The Gravity Project

Multi-Domain Concept Review

January 28, 2021
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, Grants, and In-Kind Support To-Date

Robert Wood Johnson Foundation
The University of Vermont
LARNER COLLEGE OF MEDICINE
Yale School of Nursing
sirenUCSF
BlueCross BlueShield Association
eat right. Academy of Nutrition and Dietetics
AHRQ
AAFP
AMA
AmeriHealth Caritas
UnitedHealthcare
Arkansas
CHARITY
juxly
ONX
blue california
CyncHealth
Humana
Children’s HealthWatch
Lyft
California Health Care Foundation

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

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<td>Announcements</td>
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<td>Process Grounding</td>
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<td>Project Schedule</td>
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<td>End-to-End Review: Financial Strain, Transportation Insecurity, Education, Unemployment, Veteran Status</td>
<td>Sarah</td>
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<tr>
<td>Community Homework and Next Steps</td>
<td>Sarah</td>
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</table>

Please submit questions and comments using the Webex chat feature.
Announcements
New Team Member!
Population Health Advisor and Community Liaison

- The Gravity Project is honored to welcome Asha Immanuelle, RN, PHM-C!
- Asha comes with vast social risk, population health, and population data expertise
- We look forward to her adding her wisdom across the initiative
  - Particularly in our population/aggregation use cases and community engagement
- Lucky us!
Gravity Project Sponsorship

- The Gravity Project is currently seeking additional sponsors for our 2021 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
HL7 SDOH CC FHIR IG Public Meetings

- HL7 SDOH CC FHIR IG Public Meetings are scheduled Wednesdays from 3:00 to 4:00 pm ET
- See the HL7 meeting calendar here: http://www.hl7.org/concalls/CallDetails.aspx?concall=51839
ICD-10-CM Letters of Support

  - View Gravity’s ICD-10-CM submission incorporating Gravity Project’s consensus recommendations here: [https://confluence.hl7.org/display/GRAV/ICD-10+Coding+Submissions](https://confluence.hl7.org/display/GRAV/ICD-10+Coding+Submissions)
- The next step for the submission is review at the March 9-10 ICD-10-CM Coordination and Maintenance Committee Meeting.
- Should any member wish to send a letter of support, please send these directly to the committee at E-mail: nchsicd10cm@cdc.gov
  - Aim to send prior to 1/30/2021 to help make the case for review
Process Orientation

- We have a few new educational pieces available in the “Educational and Instructional Materials” section of the confluence!
  
  https://confluence.hl7.org/display/GRAV/Educational+and+Instructional+Materials
  
  • New Terminology orientation slides
  • Terminology activities overview
  • And a video describing the adjudication process-
    https://www.youtube.com/watch?v=f1kJaTKONV0&feature=youtu.be
Gravity Food Insecurity Press Release

The Gravity Food Insecurity Press Release is now LIVE. Please help us share this PR far and wide: https://www.hl7.org/documentcenter/public/pressreleases/HL7_PRESS_20201211.pdf
CMS NPRM Request for Information on Social Risk Data Standards

- On December 18, CMS published a notice of proposed rulemaking (NPRM) on prior authorization and patients’ electronic access to health information. The NPRM included a “Request for Information: Accelerating the Adoption of Standards Related to Social Risk Data.”
  - The request for information is very relevant to the Gravity Project’s work.

  - Read the letter here [https://confluence.hl7.org/display/GRAV/CMS+RFI+-+Accelerating+Adoption+of+Standards+Related+to+Social+Risk+Data](https://confluence.hl7.org/display/GRAV/CMS+RFI+-+Accelerating+Adoption+of+Standards+Related+to+Social+Risk+Data)

- Other organizations—31 letters at last count—also explicitly mentioned and supported the Gravity Project’s work!
On January 7th, CMS released new guidance for State Medicaid Agencies on how they can use design programs, benefits, and services to address SDOH. The letter confirms states can now use federal matching funds to design and develop data infrastructure to address SDOH and encourages states to use SDOH standards published in the ONC ISA and those being developed in the Gravity Project. This is a significant lever to advance the adoption of Gravity standards.

SIREN Coffee & Science

- Join SIREN Coffee & Science, a new virtual conversation series that SIREN is launching to provide a forum for experts to discuss hot topics in health and social care integration. The series of 30-minute live events started on January 22nd and will run through June. The events will also be disseminated on SIREN’s new podcast channel, where an introductory episode is already available!
  - Join here: https://sirenetwork.ucsf.edu/news-events/siren-coffee-science
  - View podcast channel here: https://share.transistor.fm/s/d0fdaf98
Process Grounding
Gravity Overview: Integration of Two Streams

Terminology:
- SDOH Domains
  - Coding Gap Analysis & Recommendations
  - Data Set Identification

Technical (FHIR):
- New Code Submissions
  - FHIR IG Testing
  - FHIR IG Development
  - Community & FHIR Coordination

- Publication in NLM VSAC & ONC ISA
- FHIR IG Ballot & Publication

CODED VALUE SETS
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.
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
Project Schedule
# Gravity Roadmap

<table>
<thead>
<tr>
<th>2020</th>
<th>2021</th>
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<tbody>
<tr>
<td>JAN</td>
<td>FEB</td>
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<tr>
<td>Food insecurity</td>
<td>New Use Case Development</td>
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<tr>
<td>Housing instability &amp; homelessness</td>
<td>TRANSPORTATION INSECURITY</td>
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<tr>
<td>Inadequate housing</td>
<td>INADEQUATE HOUSING</td>
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<tr>
<td>Transportation insecurity</td>
<td>FINANCIAL INSECURITY</td>
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<td>Financial insecurity</td>
<td>DEMOGRAPHICS</td>
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<td>Demographics</td>
<td>INADEQUATE HOUSING</td>
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<td>Financial insecurity</td>
<td>HOUSING INSTABILITY &amp; HOMELESSNESS</td>
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## Key

- LOINC Code Submissions (APR/OCT)
- SNOMED Code Submissions (MAY/DEC)
- ICD-10 Code Submissions (JUN/DEC)

## Technical

- Gravity FHIR IG Development
- IG Ballot
- IG Ballot Reconciliation
- Final updates/IG Publication
- Reference Implementation Development
- Reference Implementation Update
- HL7 FHIR Connectathons

## PILOTS

- SDOH FHIR IG PILOTS

## Terminology

- Food insecurity
- Housing instability & homelessness
- Transportation insecurity
- Financial insecurity
- Demographics
- Social isolation
- Intimate partner violence
- Stress
- Material hardship
- Neighborhood safety

## Reference Implementation Development

- Reference Implementation Update

## HL7 FHIR Connectathons

- HL7 FHIR Connectathons

## WE ARE HERE

- WE ARE HERE
<table>
<thead>
<tr>
<th>Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework</th>
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</thead>
<tbody>
<tr>
<td>1/21</td>
<td><strong>Financial Strain and Transportation Insecurity</strong>: All Activity End to End Review</td>
<td>Review: Transportation Insecurity, Financial Strain</td>
</tr>
<tr>
<td></td>
<td><strong>Education, Unemployment, Veteran Status</strong>: Screening and Diagnoses End to End Review</td>
<td>Submit: Education, Veteran Status, and Employment Screening and Diagnoses</td>
</tr>
<tr>
<td>1/28</td>
<td><strong>Financial Strain and Transportation Insecurity</strong>: All Activity End to End Review</td>
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<td>2/04</td>
<td><strong>Financial Strain and Transportation Insecurity</strong>: All Activity End to End Review</td>
<td>Review: Transportation Insecurity, Financial Strain</td>
</tr>
<tr>
<td></td>
<td><strong>Material Hardship</strong>: Screening and Diagnoses End to End Review</td>
<td>Submit: Material Hardship, Screening and Diagnoses</td>
</tr>
<tr>
<td>2/18</td>
<td><strong>Multi-Domain</strong>: Consensus Vote</td>
<td>Submit: Material Hardship, Screening and Diagnoses</td>
</tr>
<tr>
<td></td>
<td><strong>Material Hardship</strong>: Screening and Diagnoses End to End Review</td>
<td>Submit: Social Isolation, Stress, Intimate Partner Violence, Elder Abuse Screening and Diagnoses</td>
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</table>
Questions?

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Please send all chats to Everyone.
End to End Review

- End to end review is a time to step back and consider the whole set and ask questions
  - Are there missing concepts?
  - Are there incorrect concepts that need to be changed?
  - Are there concepts that are unnecessary and should be removed?
### End to End Review

- A note on interventions....
- All domain masters carry over a few core programs

<table>
<thead>
<tr>
<th>Program</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area Agency on Aging</td>
<td>A type of community-based organization that provides aging services that address SDOH according to service areas defined by a state. They are federally and state funded, authorized under the Older Americans Act, exist in every community across the US and are increasingly partnering with health care organizations to provide a variety of services to address SDOH</td>
</tr>
<tr>
<td>Benefit Enrollment Assistance Program</td>
<td>A program that coordinates cross sector benefit eligibility, assessment and application</td>
</tr>
<tr>
<td>Community Resource Assistance</td>
<td>Help connecting individuals with available community resources to address identified social needs</td>
</tr>
<tr>
<td>Community Development Corporations (CDC)</td>
<td>501(c)(3) non-profit organizations that are created to support and revitalize communities</td>
</tr>
<tr>
<td>Community Development Financial Institutions (CDFI)</td>
<td>Depository institutions with a stated mission to primarily benefit the underserved communities in which they are chartered to conduct business</td>
</tr>
</tbody>
</table>
End to End Review

- Another note on interventions....

- All programs and professions are wrapped with our defined activities

- **Referral.** A type of order wherein clinicians/providers request services and/or assessment from other professionals and/or programs.

- **Provision.** For the purposes of the project, provision covers any concrete support that is able to be given to the patient directly at the point of service.

- **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 aims to increase knowledge and skills, change behaviors, assist coping.

- **Assessment.** Assessment includes both the process of provider clinical observation and interpretation and the utilization of assessment tools. In both activities the aim is to arrive at outcomes that define the status of the patient in order to guide further care.

- **Evaluation of eligibility.** Chosen to mark the activities prior to determination of eligibility. (Crucial for federal food assistance programs).

- **Assistance.** Non-clinical aid with the tasks of care such as applications and setting up appointments.

- **Coordination.** Organizing activities and sharing information.
End-to-End Review: Inadequate Housing
Inadequate Housing Review

- Diagnoses
  - In review of the set we realized we had not carried a few of our collective refinements/revisions over.
  - Starred elements ★

<table>
<thead>
<tr>
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<td>Substandard housing</td>
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<td>Substandard housing due to inability to store or prepare food</td>
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<tr>
<td>Substandard housing due to lack of safety equipment</td>
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<tr>
<td>Substandard housing due to lack of adequate plumbing ★</td>
</tr>
<tr>
<td>Substandard housing due to overcrowding</td>
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<tr>
<td>Substandard housing due to internal environmental hazard ★</td>
</tr>
<tr>
<td>Substandard housing due to asbestos</td>
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<tr>
<td>Substandard housing due to structural insufficiency</td>
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<tr>
<td>Substandard housing, does not meet inhabitant's functional needs</td>
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<tr>
<td>Substandard housing, at risk of code violation</td>
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Questions?

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End-to-End Review: Transportation Insecurity

Review
Review: Transportation Insecurity Screening

- Health Leads
- PRAPARE
- NC Healthy Opportunities
- WA Association for Community Health
- Accountable Health Communities Tool
- PhenX
- CUBS
- PROMIS
- Well Rx
- AAFP
- Upstream Risk Tool
- NHIS
- Transportation Barriers Measure
## Review: Transportation Insecurity Diagnoses

<table>
<thead>
<tr>
<th>Child Term (a)</th>
<th>Child Term (b)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation insecurity, inability to access health and social needs</td>
<td>Transportation insecurity, inability to access health appointments</td>
</tr>
<tr>
<td></td>
<td>Transportation insecurity, inability to access pharmacy</td>
</tr>
<tr>
<td></td>
<td>Transportation insecurity, inability to access food</td>
</tr>
<tr>
<td>Transportation insecurity, available transportation does not meet an individual’s functional and cognitive (social/psychosocial) needs</td>
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<tr>
<td>Transportation insecurity, excessive time spent travelling</td>
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<tr>
<td>Transportation insecurity, unable to afford transportation</td>
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<tr>
<td>Transportation insecurity, distance to destination limits available transportation options</td>
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<tr>
<td>Transportation insecurity, dependent on transportation assistance programs</td>
<td></td>
</tr>
<tr>
<td>Transportation insecurity, captive rider, limited transportation options</td>
<td>In review with SMEs we are considering pausing on these concepts</td>
</tr>
</tbody>
</table>
Review: Transportation Insecurity Programs

- Grateful for the SMEs and their heavy lifting

- Things we realized from all of you....
  - We did not have a program type for “Charitable Organizations” (Goodwill, St. Vincent de Paul, Salvation Army, local orgs, etc.)
  - So we made one!

<table>
<thead>
<tr>
<th>Transportation Insecurity Programs</th>
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<tbody>
<tr>
<td>Gas Voucher</td>
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<tr>
<td>Elderly and Disabled Transportation Program</td>
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<tr>
<td>Para-transit</td>
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<tr>
<td>Medicaid Transportation</td>
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<tr>
<td>Public Transportation Voucher</td>
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<tr>
<td>Taxi/Ride Hailing Voucher</td>
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<tr>
<td>Car Pool Program</td>
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<tr>
<td>Micro-Transit</td>
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<tr>
<td>Bike-Share Program</td>
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<tr>
<td>Car-Share Program</td>
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<tr>
<td>Hospital/Clinic Financed Transport</td>
</tr>
<tr>
<td>Volunteer Driver Program</td>
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<tr>
<td>Mobility Manager</td>
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<tr>
<td>Free car (donated vehicle program)</td>
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<tr>
<td>Car Repair Program</td>
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</tbody>
</table>
Initial Transportation Program Brainstorm
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: Financial Insecurity
Financial Strain Evolution

“Financial Strain”

- Financial Insecurity
  - Financial Strain
  - Medical Cost Burden

- Debt

- Material Hardship
  - Inability to obtain internet
  - Inability to obtain utilities
  - Inability to obtain childcare
Financial Insecurity and Material Hardship - Definition

- Financial Insecurity- A state of being wherein a person has difficulty fully meeting current and/or ongoing financial obligations and/or does not feel secure in their financial future

- Material Hardship- the lack of specific socially perceived basic physical necessities
Financial Insecurity and Material Hardship
Review:
Financial Insecurity and Material Hardship Screening Tools

- Health Leads
- PRAPARE
- NC Healthy Opportunities
- American Housing Survey
- Accountable Health Communities
- AAFP
- Upstream Risks Tool
- BMC Thrive
- IHelp
- Patient Centered Assessment Method
- CFPB Financial Well-Being Scale
- WellRx
- PhenX Chronic Stress (Financial Stress)
- We Care
- Children’s HealthWatch
- Medical Expenditures Panel
- YCLS
Review: Financial Insecurity Diagnoses and Programs

- **Diagnoses**
  - Financial Insecurity
    - Financial Strain
    - Medical Cost Burden
    - Debt
    - Bankruptcy

- **Programs/Professions**
  - Prescription Assistance
  - Financial Counseling
  - Consumer Credit Counseling
  - Vocational Rehab
  - Micro-Financing
  - Representative Payee Program
  - Financial Literacy
Review: Financial Insecurity Programs

- Given what we know about shifting financial tides in a household, should we include core programs that are known to alleviate financial strain but are connected to other domains?

- Such as:
  - Low Income Home Energy Assistance Program (LIHEAP)
  - SNAP
  - Free and Reduce School Lunch
  - Etc.
Questions?

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Please send all chats to Everyone.
End-to-End Review: Demographics
Review: Education, Unemployment, Veteran Status Screening

- **Education**
  - AAFP
  - CHW
  - PHENX
  - NAHNES

- **Veteran**
  - SAMHSA
  - VA Community Provider Toolkit
  - Census/American Housing Survey

- **Unemployment**
  - PhenX
  - PRAPARE
  - SAMHSA
Review: Education Approach

- One to make clear is we carved out a focus in education to address what was not yet addressed, and that is assessment of grade completed and less than a high school education.
- This does not specifically include literacy, its own risk, which will need to be addressed later.
Review: Unemployment Approach

• In multiple instance we have sorted “job seeking” out of the set because it does conceptually map to “unemployment”
• They may match to “job seeking” or “under-employment”

• AHC question 'Do you want help finding or keeping work or a job?'

• Health Leads question 'During the last four weeks, have you been actively looking for work?'
Questions?

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Please send all chats to Everyone.
Identify: Goals Consensus
Goals Consensus

- We are meeting with HL7 PCWG
- One of the things we are exploring is the relationship between goals and protective factors...
- If goals are “a desired state” can we build protective factors for use, as is appropriate, in global goal setting?
- Social determinants are not all risk!
- However, the opposite of a risk is not always the presence of a protective factor!
Social Risks, Action Steps, Goals, and Protective Factors

- Problem
- Actionable/Measurable Goals
- Meta Goals/Protective Factors

The Inadequate Housing Example

- Substandard Housing, due inability to prepare or store food
- Fix Stove, with repair Voucher
- Housing has resources for food preparation and storage
Social Risks, Action Steps, Goals, and Protective Factors

- What are goals (both meta and measurable) when the action is not behavior change?

- How do you measure progress without a scale? There is no "less" or "more" housing adequacy or transportation security

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Community Homework and Next Steps
Homework

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

- **Transportation Insecurity**
  - Review Master List in preparation for Multi-Domain Consensus Voting
    
    [https://confluence.hl7.org/display/GRAV/Transportation+Domain](https://confluence.hl7.org/display/GRAV/Transportation+Domain)

- **Financial Strain**
  - Review Master List in preparation for Multi-Domain Consensus Voting
    
    [https://confluence.hl7.org/display/GRAV/Financial+Strain](https://confluence.hl7.org/display/GRAV/Financial+Strain)

- **Demographics: Education, Veteran Status, and Employment**
  - Review in preparation for Multi-Domain Consensus Voting
    
    [https://confluence.hl7.org/display/GRAV/Demographics+Domain](https://confluence.hl7.org/display/GRAV/Demographics+Domain)
Next Steps

- 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)
Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net

LinkedIn: Gravity Project
Twitter: @thegravityproj