Consensus-driven Standards on Social Determinants of Health

Social Connection, Elder Abuse & Demographics: Goals and Interventions Concepts
Sep 16, 2021
Welcome

Thank you for joining the Gravity Project Community 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
Gravity Project Sponsorship

• The Gravity Project is currently seeking additional sponsors for our 2022 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
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Please submit questions and comments using the Webex chat feature.
Announcements
Announcements

- HL7 SDOH CC FHIR IG Public Meetings, Wednesdays 3pm – 4pm EST
- NEW ANSI Information Exchange for Human Services (IX4HS) Consensus Body
- PCORI Scoping Review and Evidence Map Report: Social Needs Intervention to Improve Health Outcomes
- Healthify- “Everything Payers Need to Know About the ICD-10-CM SDoH Code Expansion” - https://get.healthify.us/preparing-for-icd-10-cms-sdoh-code-expansion
- CyncHealth Annual Conference, Sep 20th-21st
- HHS Webinar on Cross-Sectoral Collaboration on SDOH, Sep 21st
- Congressional SDOH Caucus, comments due Sep 21st
- eHealth Exchange Innovation Grant Program, intent to apply due October 1st
- See more details regarding Gravity’s announcements here: https://confluence.hl7.org/pages/viewpage.action?pageId=91996855#TheGravityProject-Announcements
## SDOH Data Elements and Status

- **Links to spreadsheets with all current released and implementable code**
- **Updates after every terminology release (LOINC, SNOMED, ICD-10-CM)**

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<td>Diagnoses (SNOMED CT, ICD-10)</td>
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[https://confluence.hl7.org/display/GRAV/SDOH+Data+Elements+And+Status](https://confluence.hl7.org/display/GRAV/SDOH+Data+Elements+And+Status)
Project Schedule and Overview
Gravity Overview: 2021 Roadmap

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**Terminology**

- SDOH FHIR IG Pilots
- HL7 FHIR Connectathons
- Gravity FHIR IG Ballot
- Final updates/ IG Ready for publication
- IG STU2 (new functionality and feedback from testing activities)
- Reference Implementation Update
- Reference Implementation Update
- Reference Implementation Development
- IG Ballot Reconciliation
- CMS Connectathon

**Technical**

- Gravity FHIR IG Ballot
- LOINC Code Release (MAR/OCT)
- SNOMED Code Release (MAR/SEP)
- ICD-10 Code Release (APR/OCT)
- SDOH FHIR IG Pilots
- Goals/Interventions

**Pilots**

- Key

**Date:** 9/17/21
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
2022 ICD-10 CM Submission


Expert Update
• Z91.82 Personal history of military service and deployment
  • Feedback: best to press for our original separate terms submission
• We are in the process of developing a comment letter to submit regarding the proposal to both support the proposal as well as address several areas of concern that were presented at the last Gravity meeting. Comments are due by November 15, 2021 for proposals being considered for October 1, 2022 implementation
• Stay tuned for more information regarding how you can provide your comments to the Coordination and Maintenance committee.
2021 ICD-10-CM codes: Pathways to Use

STANDARDIZED SCREENING QUESTIONS

The Hunger Vital Sign™
“Within the past 12 months we worried whether our food would run out before we got money to buy more.”

“Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”

A STORY

Things have been really hard lately. My partner lost their job and I have not been able to work since I got sick. It’s hard to eat well. Luckily, the kids get food at school. But, sometimes we only have enough for one meal at home.”

Z59.41 Food Insecurity
STANDARDIZED SCREENING QUESTIONS

**PREPARE**

“Are you worried about losing your housing?”

**Housing Vital Sign™**

Over the last 12 mo:

“Was there a time when you were not able to pay the mortgage or rent on time?”

“How many places have you lived?”

“At any time were you homeless or living in shelter (including now)?”

**A STORY**

“I am so glad we have a roof over our heads now. Those months in the shelter this spring were hard on the kids. Virtual school was just impossible. I am scared it will not last though.”

**ICD-10-CM Codes**

- Z59.819 Housing instability, housed unspecified
- Z59.812 Housing instability, housed, homelessness in past 12 mo
2021 ICD-10-CM codes: Pathways to Use

STANDARDIZED SCREENING QUESTIONS

**PREPARE**
“What is your housing situation today?”

VA Homelessness Screening
“In the past two months, have you been living in stable housing that you own, rent, or stay in as part of a household?”

**A STORY**
“I’ve been sleeping on friend’s couches since April after my mom kicked me out. I just kind of move around so to no be trouble. Just trying to get through school right now.”

“I could not stay in the shelter any longer. But I’m ok out here. I just sleep in the park and then walk around all day.”

- Z59.00 Homelessness unspecified
- Z59.01 Sheltered homelessness
- Z59.02 Unsheltered homelessness
Terminology Roadmap

**Key**
- ▲ LOINC Code Release (MAR/OCT)
- ☆ SNOMED Code Release (MAR/SEP)
- ◆ ICD-10 Code Release (APR/OCT)
- ⬇ Goals/Interventions

**Pilots**
Terminology Pilots (Tier 1)

**Break**

**Inadequate Housing**

**Transportation Insecurity**

**Financial Insecurity**

**Unemployment**

**Education**

**Veterans**

**Social Connection**

**Stress**

**Material Hardship**

**Elder Abuse**

**Intimate Partner Violence (IPV)**

**WE ARE HERE**
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<th>Homework</th>
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<td><strong>Social Connection, Elder Abuse &amp; Demographics: Goals and Interventions Kickoff</strong></td>
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<tr>
<td>9/02</td>
<td><strong>Social Connection, Elder Abuse &amp; Demographics:</strong> Goals and Interventions Concepts</td>
<td><strong>Submit: Social Connection, Elder Abuse &amp; Demographics Programs and Professions</strong></td>
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<tr>
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<td><strong>Submit: Social Connection, Elder Abuse &amp; Demographics Programs and Professions</strong></td>
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<td><strong>Review: Social Connection, Elder Abuse &amp; Demographics Programs and Professions</strong></td>
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<td>Review</td>
<td></td>
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<tr>
<td></td>
<td><strong>IPV &amp; Stress:</strong> Goals and Interventions Concepts</td>
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</table>
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
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 Team

Director of Clinical Informatics: Dr Sarah DeSilvey, DNP, FNP-C, RN

Lead Terminology Consultant: Linda Hyde, RHIA

Community Liaison and Public Health Consultant: Asha Immanuelle, MAS, RN, PHM-C

Terminology Consultant: Katiya Shell, MPH, PMP
Community Terminology Development

We are here!
A reminder that in this phase all concepts are in process, the first goal is meaning, wording comes next
Social Connection: Goals and Interventions Concepts
Intervention and Goals Development

• The task for the next months is to build out the goals and interventions concepts for the screening and diagnoses only domains we addressed in the winter and spring
  • Less than a high school education
  • Veteran Status
  • Unemployed
  • Psychological Stress
  • Social Connection: Social Isolation, Loneliness, Lack of Social Support
  • Intimate Partner Violence
  • Elder Abuse
Intervention Development

• The core of interventions are the programs and professions critical to addressing the social risk at hand

• Key steps are taken to:
  • Align with federal reporting requirements and policy
  • Anticipate mapping to community taxonomies such as 211 LA

• All programs and professions are then integrated into the Gravity Project Interventions Structure
## Intervention Structure

<table>
<thead>
<tr>
<th>Gravity Term</th>
<th>Definitions</th>
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<tr>
<td>Assistance/Assisting</td>
<td>To give support or aid to; help</td>
</tr>
<tr>
<td>Coordination</td>
<td>Process of organizing activities and sharing information to improve effectiveness</td>
</tr>
<tr>
<td>Counseling</td>
<td>Psychosocial procedure that involves listening, reflecting, etc. to facilitate recognition of course of action / solution.</td>
</tr>
<tr>
<td>Education</td>
<td>Procedure that is synonymous with those activities such as teaching, demonstration, instruction, explanation, and advice that aim to increase knowledge and skills.</td>
</tr>
<tr>
<td>Evaluation of eligibility (for &lt;x&gt;)</td>
<td>Process of determining eligibility by evaluating evidence</td>
</tr>
<tr>
<td>Subtype of Evaluation</td>
<td></td>
</tr>
<tr>
<td>Evaluation/Assessment</td>
<td>Determination of a value, conclusion, or inference by evaluating evidence.</td>
</tr>
<tr>
<td>Provision</td>
<td>To supply/make available for use</td>
</tr>
<tr>
<td>Referral</td>
<td>The act of clinicians/providers sending or directing a patient to professionals and/or programs for services (e.g., evaluation, treatment, aid, information, etc.)</td>
</tr>
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</table>
Common Interventions

• Assessment for ________
• Assessment of barriers to ________ care plan
• Assessment of goals to achieve __________ (goal statement)
• Assessment of progress toward goals to achieve __________ (goal statement)
• Counsel for barriers achieve __________ (goal statement)
• Counseling for __________ care plan participation barriers
• Counseling for readiness to achieve __________ (goal statement)
• Counseling for readiness to implement __________ care plan
New General Interventions

• New Intervention Type
  • Coaching

• New Interventions
  • Assessment of communication barriers
  • Coordination of resources to address social needs
  • Coordination of service provision

• New Program
  • Community Paramedic Program
**Goals Development**

- The core of goals is representing the “desired for state” when one has a social need.
- In past build, the Gravity Project has taken the tack of building macro terms representing protective factors or the antithesis of the problem.
- When a domain has sub-domains “plateaus” that mark progress, we build these too.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Goal</th>
<th>Problem</th>
<th>Goal</th>
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<tr>
<td>Food Insecurity</td>
<td>Food Security</td>
<td>Homelessness</td>
<td>Stably Housed</td>
</tr>
<tr>
<td></td>
<td>Has adequate number of</td>
<td></td>
<td>Homeless, sleeping safely</td>
</tr>
<tr>
<td></td>
<td>meals and snacks daily</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Has adequate quality meals and snacks</td>
<td></td>
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</tbody>
</table>
Social Connection

- SMEs: Edward Garcia - Foundation for Social Connection; Dr Julianne Holt-Lunstad, Dr Matt Pantell, Dr. Carla Perissinotto
Goals Development

- Social Connection
- Social Isolation
- Lack of social support
- Loneliness
- Poor Relationship Quality

Adequate social connection
Participating socially
Adequate social support
Not lonely
Social Connection Interventions

- Working with Committee to End Social Isolation and Loneliness (CESIL) on interventions initiative in partnership with the Administration of Community Living (ACL)
- Looking ahead will include any Older Americans Act (OAA) food security programs that also address social isolation, such as home delivered meals
Elder Abuse: Goal and Intervention Concepts
Elder Abuse

• SMEs: Dr Ron Acierno, Dr Jason Burnett, Dr Zach Gassoumis, Dr Tony Rosen, Dr Jeffrey Hall, Dr David Burnes
Elder Abuse Interventions

• Our core set of SMEs are connecting us to further intervention experts on their multi-disciplinary teams and within their networks to ensure robust program build
• Given commonality with some intimate partner violence programs, we will ensure building synch.
## Goals Development

<table>
<thead>
<tr>
<th>Broad Domain</th>
<th>Specific Domain</th>
<th>Sub-Domain</th>
<th>Plateau Goal</th>
<th>Final Goal</th>
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<td>Feeling Safe</td>
<td>Resolution of Elder Abuse</td>
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<tr>
<td>Elder Abuse</td>
<td>Elder Physical</td>
<td>Adequate Safety from Elder Abuse</td>
<td>Resolution of Elder Physical Abuse</td>
<td></td>
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<tr>
<td>Elder Physical Abuse</td>
<td>Psychological</td>
<td>Adequate Safety from Elder</td>
<td>Resolution of Elder Psychological Abuse</td>
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<tr>
<td>Elder Psychological Abuse</td>
<td>Sexual Abuse</td>
<td>Adequate Safety from Elder Sexual</td>
<td>Resolution of Elder Sexual Abuse</td>
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<td>Elder Sexual Abuse</td>
<td>Elder Neglect</td>
<td>Resolution of Elder Neglect</td>
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<td>Elder Neglect</td>
<td>Elder Financial</td>
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<td>Elder Financial Exploitation</td>
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<td>Exploitation</td>
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Demographics:
Goals and Interventions
Concepts
Demographics Contacts: Less than a high school education, Veteran Status, Unemployment

- Veteran Status:
  - Dept of Veteran Affairs
- Less than a high school education, Unemployment:
Education Interventions

• Adult Learning Center (Program)
• Basic Skills Training (Program)
• Charitable Organizations (Program)
• Digital Literacy Program (Program)
• English as a Second Language (Program)
• General Educational Degree (GED) (Program)
• High School Completion (Program)
Education Goals

- High School Education
- General Educational Degree
- “Completion of...” ex Basic Skills Program
Employment Interventions

- Basic Skills Training (Program)
- Workforce Development (Program)
- Unemployment Insurance (Program)
- Vocational Rehabilitation (Program)
- Employment Legal Aid (Program)
- Fair Employment (Program)
- Career Fairs
- Charitable Organizations (Program)

- *Dependent Care Services (Program)* name in progress
- *Elder Care Services (Program)* name in progress

- Financial Counseling (Program)
- Financial Loan Counseling (Program)
- Health Insurance Continuation (Program)

Special Population Considerations To Come
Employment Goals

• Employed
  • (definition from the Bureau of Labor Statistics is broad)

• Has Unemployment Benefits

• “Completion of....” ex Basic Skills Program
Demographics - Interventions

Less than a high school education

Unemployment
Veteran Interventions

- Veteran Services Office
- GI Bill (Program)
- Military OneSource (Program)
- Native American Direct Loan (Program)
- Supportive Services for Veteran Families (SSVF) (Program)
- VA Homeless Veterans Community Employment Services (Program)
- VA Housing Assistance (Program)
- VA Loan (Program)
- VA Supportive Housing (HUD-VASH) (Program)
- Veterans Experiencing Homelessness (Program)
- Yellow Ribbon (Program)
Intervention Council

• Identifying programs and professions
• Solving puzzles
  • > Special population considerations for programs
    • ESL, Incarcerated Individuals, Differently Abled, Immigrants, Refugees, Foster Youth, Long Term Services and Supports (LTSS), Indigenous/Native American, SOGI, Race/Ethnicity

• Examples from past build food pantry
  also > FDPIR
Questions?

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USCDI v2

• ONC’s final USCDI version 2 includes the Gravity Project’s SDOH data elements for nationwide interoperable exchange!

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<th>New Data Element</th>
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<td>SDOH Assessment</td>
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<td>SDOH Goals</td>
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<td>Procedures</td>
<td>SDOH Interventions</td>
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<td>Problems</td>
<td>SDOH Problems/Health Concerns</td>
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• Thank you to the entire Gravity Community for this groundbreaking contribution!

• Considerable work remains now to implement, pilot, test, and iterate all that we successfully added to USCDI v2. For example:
  • Ongoing development and publication of SDOH value sets—Food Insecurity and Housing most complete to-date
  • SDOH Clinical Care IG just published by HL7—needs real-world testing, implementation, and iteration beyond FHIR Connectathons
  • Pilots and smartphone apps needed for integration in community and patient settings
Gravity Project’s plans for USCDI v2-v3

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<th>FHIR Implementation Guides (IG) / Use Cases (UC)</th>
<th>Data Elements</th>
<th>Domains*</th>
<th>Code Systems / Value Sets</th>
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| • SDOH Clinical Care IG  
• SDOH Social Care UC  
• SDOH Quality Measurement UC  
• SDOH Population Health & Research IG  
• SDOH Public Health UC  
• SDOH Directory Exchange UC | • Assessments  
• Problems/Health concerns  
• Goals  
• Interventions  
• Outcomes  
• Consent  
• Data aggregation  
• Billing  
• Health insurance | • Food insecurity  
• Housing instability  
• Homelessness  
• Inadequate housing  
• Transportation insecurity  
• Financial insecurity  
• Material hardship  
• Employment status  
• Educational attainment  
• Veteran status  
• Stress (general)  
• Social isolation  
• Intimate partner violence  
• Elder abuse  
• Food deserts  
• Neighborhood safety  
• Health literacy  
• Minority & Relationship stress  
• Racism/discrimination/bias (more work, beyond mid-2022) | • LOINC  
  ▪ Assessments  
  ▪ Goals  
  ▪ Outcomes (e.g., quality measures)  
• SNOMED-CT  
  ▪ Problems/Health concerns (clinical)  
  ▪ Goals  
  ▪ Interventions (clinical)  
• ICD-10-CM  
  ▪ Problems/Health concerns (billing)  
• CPT/HCPCS  
  ▪ Interventions (billing, where available) |

*List not exhaustive for 2022 and beyond. Domains are grounded in then Institute of Medicine’s “Capturing Social and Behavioral Domains in Electronic Health Records” (2014).
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.
Technical Roadmap

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Major Milestone – SDOH IG Published by HL7 as STU1

WE ARE HERE
HL7 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://hl7.org/fhir/us/sdoh-clinicalcare/STU1/
Enabling Survey Instruments

- **Survey**
  - LOINC Panel (Survey Instruments)
    - Include Health Concern Algorithm
  - Conversion to FHIR Questionnaire (enhanced NLM LHC-Forms Widget)
  - Execute FHIR Questionnaire (enhanced NLM SDC Questionnaire App)
- **QuestionnaireResponse**
- **Observation** (survey question-answer pair)
- **Condition Health Concern**
- **Value Sets** – based on SDOH Domain Definitions

- 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

**Note:** Survey instruments may produce Health Concerns with Gravity defined value sets
SDOH Interactions & Workflow

Coordination Platform (CP) – Typically CPs are based on referral platforms such as UniteUs, Aunt Bertha, NowPow, 211 (this is not an exhaustive list)

Community Based Organizations (CBO) -- Typically CBOs provide the services to address social risk and need (e.g. food pantry)

Both CPs and CBOs may provide a number of services that overlap and differ substantially by community.

Interaction with a patient or caregiver may require alternative methods if internet access is not available.
Example of Exchanging Consent

Diagram showing the flow of exchanging consent using FHIR API. The diagram includes Provider’s EHR, patients, consent, FHIR API, Business Associate, Coordination Platform (CP), Community Based Organization (CBO), and Exchange based on Consent.
September Connectathon Day 1 plan

1) Test Implementation Guide (IG) survey process
2) Test IG Closed loop referrals
September Connectathon Day 2 plan

1) Test patient/client application workflow (patient closed loop referral and patient reported outcomes)
2) Test CBO application workflow (multiple patients/clients)
3) Test automatic synchronization for applications with multiple referral sources (e.g., outlook style)
FHIR Connectathons

- CMS hosted a virtual Connectathon on July 21, 2021
  - The Gravity Project led the SDOH track (one day)
    - focus was on survey and closed loop referrals
  - Over 40 individuals participated:
    - https://confluence.hl7.org/display/FHIR/CMS2021-07+Gravity+SDOH+Exchange

- HL7 FHIR September 2021 Connectathon (September 14-15)
  - The Gravity Project led the SDOH track on both days
    - First day focused on survey process and closed loop referrals
    - Second day focused on
      - application synchronization with multiple referral sources
      - patient/client application workflow (patient closed loop referral and patient reported outcomes)
      - CBO application workflow (multiple patients/clients)
  - Over 40 individuals participated from 20 organizations
  - Track information: 2021-09 Gravity SDOH Exchange - FHIR - Confluence (hl7.org)
Participants for the September Gravity Track

- ACAP
- Adair County SB40
- Association for Community Affiliated Plans
- Blue Cross and Blue Shield of Minnesota
- CMS
- EMI Advisors
- Epic
- Eyes on FHIR
- Gevity
- HHS/HRSA/BPHC
- Highmark Health
- Mathematica
- MITRE Corporation
- MO Department of Mental Health Division of Developmental Disabilities
- Opala
- Telstra Health
- UAMS
- Unite Us
Questions?

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Community Homework & 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

• Social Connection
  • Submit Social Connection programs and professions
  
  https://confluence.hl7.org/display/GRAV/Social+Connection

• Elder Abuse
  • Submit Elder Abuse programs and professions
  
  https://confluence.hl7.org/display/GRAV/Elder+Abuse

• Demographics
  • Submit Demographics programs and professions
  
  https://confluence.hl7.org/display/GRAV/Demographics+Domain
Join the Gravity Project!

Learn More
https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project

• Public Collaborative meets bi-weekly on Thursdays 4:00 to 5:30pm ET
• SDOH FHIR IG Workgroup meets weekly Wednesdays 3:00 to 4:00pm ET

• Submit SDOH domain data elements: https://confluence.hl7.org/display/GRAV/Data+Element+Submission

Help us with Gravity Education & Outreach
Use Social Media handles to share or tag us to relevant information

@thegravityproj
https://www.linkedin.com/company/gravity-project

Help us find new sponsors and partners
Partner with us on development of blogs, manuscripts, dissemination materials
Gravity PMO Team

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