Hold – 0</td>
<td>Hold – 0</td>
<td>Hold – 0</td>
<td>Hold – 1</td>
</tr>
</tbody>
</table>

**Total Submissions Returned* = 1**

* Adjudication completed and file returned to submitter with dispositions
Data Submission Framework

- **Phase 1: Housing Instability and Homelessness**
  - Screening tools
  - Assessments/Diagnoses
  - **Goals of care**
  - **Interventions**
    - Program Names and Definitions
    - Provider/Practitioner Roles (e.g. community health navigator)
    - Applicable Intervention Activities/Services

- **Phase 2: Inadequate Housing**
Screeners

- PRAPARE
- VA Homelessness Screening Clinical Reminder (HSCR)
- NC Healthy Opportunities Screening
- Accountable Health Communities (AHC) Health related social needs screening tool
- CHW Housing Instability Vital Sign
- We Care
- Health Leads
- KP Your Current Life Situation
- Well Rx
- AAFP Social Needs Screening Tool
Diagnosis Definition Refinement

- Housing Instability
- Homelessness
How to Review Housing Instability Adjudicated Data Submissions (Master List)

https://confluence.hl7.org/display/GRAV/Housing+Instability+and+Homelessness+Domain

- The Housing Master List with adjudicated data elements will be published on Confluence page following each community meeting
How to Submit Housing Data Concepts

- Go to the Data Element Submission Confluence page and follow instructions
  - [https://confluence.hl7.org/display/GRAV/Data+Element+Submission](https://confluence.hl7.org/display/GRAV/Data+Element+Submission)
  - You can submit via spreadsheet or web tool

- Submissions are due by Friday, May 1
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.
SDOH FHIR IG Updates
5.a.1 Community Engagement & FHIR IG Review

5.b.1 FHIR IG Development V0.0.1

5.b.2 FHIR IG Development V0.0.2

5.b.3 FHIR IG Development V0.0.3

5.b.4 FHIR IG Development V0.0.4

5.b.5. FHIR IG Development v0.1.0

5.a.2 FHIR IG Testing

HL7 Sydney Connectathon Testing (Feb 20): Use Case 1

HL7 San Antonio Connectathon Testing (May 16): Use Case 1, 2

HL7 Baltimore Connectathon Testing (Sept 19): Use Case 1, 2

HL7 Nevada Connectathon Testing (Jan 21): Use Case 1, 2, 3

HL7 New Orleans Connectathon Testing (May 21): Use Case 1, 2, 3

5. FHIR IG STU Ballot & Reconciliation (Aug to Feb)

FHIR IG STU Published V1.0.0

Value (Payment & Interoperability)

FHIR IG Timeline (Detail)
New Info about May Connectathon

https://confluence.hl7.org/display/FHIR/2020-05+Connectathon+24

🔗 HL7 FHIR CONNECTATHON 24

WILL BE VIRTUAL!

Wednesday May 13, Thursday May 14, and Friday May 15
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
FHIR IG Updates

- V0.0.3 is now available – Quick Links Access
  - [https://confluence.hl7.org/display/GRAV/Gravity+FHIR+IG](https://confluence.hl7.org/display/GRAV/Gravity+FHIR+IG)

- Highlights:
  - Focus is on Use Case #1
  - Home Page – Notes to Reviewers
  - TOC
  - Personas, Patient Story, Use Cases
  - Master List with Temporary Codes
  - SDOH Coded Content
  - Examples
Focus on Use Case 2

Need Community Input on:
- Supporting information when a referral for services is sent out
- Feedback information needed when a referral for services completed

Plan to provide input via survey during April
2020 Connectathons

- Sydney Connectathon – February 2020
  - Use Case #1 (view results recording)
- San Antonio, TX HL7 Connectathon - May 13-15
  - Virtual Event
- Detroit MiHIN Interopathon – May 28-29
  - Virtual Event
- Baltimore, MD HL7 Connectathon – Sept 19-20
  - Stay tuned
- [https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+Connectathons](https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+Connectathons)
Next Steps

- SDOH-CC V0.0.4 - April 20th
  - Use Case #2 – Closed-Loop Referrals (BSeR)
    - Overview education, confirm data elements that need to be shared when doing a referral or getting feedback

- Connectathon Planning
  - Need committed participants – with declared roles
  - Pt. role for “observers” to be active participants

Sign Up:
https://confluence.hl7.org/display/GRAV/Connectathon+Participation+Sign-Up

Attend Prep Sessions:
https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+Connectathon+Participant+Meetings

Wednesdays 3:00pm-4:00pm ET April 15 and April 29
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
Submit Housing Instability Data Element Concepts

- Please submit concepts via downloadable spreadsheet template or web tool
- For instructions, links and downloads go to Confluence: https://confluence.hl7.org/display/GRAV/Data+Element+Submission
- For questions, please send an email to GravityProject@emiadvisors.net
Review Introductory Materials

• Introduction to Concepts and Coding Systems
  ▪ Download materials or watch recording

• Introduction to Data Elements
  ▪ Download materials or watch recording

• Coding System Overview Videos
  https://confluence.hl7.org/display/GRAV/Educational+and+Instructional+Materials
HMIS and Data Principles

- HMIS
  - Please email Sarah.DeSilvey@med.uvm.edu if you are interested in participating

- Data Justice/Data Principles
  - Please review example principles on Confluence
  - Write Mark and Sarah with thoughts
    - Mark Savage, SDOH Data Policy Lead
      - Mark.Savage@ucsf.edu
    - Sarah DeSilvey, SDOH Clinical Informatics Lead
      - Sarah.DeSilvey@med.uvm.edu
Next Steps

- Sign up to join our **2020 Connectathon Events**:
  https://confluence.hl7.org/display/GRAV/Connectathon+Testing
  - 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
Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net
Background Slides
Housing Domain Approach and Concepts
Housing Domain Context

- There is no agreed upon singular definition of circumstances that define housing instability/insecurity, homelessness, and other housing-related social risks.

- There is no gold standard housing stability measure against which housing instability screening tools (e.g., the Housing Stability Vital Sign) can be compared.

- Investments in future research to create robust standard testing of a diagnostic tool, is warranted.
Stability: The Housing Iceberg

- Homelessness
  - Behind on rent
  - Multiple moves

- Housing instability

- Inequitable policies
Homelessness Defined

- **U.S. Department of Housing and Urban Development**
  - Individual or family who lacks a fixed, regular, and adequate nighttime residence, including:
    - Living in a public or private place not meant for human habitation
    - Living in a shelter (including congregate shelter, transitional housing, hotel and motels)
    - Exiting an institution where they lived for 90 days or less and who resided in one of the aforementioned settings prior to entering that institution.

- **U.S. Department of Education (McKinney-Vento Act)**
  - Applies to homeless children and youth
  - Includes settings above AND applies to children and youths sharing housing of other persons due to loss of housing, economic hardship, or similar reasons.
Homelessness and Health

- Robust research across the life course linking homelessness and health including increased risk of:
  - adverse physical and mental health outcomes for children and adults
  - health care utilization and costs
  - infectious disease transmission
Among 22,234 families with children < 4yrs in 5 urban safety net hospitals, 34% had at least one adverse housing circumstance:

- 27% behind on rent
- 8% multiple moves
- 12% history of homelessness
- Each circumstance individually associated with adverse health and material hardship compared to stable housing
Little overlap among three adverse housing conditions
Outcomes of Unstable Housing with Health and Material Hardship Outcomes

Adjusted Odds Ratios

- Child fair/poor health
- Maternal fair/poor health
- Maternal depression
- Food insecurity
- Energy insecurity
- Health care trade-offs

Stable Housing
Behind on Rent
Multiple Moves
Homelessness
Limitations

- This research was conducted among low-income families with young children in five US cities – needs to be replicated among additional populations and/or the general population
- No gold standard is problematic
- While we examined the relationship between these circumstances and health/hardship outcomes, more work can/should be done
Other Housing Domains

- Unsafe or substandard housing
- Housing conditions including the presence of mold, lead, and pests are known health hazards.
- Neighborhood-level housing indicators
- Emerging research on concentrations of poverty, air quality, and other neighborhood-level factors on health points to the need to understand neighborhood indicators
- While these are important indicators, they are currently out of scope for this project. Future work may seek to address these domains.