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: 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
Project Founders, Grants, and In-Kind Support To-Date

Robert Wood Johnson Foundation
The University of Vermont
Yale School of Nursing

siren UC SF
Kaiser Permanente
AHA
AAFP
BlueCross BlueShield Association
AMA
GUIDEWELL

AmeriHealth Caritas
UnitedHealthcare
NC
Arkansas

The Office of the National Coordinator for Health Information Technology
juxly

Humana

CHILDREN'S HealthWatch
lyft

California Health Care Foundation

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

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

- The Gravity Project multi-domain ICD-10 submission was reviewed at ICD-10 Coordination and Maintenance Virtual Meeting on March 10th. Meeting materials can be found here: [https://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm](https://www.cdc.gov/nchs/icd/icd10cm_maintenance.htm)

- Thank you to all of you that have contributed to the development and review of this submission! We appreciate those who have sent in letters of support.

- We have two main comment efforts at this time
  - One, the general letter of support including rationale
  - Two, a specific email to Donna Pickett, RHA, MPH requesting that the codes be released as part of the 10/2021 release (not 2022)

- Both are available on the confluence here [https://confluence.hl7.org/display/GRAV/ICD-10+Coding+Submissions](https://confluence.hl7.org/display/GRAV/ICD-10+Coding+Submissions)
Gravity Project Website

- The Gravity Project has created a website to better introduce the project
- Our website is now live! Click here to visit https://thegravityproject.net
ONC Published LEAP in Health IT SEN

- ONC published a special emphasis notice (SEN) under the Leading Edge Acceleration Projects (LEAP) in Health IT notice of funding opportunity. The goal of the SEN is to advance health IT standards and tools to improve social determinants of health data exchange and research, and to develop tools for making electronic health record (EHR) data research and artificial intelligence (AI)-ready. ONC seeks applications with specific aims to address one of those areas of interest.
  - Learn more about the LEAP in Health IT here: https://www.healthit.gov/topic/onc-funding-opportunities/leading-edge-acceleration-projects-leap-health-information
ONC 2021 Annual Meeting March 29-30

- The all-virtual ONC 2021 Annual Meeting will be held March 29\textsuperscript{th}-30\textsuperscript{th} from 12:00pm – 5:00pm EST. Join over 1,000 health IT partners online for two afternoons of plenary and breakout sessions on a variety of topics at the forefront of health IT.

- Please join the Gravity Project as we present on the following:
  - Evelyn Gallego, Program Manager, and Bob Dieterle, Technical Director, to present on the Gravity Project \textbf{Monday March 29\textsuperscript{th} between 2:50pm and 3:50pm EST}

- Register here: \url{https://www.healthit.gov/news/events/2021-onc-annual-meeting}
Project Schedule and Overview
Gravity Overview: Integration of Two Streams

Terminology: SDOH Domains

1. Data Set Identification
2. Coding Gap Analysis & Recommendations
3. New Code Submissions
4. Publication in NLM VSAC & ONC ISA

Technical (FHIR)

1. FHIR IG Ballot & Publication
2. FHIR IG Development
3. FHIR IG Testing
4. CODED VALUE SETS
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
Enter the Gravity Project...

**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 Project Terminology Engagement Guide: General

- The intent of our public calls is to present updates of Gravity materials and offer opportunities for the community to reflect and discuss implications.
- The community has a critical role in ensuring content is representative of needs. We welcome ideas for additional or altered content to be submitted via Gravity Process available here.
- Within the terminology end-to-end review process, one needs to offer *rationale with evidence* for suggested alternate approaches.
- All elements must be assessed by our subject matter experts prior to inclusion in the set.
If one has questions about domains covered in previous builds, please review materials provided and reach out to gravityproject@emiadvisor.net with questions or concerns.

- Our team will add relevant links on past domains into the chat as able.

**Of note:** We gather subject matter experts by domain, if we touch upon concepts that cross domains we’ve yet to cover, we must pause on build of these concepts, however, we will ensure, to the best of our ability, that both the project plan and taxonomy structure allow for additions of these new domains in time.

- Ex: literacy as driver of material hardship
Gravity Project Engagement Guide: Domains, cont

- The anchor of our domain project plan remains the NASEM reports “Capturing Social and Behavioral Domains in Electronic Health Records” (Phase one and two, 2014)

- Phase One
  1. Identify specific domains to be considered by the Office of the National Coordinator
  2. Specify criteria that should be used in deciding which domains should be included
  3. Identify core social and behavioral domains to be included in all EHRs, and
  4. Identify any domains that should be included for specific populations or settings defined by age, socioeconomic status, race/ethnicity, disease, or other characteristics
Selected Domains

Sociodemographic Domains
- Sexual orientation
- Race and ethnicity
- Country of origin/U.S. born or non-U.S. born
- Education
- Employment
- Financial resource strain: Food and housing insecurity

Psychological Domains
- Health literacy
- Stress
- Negative mood and affect: Depression and anxiety
- Psychological assets: Conscientiousness, patient engagement/activation, optimism, and self-efficacy

Behavioral Domains
- Dietary patterns
- Physical activity
- Tobacco use and exposure
- Alcohol use

Individual-Level Social Relationships and Living Conditions Domains
- Social connections and social isolation
- Exposure to violence
### Selected and Future Domains

<table>
<thead>
<tr>
<th>Candidate Set of Domains for Consideration for the Inclusion in All Electronic Health Records (Chapter 3)</th>
<th>Domains Reviewed But Not Selected (Appendix A)</th>
</tr>
</thead>
</table>
| **Sociodemographic Domains**  
- Sexual orientation  
- Race/ethnicity  
- Country of origin/U.S. born or non-U.S. born  
- Education  
- Employment  
- Financial resource strain (Food and housing insecurity) | - Gender identity |
| **Psychological Domains**  
- Health literacy  
- Stress  
- Negative mood and affect (Depression, anxiety)  
- Psychological assets (Conscientiousness, patient engagement/activation, optimism, self-efficacy) | - Negative mood and affect (Hostility and anger, hopelessness)  
- Cognitive function in late life  
- Psychological assets (Coping, positive affect, life satisfaction) |
| **Behavioral Domains**  
- Dietary patterns  
- Physical activity  
- Tobacco use and exposure  
- Alcohol use | - Abuse of other substances  
- Sexual practices  
- Exposure to firearms  
- Risk-taking behaviors (Distractive driving and helmet use) |
| **Individual-Level Social Relationships and Living Conditions Domains**  
- Social connections and social isolation  
- Exposure to violence | - Social support (Emotional, instrumental, and other)  
- Work conditions  
- History of incarceration  
- Military service  
- Community and cultural norms (Health decision making) |
| **Neighborhoods and Communities**  
- Neighborhood and community compositional characteristics (Socioeconomic and racial/ethnic characteristics) | - Neighborhood and community contextual characteristics (Air pollution, allergens, other hazardous exposures, nutritious food options, transportation, parks, open spaces, health care and social services, educational and job opportunities) |
Questions?

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Please send all chats to Everyone.
Terminology
<table>
<thead>
<tr>
<th>Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework</th>
</tr>
</thead>
</table>
| 3/18   | **Material Hardship**: Screening, Diagnoses and Goals End to End Review  
         | **Stress**: Screening and Diagnosis Concepts                   | *Review: Material Hardship*  
         |                                                 | *Submit: Stress Screening and Diagnoses*                             |
| 4/1    | **Social Isolation KICKOFF**                                     |                                                                           |
| 4/15   | **IPV, Elder Abuse KICKOFF**                                     |                                                                           |
| 4/29   | **MATERIAL HARDSHIP**: Consensus Vote                            |                                                                           |

Submit Stress concepts by 4/1
Submit Social Isolation concepts by 4/15
Submit IPV, Elder Abuse concepts by 4/29
Community Terminology Development
Material Hardship - Definition

- Material Hardship - the lack of specific socially perceived basic physical necessities
Across the hardship tools, some assess cause, some do not

**Broad**
- PRAPARE- 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: Food, Utilities, Clothing, Childcare, Medicine, Phone

**Financial**
- Health Leads- In the past 12 months has the electric, gas, oil, or water company threatened to shut off services in your home?
- Well Rx- Do you have trouble paying for your gas or electricity bills?
Review: Material Hardship Diagnoses

- Material hardship
  - Unable to obtain childcare secondary to financial hardship
  - Unable to obtain phone connection secondary to financial hardship
  - Unable to obtain internet secondary to financial hardship
  - Unable to obtain heat secondary to financial hardship
  - Unable to obtain cooling secondary to financial hardship
  - Unable to obtain electricity secondary to financial hardship
  - Unable to obtain clothing secondary to financial hardship
  - Unable to obtain medicine secondary to financial hardship

One of the things we have to sort in the Gravity work is the primary experience. Although related to financial insecurity, the primary experience here is the absence of the necessity
Review: Material Hardship Goals

• Able to afford
  - Childcare
  - Phone connection
  - Internet
  - Heat
  - Home cooling
  - Electricity
  - Adequate clothing (whenever there is a wide spectrum, we use adequate to determine baseline need)
  - Medicine

Able to be interchanged across domains....
Review: Material Hardship Interventions

Broad programs from previous domains
- Ex: Community Action Agency or Area Agency on Aging

Specific programs in common with previous domains
- Ex: Childcare assistance programs

But also hardship type additions
- Ex: Utility assistance programs
Questions?

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Please send all chats to Everyone.
Identify: Stress Screening and Diagnoses
Stress

- Stress and Health Disparities: Contexts, Mechanisms, and Interventions Among Racial/Ethnic Minority and Low Socioeconomic Status Populations (APA)

- Stress Definitions
  - Stress occurs when individuals experience demands or threats without sufficient resources to meet these demands or mitigate the threats (Lazarus & Folkman, 1984).
  - Minority stress is the relationship between minority and dominant values and resultant conflict with the social environment experienced by minority group members (Meyer, 1995; Mirowsky & Ross, 1989; Pearlin, 1989)
Stress

**Exposures**
- Stigma and Bias (Minority Stress)
- Financial Strain
- Transitions
- Caregiving
- Relationships and their absence
- Trauma
- Environment

**Responses**
- Psychological
  - “I feel stressed”
- Physiological

Juster et al (2017)
Stress Types: The Stress Measurement Network
Stress: Tools

Perceived Stress Scale

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”? 
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
Stress: Tools

PRAPARE
Stress is when someone feels tense, nervous, anxious, or can’t sleep at night because their mind is troubled. How stressed are you?

Finnish Institute of Occupational Health, Occupational Stress Questionnaire
Stress means a situation in which a person feels tense, restless, nervous, or anxious, or is unable to sleep at night because his or her mind is troubled all the time. Do you feel this kind of stress these days?
<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>ICD-10-CM Code</th>
<th>SNOMED Child Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>F43.2 Adjustment disorders</td>
<td>271952001 Stress and adjustment reaction</td>
<td>162218007 Stress-related problem</td>
<td></td>
</tr>
<tr>
<td>F43.9 Reaction to severe stress, unspecified</td>
<td>73595000 Stress</td>
<td>166491000119100 Stress due to family tension</td>
<td></td>
</tr>
<tr>
<td>NO ICD-10-CM Mapping for SNOMED Child Codes</td>
<td>13117000 Absence of stress</td>
<td>716421004 Able to manage stress</td>
<td></td>
</tr>
<tr>
<td>Z56.3 Stressful work schedule</td>
<td>15936461000119100 Stressful work schedule</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z56.6 Other physical and mental strain related to work</td>
<td>276074009 Stress at work</td>
<td>276075005 Work worries</td>
<td></td>
</tr>
<tr>
<td>Z63.7 Other stressful life events affecting family and household</td>
<td>105485001 Stress at home</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z63.8 Other specified problems related to primary support group</td>
<td>73595000 Stress</td>
<td>37240003 Ineffective family coping: compromised</td>
<td></td>
</tr>
<tr>
<td></td>
<td>409030003 Ineffective family coping</td>
<td>18676001 Ineffective family coping: disabling</td>
<td></td>
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<tr>
<td></td>
<td>166491000119100 Stress due to family tension</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z73.3 Stress, not elsewhere classified</td>
<td>73595000 Stress</td>
<td>129891007 Caregiver role strain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>23085004 Increased stress</td>
<td>79365001 Decreased stress</td>
<td></td>
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<tr>
<td></td>
<td>224974006 Feeling stressed</td>
<td>422761005 Difficulty managing stress</td>
<td></td>
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<tr>
<td></td>
<td>442347009 Emotional stress</td>
<td>442347009 Emotional stress</td>
<td></td>
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<tr>
<td></td>
<td>55539008 Physical stress</td>
<td>55539008 Physical stress</td>
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<tr>
<td></td>
<td>424582000 Stress overload</td>
<td>424582000 Stress overload</td>
<td></td>
</tr>
<tr>
<td>Z73.8 Other problems related to life management difficulty</td>
<td>18232000 Difficulty coping</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>47695004 Inability to cope</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Questions?

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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
    https://confluence.hl7.org/display/GRAV/The+Gravity+Project+Materials

- **Financial Strain**
  - Submit Material Hardship screening, diagnosis, goals and interventions
    https://confluence.hl7.org/display/GRAV/Financial+Strain

- **Stress**
  - Submit Stress screening and diagnosis
    https://confluence.hl7.org/display/GRAV/Stress
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