The Gravity Project

IPV Kickoff,
Material Hardship Consensus Vote,
Stress & Social Isolation Concepts

April 15th, 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: 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

https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors
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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
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://thegavityproject.net
The HL7® FHIR Virtual Connectathon will occur from May 17th to 19th, 2021

- The Gravity Team is leading the Gravity Project SDOH Exchange Connectathon Track. The focus of this Connectathon track is to test the:
  1. FHIR artifacts (e.g. profiles) and exchange workflows in the SDOH Clinical Care FHIR IG
  2. Exchange workflows between multiple stakeholders,
  3. Survey automation process
  4. Reference implementation support for the various exchanges

- View the Gravity Project Connectathon Track page here: https://confluence.hl7.org/display/FHIR/2021-05+Gravity+SDOH+Exchange
  - Sign up to be a participant in Gravity’s track here: https://confluence.hl7.org/display/GRAV/Connectathon+Participation+Sign-Up

- Learn more about the HL7® Connectathon here: https://confluence.hl7.org/display/FHIR/2021+-+05+Connectathon+27
Da Vinci Education & HL7 FHIR Implementation Event April 26th-30th

- Join HL7 for the upcoming Da Vinci Education & HL7® FHIR® Implementation Event, April 26th-30th
- Goals for the event are to:
  - Educate the health IT community about HL7 FHIR, FHIR implementation guides (IGs) developed by the Da Vinci Project and the CARIN Alliance, and real-world uses
  - Help participants prepare to meet the CMS/ONC rules
  - Engage providers, payers and partners to join the growing collaborative FHIR community and directly access all of the free and open resources
- Flexible registration options are available, as you may attend the full week or only the days that best fit your learning objectives.
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
Project Schedule and Overview
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<td>TRANSPORTATION INSECURITY</td>
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<td>ELDER ABUSE</td>
<td>INTIMATE PARTNER VIOLENCEN</td>
<td>SOCIAL ISOLATION &amp; LONELINESS</td>
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<td>NEIGHBORHOOD SAFETY</td>
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**Key**
- ▲ LOINC Code Submissions (MAR/OCT)
- ♠ SNOMED Code Submissions (MAY/DEC)
- ◆ ICD-10 Code Submissions (JUN/DEC)
- ⚫ Goals/Interventions

**TERMINOLOGY**
- **TECHNICAL**
  - Gravity FHIR IG Ballot
  - IG Ballot Reconciliation
  - Reference Implementation Development
  - Reference Implementation Update
  - HL7 FHIR Connectathons

**PILOTS**
- Gravity Pilots Recruitment
- Gravity Pilots Testing (6 to 12 months)

**Goals/Interventions**
- ELDER ABUSE
- INTIMATE PARTNER VIOLENCEN
- SOCIAL ISOLATION & LONELINESS
- STRESS
- MATERIAL HARDSHIP
- NEIGHBORHOOD SAFETY
- FOOD DESERT
- RACISM / BIAS / DISCRIMINATION

**Social Isolation & Loneliness**
- ELDER ABUSE
- INTIMATE PARTNER VIOLENCEN
- SOCIAL ISOLATION & LONELINESS
- STRESS

**Transportation Insecurity**
- ELDER ABUSE
- INTIMATE PARTNER VIOLENCEN
- SOCIAL ISOLATION & LONELINESS
- STRESS

**Food Desert**
- ELDER ABUSE
- INTIMATE PARTNER VIOLENCEN
- SOCIAL ISOLATION & LONELINESS
- STRESS

**Inadequate Housing**
- ELDER ABUSE
- INTIMATE PARTNER VIOLENCEN
- SOCIAL ISOLATION & LONELINESS
- STRESS
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.
Gravity Project Engagement Guide: Domains

- 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 Recommitment Process for Committed Members

• One of our challenges has been reaching consensus during voting periods when we do not have committed members cast a vote. We understand circumstances change, and you may no longer be in a role to serve as a committed member. That is why we requested your help in reconfirming your committed member status.

• Committed members are those who can regularly participate in weekly project meetings and actively contribute to the development and review of project deliverables. These individuals are expected to vote on all project deliverables presented for public voting.

• Committed members were asked to recommit by Wednesday, April 14th. Members who have not responded will take on the status of Other Interested Party.

• We appreciate the time and effort our committed members make to help ensure the Gravity Project is successful. Our community is a very important part of everything we do!

• Going forward we will ask all committed members to recommit twice yearly.
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.
Terminology
## 2021 Gravity Terminology Roadmap

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### Terminology
- Inadequate Housing
- Transportation Insecurity
- Financial Insecurity
- Demographics Status
- Social Isolation
- Intimate Partner Violence
- Elder Abuse
- Stress
- Material Hardship
- Food Desert
- Neighborhood Safety
- Racism / Bias / Discrimination

### Goals/Interventions
- Elder Abuse
- Intimate Partner Violence
- Social Isolation
- Stress
- Elder Abuse
- Neighborhood Safety

### Key
- **Δ** LOINC Code Submissions (MAR/OCT)
- **★** SNOMED Code Submissions (MAY/DEC)
- **◆** ICD-10 Code Submissions (JUN/DEC)
- **Goals/Interventions**
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<tr>
<th>Date</th>
<th>Gravity WG Meeting Tasks</th>
<th>Homework</th>
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| 4/15 | **MATERIAL HARDSHIP:** Consensus Vote  
      **IPV KICKOFF**  
      **Stress and Social Isolation:** Screening and Diagnosis Concepts | Submit: Stress, Social Isolation, and IPV Screening and Diagnoses |
| 4/29 | **Stress:** Screening and Diagnoses End to End review  
      **Social Isolation:** Screening and Diagnosis Concepts  
      **IPV:** Screening and Diagnoses Concepts |  
      Review: Stress, Social Isolation, Screening and Diagnoses  
      Submit: IPV, and Elder Abuse Screening and Diagnoses Concepts |
| 5/13 | **Elder Abuse KICKOFF**  
      **STRESS:** Consensus Vote  
      **Social Isolation:** Screening and Diagnoses End to End review  
      **IPV:** Screening and Diagnoses Concepts |  
      Review: Social Isolation, IPV, Screening and Diagnoses  
      Submit: Elder Abuse Screening and Diagnoses Concepts |
| 5/27 | **SOCIAL ISOLATION : Consensus Vote**  
      **IPV:** Screening and Diagnosis End to End Review  
      **Elder Abuse:** Screening and Diagnoses Concepts |  
      Review: IPV, and Elder Abuse Screening and Diagnoses Concepts |
Community Terminology Development

Pre-Work → Identify → Review → Vote → Analyze → Build → Test → Evaluate

We are here!
Intimate Partner Violence (IPV)
KICKOFF
Intimate Partner Violence Subject Matter Experts

Lisa James –
Director of Health at Futures Without Violence

Chris Grasso-
Associate Vice President for Health Informatics and Data Services at Fenway Health
About Futures Without Violence

Our vision is a future without violence that provides health, education, safety, justice, and hope.

National Health Resource Center on Domestic Violence: supported by the US DHHS Family Violence Prevention and Services Program
[https://www.futureswithoutviolence.org/health/](https://www.futureswithoutviolence.org/health/)

HRSA supported: The National Health Network on Intimate Partner Violence and Human Trafficking work with community health centers to support those at risk of, or surviving intimate partner violence (IPV), human trafficking (HT) and exploitation, and to bolster prevention efforts.

Learn more: [www.futureswithoutviolence.org/health/nationalhealthnetwork](http://www.futureswithoutviolence.org/health/nationalhealthnetwork)

My Email: ljames@futureswithoutviolence.org
What is Intimate Partner Violence (IPV)?

One person in a relationship is using a **pattern** of methods and tactics to gain and maintain **power and control** over the other person.

- It is often a cycle that gets worse over time – not a one time ‘incident’
- Abusers use jealousy, mental health, money and other tactics to be controlling and abusive – not just physical violence
- Leaving an abusive relationship is not always the best, safest or most realistic option for survivors
Definitions of Domestic Violence

- Legal definitions are often more narrowly defined with particular focus on physical and sexual assault.

- Public health definitions include a broader range of controlling behaviors that impact health including:
  - emotional abuse
  - social isolation
  - stalking
  - intimidation and threats
Intimate Partner Violence/Sexual Violence Data

- **Highest risk ages 18-24 and a high percentage of mothers**
  - In rural settings, the **incidence of IPV may be as high as 50%** during the perinatal period (Bailey, 2007)

- **61% of bisexual women and 37% of bisexual men** and **44% of lesbian women and 26% of gay men** reported experiencing rape, physical violence, and/or stalking by an intimate partner in their lifetime.

- **Of transgender individuals, 34.6%** reported lifetime physical abuse by a partner and **64%** reported experiencing sexual assault.

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The National Intimate Partner and Sexual Violence Survey (NISVS): 2010-2012 State Report, Centers for Disease Control
IPV and HT recognized in the 2020 UDS

- HRSA recognizes IPV and HT/exploitation as complex public health issues
- First time IPV/exploitation data will be collected in UDS report
Health Impact of IPV

IPV:
- Asthma
- Bladder and kidney infections
- Circulatory conditions
- Cardiovascular disease
- IBS
- Chronic pain syndromes
- Central nervous system disorders
- Gastrointestinal disorders
- Joint disease
- Migraines and headaches
- Fibromyalgia

(Black/CDC, 2011)
Studies show a range of 40%-91% of women experiencing IPV have incurred a traumatic brain injury (TBI) due to a physical assault (Campbell, 2018).

More than two-thirds of IPV victims are strangled at least once. {the average is 5.3 times per victim}

(Chrisler & Ferguson, 2006 Abbott, 1995; Coker, 2002; Frye, 2001; Goldberg, 1984; Golding, 1999; McLeer, 1989; Stark, 1979; Stark, 1995)
IPV and Behavioral Health

- Anxiety and/or depression
- Post-traumatic stress disorder (PTSD)
- Antisocial behavior
- Suicidal behavior
- Low self-esteem
- Emotional detachment
- Sleep disturbances
- Substance dependency

(Tjaden P, 2000; Coker AL, 2002; Mazeda 2010; Zimmerman 2011; )

Research suggests that women may also be more likely than men to use prescription opioids to self-medicate for other problems including anxiety or stress. (McHugh 2013)
IPV and Substance Use Coercion

Substance use is another way abusive partners exert power and control

N = 3,380 people calling the National Domestic Violence Hotline

Hotline callers reported:

- 27% were pressured or forced to use alcohol or other drugs
- 24.4% were afraid to call the police
- 60.1% tried to prevent or discourage them from getting help
- 37.5% threatened to report alcohol or other drug use to someone in authority to keep them from getting something they wanted or needed

...because of their partner or ex-partner

(Warshaw, NCDVTMH/NDVH 2014)
Women, Opioids, and Violence

• **Opioid use disorders** are associated with IPV victimization particularly among women
  
  (Smith, 2012)

• **Women also may be particularly susceptible to such violence** when under the influence of opioids

  (Smith, 2012)
Adolescent Relationship Abuse

Young women who have experienced abuse have higher rates of:

- Depression and anxiety
- Disordered eating
- Suicidality
- Substance abuse

(Kim-Godwin, ‘09; Howard, ‘08; Brossarte, ‘08; Ackard & Neumark-Sztainer, ‘02)

- Girls (grades 9-12) who initiate sex at an earlier age are at increased risk for physical dating violence.

(Olhongbe, 2017)
One in four teens in a relationship report having been called names, harassed, or put down by their partner via cell phone/texting.

(Zweig, 2013)
Cyber Relationship Abuse Rarely Happens in Isolation

Technology-based harassment is a red flag for other abuse

- **84%** of the teens who report cyber abuse said they were also psychologically abused by their partners
- **52%** say they were also physically abused
- **33%** say they were also sexually coerced

(Zweig, 2013)
Perinatal, Reproductive, and Sexual Health

- IPV is linked to an increased likelihood for rapid repeat and unintended pregnancy, low birth weight babies, preterm birth, and miscarriages

- Women disclosing physical abuse were 3 times more likely to have an STI

- Over half of women living with HIV have experienced domestic or sexual violence

- Trafficking survivors are more at risk for sexual health complications, unwanted pregnancy, and forced/unsafe terminations of pregnancy

Definition: Reproductive and Sexual Coercion

Behaviors to maintain power and control in a relationship related to reproductive health by someone who is, was, or wishes to be involved in an intimate or dating relationship with an adult or adolescent.

- Explicit attempts to impregnate a partner against their wishes or interfering with contraception
- Controlling outcomes of a pregnancy
- Coercing a partner to have unprotected sex

(Miller, 2011)
Health Care Providers Are Lifelines

Health providers may be:

- **first** responders for people experiencing IPV
- the only other person your patient is allowed to speak to
- the only kind words your patient has heard
- the only access to information on help and safety
The Heart of the Model: Building Meaningful Partnerships

Partnerships help promote bi-directional warm referrals for clients/patients and increase staff engagement and support.

- **DV Advocacy Partner**
  - Improve health and wellness for DV/HT survivors

- **Warm referral** from domestic violence agency to health center

- **Warm referral** from health center to domestic violence agency

- **Community Health Center Partner**
  - Improve health and safety through “CUES”

Download a sample MOU: https://ipvhealthpartners.org/partner/
About Domestic/Sexual Violence Advocacy Programs

Domestic violence and sexual assault programs have vast experiences working with survivors of violence and assist them to identify ways to increase personal safety while assessing the risks.

**Advocates connect patients to additional services like:**

- Crisis safety planning (usually 24/hr hotline)
- Housing (emergency and transitional)
- Legal advocacy for IPV/HT, family court, immigration, labor
- Support groups/counseling
- Children’s services
- Employment support
ACF, U.S. DHHS Funded Hotlines

https://www.acf.hhs.gov/acf-hotlines-helplines

800-799-SAFE (7233)
Text LOVEIS to 22522
Chat at thehotline.org

800-RUNAWAY (786-2929)
Email: 1800runaway.org/crisis-online-services/
Chat at 1800runaway.org/
Forum: bulletinboards.1800runaway.org/forum

844-7NATIVE (762-8483)
Monday-Friday from 9am to 5:30pm CST
strongheartshelpline.org

877-565-8860
www.translifeline.org/

www.thetrevorproject.org
866-488-7386 LGBTQ Youth
CUES: An Evidence-based Intervention

Confidentiality
Universal Education
Empowerment
Support

Adolescent Safety Card
Available in English and Spanish
www.IPVHealthPartners.org online toolkit + CUES

Guidance on:
✓ Enhancing patient privacy
✓ Disclosing limits of confidentiality
✓ Universal education scripts
✓ Reaching friends and family
✓ Disclosures + supportive messages
✓ Warm referrals to local DV programs
✓ Safely sharing resources
✓ Tech privacy tips

+ New guidance on COVID-19 and telehealth support

Developed by and for community health centers in partnership with domestic violence programs
Defining Success

“Success is measured by our efforts to reduce isolation and to improve options for safety.”

Futures Without Violence
Thank You!

Join us! www.nchdv.org

CHC’s: You are invited to join a learning collaborative on using HIT to address new UDS measures and promote survivor centered quality care Contact: ljames@futureswithoutviolence.org
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.
Policy Update
Gravity Project’s Submission to USCDI: A New SDOH Data Class

- ONC released the draft U.S. Core Data for Interoperability (USCDI) version 2 on January 12. It did not include the Gravity Project’s submitted SDOH data class.
  - ONC’s draft only added nine new data elements.

- On April 6, 2021, the USCDI Task Force voted to recommend adding the Gravity Project’s SDOH data class to USCDI version 2!
  - Consent not included in recommendation—ONC had categorized as Level 1.

- On April 15, 2021, the HIT Advisory Committee approved and forwarded the recommendation to the National Coordinator!

- In any case, Gravity’s groundbreaking work and advances are not delayed and remain on track:
  - Standardizing SDOH terminology, value sets, representation in FHIR for nationwide exchange, reference implementations, community mapping and engagement—all remain on track and available for national use.
# U.S. Core Data for Interoperability (2018+)

<table>
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<th>Common Clinical Data Set (2015 Edition CEHRT)</th>
<th>2020 USCDI v1</th>
<th>+ 1 year Candidate Status</th>
<th>+ 2 years Candidate Status</th>
<th>+ 3 years Candidate Status</th>
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<tr>
<td>• Individual name</td>
<td>• Address (current, historical)</td>
<td>• Cognitive status</td>
<td>• Care provider demographics</td>
<td>• Individual goals, priorities</td>
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<td>• Sex (birth sex)</td>
<td>• Phone number (current, historical)</td>
<td>• Encounter</td>
<td>• Practitioner responsible for care</td>
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<td>• Date of birth</td>
<td>• Pediatric vital signs</td>
<td>• Discharge instructions</td>
<td>• Provider goals, priorities</td>
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<td>• Race</td>
<td>• Provenance</td>
<td>• Family health history</td>
<td>• Reason for referral</td>
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<td>• Ethnicity</td>
<td>• Clinical notes</td>
<td>• Functional status</td>
<td>• Referring / transitioning providers—name &amp; contact info</td>
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<td>• Care team members</td>
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<td>• Assessment and plan of treatment</td>
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<th>2021 USCDI v2 draft</th>
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<td>• Advance care planning</td>
<td>• Employment status</td>
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<td>• Problem (diagnosis date, resolution date)</td>
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<td>• POLST</td>
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<td>• Disability status</td>
<td>• Travel status/history</td>
</tr>
<tr>
<td></td>
<td>• Durable medical equipment</td>
<td>• Weight-based dosing</td>
</tr>
<tr>
<td></td>
<td>• Health insurance info</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Minor status</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Personal representative</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social, psychological &amp; behavioral data</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Overall financial resource strain</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Social support &amp; isolation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Domestic violence</td>
<td></td>
</tr>
</tbody>
</table>
# USCDI Task Force recommendations: April 6, 2021

## Common Clinical Data Set (2015 Ed.)
- Individual name
- Sex (birth sex)
- Date of birth
- Race
- Ethnicity
- Preferred language
- Smoking status
- Problems
- Medications
- Medication allergies
- Laboratory test(s)
- Laboratory value(s)/result(s)
- Address (current, historical)
- Phone number (current, historical)
- Pediatric vital signs
- Provenance
- Clinical notes

## 2020 USCDI v1
- Vital signs
- Procedures
- Care team members
- Immunizations
- Unique device identifier(s) for implantable device(s)
- Assessment and plan of treatment
- Patient goals
- Health concerns

## 2021 USCDI v2 draft
- Provider (name, identifier)
- Encounter (type, diagnosis, time)
- Problem (diagnosis date, resolution date)
- Diagnostic imaging (order, report)

## Priorities now
- Social, psychological & behavioral data
- Education
- Overall financial resource strain
- Social support & isolation
- Domestic violence
- Employment status
- Stress
- Military history
- Gender identity
- Sexual orientation
- Care team members—contact info
- Care team members—roles/relationships
- Encounter time, disposition
- Diagnostic image reports
- Diagnostic studies

## Missing
- Cognitive status
- Discharge instructions
- Family health history
- Functional status
- POLST
- Alive status/date of death
- Communication facilitators
- Minor consent
- Disability status
- Durable medical equipment
- Health insurance info
- Minor status
- Personal representative
- Individual goals, priorities
- Practitioner responsible for care
- Provider goals, priorities
- Reason for referral
- Referring or transitioning providers—name & contact info
- Depression
- Physical activity
- Alcohol use
- Advance care planning
- Advance directive
- Power of attorney
- Reconciled medication list
- Travel status/history
- Weight-based dosing
Gravity Project’s Submission to USCDI: Thank you!

Stakeholders across the nation sent formal letters of support:

- AcademyHealth
- American Academy of Family Physicians (AAFP)
- American Health Information Management Association (AHIMA)
- AmeriHealth Caritas
- BlueCross BlueShield Association (BCBSA)
- Blue Shield of California
- Centers for Medicare & Medicaid Services (CMS)
- Codentx
- HHS Administration for Children and Families (ACF)
- Highmark Health
- Lucy Johns
- Lyft
- Jim Meyers
- National Committee for Quality Assurance (NCQA)
- National Partnership for Women & Families (NPWF)
- Nebraska Health Information Initiative (NEHII)
- New York eHealth Collaborative (NYeC)
- OCHIN
- Onyx
- Pew Charitable Trusts
- Providence St. Joseph Health
- Stewards of Change Institute
- University at Buffalo School of Nursing
- University of California San Francisco (UCSF)
CMS Request for Information on Social Risk (Jan. 2021)

Many organizations—31 letters at last count—also explicitly highlighted and supported the Gravity Project’s work!

- Aligning for Health
- American Academy of Pediatricians
- American Association of Medical Colleges (AAMC)
- American Health Information Management Association (AHIMA)
- American Medical Association (AMA)
- American Medical Informatics Association (AMIA)
- America’s Health Insurance Plans (AHIP)
- AmeriHealth Caritas
- Anthem
- Aunt Bertha
- BlueCross BlueShield Association
- Cigna
- Colorado Office of eHealth Innovation
- Epic
- Health Record Banking Alliance (HRBA)
- Health Level Seven International (HL7)
- Highmark Health
- Humana
- Kaiser Permanente
- Lantana Consulting Group
- Movement Is Life
- National Association of Community Health Clinics (NACHC)
- National Committee on Quality Assurance (NCQA)
- New York eHealth Collaborative (NYeC)
- Pew Charitable Trusts
- Protecting Privacy to Promote Interoperability (PP2PI)
- Providence St. Joseph Health
- RTI International
- UnitedHealth Group
- WEDI
- Wolters Kluwer
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 Terminology Development

Pre-Work → Identify → Review → Vote → Analyze → Build → Test → Evaluate

We are here!
Material Hardship Consensus Vote
Material Hardship - Definition

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

- **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
  - AAFP- 
    - Do problems getting child care make it difficult for you to work or study?
    - In the past 12 months has the electric, gas, oil, or water company threatened to shut off services in your home?

- **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

- Unable to obtain childcare
  - Unable to obtain childcare due to limited financial resources
- Unable to obtain adult dependent care
  - Unable to obtain adult dependent care due to limited financial resources
- Unable to obtain phone
  - Unable to obtain phone connection due to limited financial resources
- Unable to obtain internet
  - Unable to obtain internet due to limited financial resources
- Unable to obtain heat
  - Unable to obtain heat due to limited financial resources
- Unable to obtain cooling
  - Unable to obtain cooling due to limited financial resources
- Unable to obtain electricity
  - Unable to obtain electricity due to limited financial resources
- Unable to obtain clothing
  - Unable to obtain clothing due to limited financial resources
- Unable to obtain medicine
  - Unable to obtain medicine due to limited financial resources
Review: Material Hardship Goals

• Able to obtain
  - Childcare
  - Adult dependent care
  - Phone connection
  - Internet
  - Heat
  - Home cooling
  - Electricity
  - Adequate clothing
  - Medicine

• Able to afford
  - Childcare
  - Adult dependent care
  - Phone connection
  - Internet
  - Heat
  - Home cooling
  - Electricity
  - Adequate clothing
  - Medicine
## Review: Material Hardship Interventions

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unable to obtain childcare due to financial insecurity</td>
<td>• Childcare Assistance Program (general to cover gov and philanthropic approaches</td>
</tr>
<tr>
<td></td>
<td>● HeadStart (specific) <a href="https://www.acf.hhs.gov/ohs">https://www.acf.hhs.gov/ohs</a></td>
</tr>
<tr>
<td></td>
<td>• HeadStart (specific) <a href="https://www.acf.hhs.gov/ohs">https://www.acf.hhs.gov/ohs</a></td>
</tr>
<tr>
<td>Unable to obtain phone due to financial insecurity</td>
<td>• Lifeline Wireless Program</td>
</tr>
<tr>
<td></td>
<td>• Telephone Assistance Program (general to cover gov and philanthropic approaches)</td>
</tr>
<tr>
<td>Unable to obtain internet due to financial insecurity</td>
<td>• Internet Assistance Program</td>
</tr>
<tr>
<td>Unable to obtain heat due to financial insecurity</td>
<td>• Low Income Home Energy Assistance Program <a href="https://www.acf.hhs.gov/ocs/low-income-home-energy-assistance-program-liheap">https://www.acf.hhs.gov/ocs/low-income-home-energy-assistance-program-liheap</a></td>
</tr>
<tr>
<td></td>
<td>(Includes but not limited to HEAP)</td>
</tr>
<tr>
<td></td>
<td>• Utility Assistance Program</td>
</tr>
<tr>
<td>Unable to obtain cooling due to financial insecurity</td>
<td>• Low Income Home Energy Assistance Program <a href="https://www.acf.hhs.gov/ocs/low-income-home-energy-assistance-program-liheap">https://www.acf.hhs.gov/ocs/low-income-home-energy-assistance-program-liheap</a></td>
</tr>
<tr>
<td></td>
<td>• Utility Assistance Program</td>
</tr>
<tr>
<td>Unable to obtain electricity due to financial insecurity</td>
<td>• Low Income Home Energy Assistance Program <a href="https://www.acf.hhs.gov/ocs/low-income-home-energy-assistance-program-liheap">https://www.acf.hhs.gov/ocs/low-income-home-energy-assistance-program-liheap</a></td>
</tr>
<tr>
<td></td>
<td>• Utility Assistance Program</td>
</tr>
<tr>
<td>Unable to obtain adequate clothing due to financial insecurity</td>
<td>• Clothing assistance programs</td>
</tr>
<tr>
<td>Unable to obtain medicine due to financial insecurity</td>
<td>• Prescription Assistance Programs</td>
</tr>
<tr>
<td></td>
<td>• Prescription Voucher Provision</td>
</tr>
<tr>
<td>Unable to obtain eldercare due to financial insecurity</td>
<td>• Area Agency on Aging</td>
</tr>
</tbody>
</table>
Consensus Voting

• **Yes:** A Yes vote does not necessarily mean that the deliverable is the ideal one from the perspective of the Committed Member, but that it is better to move forward than to block the deliverable.

• **Yes with Comment:** If a consensus process attracts significant comments through Yes With Comment votes, it is expected that the comments will be addressed in a future revision of the deliverable.
  - **Email comments to gravityproject@emiadvisors.net by 04/22/2021**

• **Formal Objection:** This vote must include comments indicating a path to address the objection in a way that meets the known concerns of other members of the project. A Formal Objection vote without such comments will be considered an Abstain vote.
  - **Email comments to gravityproject@emiadvisors.net by 04/22/2021**

• **Abstain:** A member declined to vote.
Material Hardship Consensus Vote

- Complete the following Google Poll by 5pm EST April 16\textsuperscript{th} https://forms.gle/H5t1AvWRq6qUzcqW6
- Item for Vote: Material Hardship Master List
- Of note:
  - \textbf{You must press submit for answers to be recorded!}
  - If voting yes with comment / formal objection: Email comments to gravityproject@emiadvisors.net by 04/22/2021
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 Terminology Development

We are here!
End to End Review: 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

daily stressors
burnout
discrimination
pregnancy
caregiver stress
work
trauma
major life events
stigma
relationship conflict
<table>
<thead>
<tr>
<th>question</th>
<th>PSS-10</th>
<th>PSS-4</th>
</tr>
</thead>
<tbody>
<tr>
<td>In the last month, how often have you been upset because of something that happened unexpectedly?</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt that you were unable to control the important things in your life?</td>
<td>✔   ✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt nervous and “stressed”?</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you dealt successfully with irritating life hassles?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt confident about your ability to handle your personal problems?</td>
<td>✔   ✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt that things were going your way?</td>
<td>✔   ✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you found that you could not cope with all the things that you had to do?</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you been able to control irritations in your life?</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt that you were on top of things?</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you been angered because of things that were outside of your control?</td>
<td>✔</td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you found yourself thinking about things that you have to accomplish?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you been able to control the way you spend your time?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?</td>
<td>✔   ✔</td>
<td></td>
</tr>
</tbody>
</table>
**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?

**NHANES**
Have you been under or felt you were under any strain, stress, or pressure? (DURING THE PAST MONTH)

**SEEK**
Do you often feel under extreme stress?
## Stress: Diagnoses

<table>
<thead>
<tr>
<th>Z73.3 Stress, not elsewhere classified</th>
<th>73595000-Stress</th>
<th>129891007-Caregiver role strain</th>
</tr>
</thead>
<tbody>
<tr>
<td>23085004 Increased stress</td>
<td>79365001-Decreased stress</td>
<td></td>
</tr>
<tr>
<td>224974006 Feeling stressed</td>
<td>422761005-Difficulty managing stress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>442347009-Emotional stress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55539008-Physical stress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>424582000-Stress overload</td>
<td></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.
Identify: Social Isolation and Loneliness Screening and Diagnosis Concepts
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.
Technology Update: May Connectathon
1. The SDOH Clinical Care IG is a framework Implementation Guide (IG) and supports multiple domains

2. The IG supports the following clinical activities
   • Assessments
   • Health Concerns / Problems
   • Goals
   • Interventions/Referrals
   • Consent
   • Aggregation for exchange/reporting

3. Completed January 2021 ballot as a Standard for Trial Use Level 1 (STU1)

Gravity FHIR SDOH Clinical Care IG Scope

1. Document SDOH data in conjunction with the patient encounter and define Health Concerns / Problems.
2. Patient and provider establish SDOH related goals.
3. Plan, communicate, and track related interventions to completion.
4. Measure outcomes.
5. Establish cohorts of patients with common SDOH characteristics for uses beyond the point of care (e.g., population health management, quality reporting, and risk adjustment/ risk stratification).
6. Manage patient consent

http://build.fhir.org/ig/HL7/fhir-sdoh-clinicalcare/
Enabling Survey Instruments

Survey

LOINC Panel (Survey Instruments)
  Include
  Health Concern Algorithm

Conversion to FHIR Questionnaire
  (enhanced NLM LHC-Forms Widget)

Establish complete survey as LOINC Components with LOINC Answer Lists
  Add calculation logic for Questionnaire

Build executable FHIR Questionnaire with logic to create LOINC-LOINC Observations and SNOMED-CT/ICD10-CM Health Concerns

Execute FHIR Questionnaire
  (enhanced NLM SDC Questionnaire App)

QuestionnaireResponse

Observation
  (survey question-answer pair)

Condition
  Health Concern

Value Sets – based on SDOH Domain Definitions

Condition
  Problem/ Diagnosis

Provider Evaluation

Goals
  Interventions

Other
  “clinical” findings

Note: Survey instruments typically generate Health Concerns with Gravity defined value sets
Enabling SDOH Interactions/Workflow (Initial exchanges)
Consent exchange for SDOH Clinical Care IG
Expanded workflow guidance for other actors

Interaction with a patient or caregiver may required alternative methods if internet access is not available
Interaction with a patient or caregiver may required alternative methods if internet access is not available.
### Results from the January SDOH Clinical Care IG Ballot

#### Results of ballot voting
- Affirmative 63
- Negative 30
- Abstain 56
- No Vote 43
- Total 192

The ballot met the **60%** threshold required to publish as an STU

#### Ballot comments submitted
- Total ballot comments 227
- Total negative comments 72
- Total affirmative comments 155

Note: Affirmative comments include typos, questions, suggestions, comments

#### Ballot Reconciliation Status
- The ballot reconciliation process started on 2/7/2021 and is expected to continue until the end of April.
- As of 4/15/2021 173 of the 227 ballot comments have dispositions - 54 to go

---

#### Technical Timeline

<table>
<thead>
<tr>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAN</td>
<td>FEB</td>
</tr>
<tr>
<td>Gravity FHIR IG Development</td>
<td>IG Ballot</td>
</tr>
<tr>
<td>IG Ballot Reconciliation</td>
<td>Reference Implementation Development</td>
</tr>
<tr>
<td>Reference Implementation Update</td>
<td>HL7 FHIR Connectathons</td>
</tr>
</tbody>
</table>

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### PILOTS

- **SDOH FHIR IG PILOTS**

---

**WE ARE HERE**

---
Discuss Exchanges between
Payers and Referral Platforms / CBOs
Payers and Providers and among Referral Platforms

- What resources need to be exchanged between each of the stakeholders
  - Assessments/Surveys
  - Health Concerns / Problems
  - Goals
  - Referrals (including status)
  - Interventions
  - Consent
  - Referral Directory

- Payer – Referral platform
- Payer – CBO
- Payer – Provider
- Payer – Patient or Caregiver
- Referral Platform – Payer
- Referral Platform – Provider
- Referral Platform – Referral Platform
- Referral Platform – Patient or Caregiver
What's Next?

• Work with NLM, Regenstrief and other stakeholders to advance tooling that supports the multi-domain Gravity IG, externally maintained value sets, and questionnaires

• Work with the community to establish the clinical content required for multiple SDOH domains

• Advance development of the reference implementation

• Incorporate dispositions from January 2021 ballot comments

• Please join us every Wednesday from 3 to 4 pm ET. Meeting details and agendas available here: https://confluence.hl7.org/display/GRAV/FHIR+IG+Work+Group+Meetings
Connectathon 27

- There is a Gravity SDOH exchange track as part of the HL7 Connectathon 27
- Register for the Connectathon at: http://www.hl7.org/events/fhir/connectathon/2021/05/
- Register for the specific Actor role(s) at: https://confluence.hl7.org/display/GRAV/Connectathon+Participation+Sign-Up

Specific Roles to test:
- Provider (Physician or Social Worker) / EHR
- Community Based Referral Organization (CBRO) / Platform
- Community Based Organization (CBO) / Application
- Survey Application / Platform
- Heath Information Exchange (HIE)
- Patient/Caregiver (Application)
- Payer / Payer HIT
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

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

- **Social Isolation**
  - Submit Social Isolation screening and diagnosis
    https://confluence.hl7.org/display/GRAV/Social+Isolation

- **IPV**
  - Submit IPV screening and diagnosis
    https://confluence.hl7.org/display/GRAV/Intimate+Partner+Violence

- **Elder Abuse**
  - Submit Elder Abuse screening and diagnosis
    https://confluence.hl7.org/display/GRAV/Elder+Abuse
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

: Gravity Project
: @thegravityproj