Welcome

Thank you for joining the **Gravity Project Workgroup meeting**!

Due to the large number of attendees, participants are **muted upon entry**. Please remain muted to avoid background noise.

- This call is being recorded; recording will be available on the Gravity Confluence page following the meeting.

You are encouraged to actively participate in the discussion using the Webex chat feature (bottom right of the Webex Meeting window).

**Please send chats to “Everyone.”**
Gravity Project Participation

- If you have not already done so, we invite you to officially join the project here: https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project

- If you want to check whether you have already signed up or if others from your organization have signed up, please review the existing membership here: 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
# Agenda

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Please submit questions and comments using the Webex chat feature.
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Happy Holidays! We look forward to talking to you all next year!
Consensus Voting Results

- Consensus Voting requires a quorum of Committed Members
  - Received votes from over 50% of 213 Committed Members
  - THANK YOU ALL FOR YOUR VOTES!

- Total votes: 108
  - Yes: 67
  - Yes with Comments: 19
  - Formal Objection: 0
  - Abstain: 22

- Currently reviewing comments and assigning dispositions
  - Acknowledged
  - Accepted
  - Considered, Not Accepted
Consensus Voting Comment Themes

- Adding back the dietitian CPT
- Revisiting verb tenses of the interventions for consistency
- Adding all program definitions to the definition page on Confluence
- Making technical definition changes
Next Steps

- Publish Consensus Approved Food Insecurity Data Set (target January 2020)
- Publish Voting Comments and Dispositions
- Develop draft Terminology and Coding Gaps Recommendations Report to inform FHIR IG development
- Build on Food Insecurity Data Set development to inform approach for Housing Instability and Transportation Access
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.
Year-End Review and Sponsors
Acknowledgement
## Gravity Project Roadmap (Phase 1)

**May - Jun 19**

**Task 1: Collaborative Launch**
- Project Charter Introduction and Coding Concept Orientation

**Jul - Aug 19**

**Task 2: Use Case Development & Functional Requirements**
- Use Case Development & Consensus (HL7 Cross-Paradigm Storyboard)

**Sep - Nov 19**

**Task 3: Data Set Identification By Domain**
- Food Insecurity Data Set Identification
- Housing Instability & Quality Data Set Identification
- Transportation Access Data Set Identification

**Dec 19 - Jan 20**

**Task 4: Coding Recommendations**
- Terminology & Code Harmonization Report Development

**Feb - May 20**

**Task 5: HL7 FHIR Integration**
- HL7 FHIR SDOH Implementation Guide Development

Kick-Off May 2, 2019
Gravity Project Accomplishments

- Consensus approved and published **Use Case Package:**
  https://confluence.hl7.org/display/GRAV/Gravity+Use+Case+Package
  - 7 Personas
  - 1 Patient Story
  - 3 Use Cases

- Received **19** separate submissions of **food insecurity data elements** from diverse stakeholder groups including food advocacy coalitions, food banks, health systems, EHR vendors, state agencies, R&D organizations, and CBOs:
  https://confluence.hl7.org/display/GRAV/Data+Element+Submission

- Adjudicated total of **423** food insecurity data elements across 4 clinical activities:
  - Screening: **203** Questions
  - Diagnosis: **60**
  - Goals: **13**
  - Interventions: **147**
Gravity Project Accomplishments

- Consensus approved **Food Insecurity Data Set:**
  https://confluence.hl7.org/display/GRAV/Food+Insecurity+Domain

- Initiated development of **SDOH FHIR Implementation Guide:**
  https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG

- Convened over **800** participants from May to December 2019

- Achieved total membership of **622** members:
  - **232** Committed Members
  - **390** Other Interested Party
Gravity Project Sponsorship

- We want to thank all our project sponsors
  - Project Founders
  - In-Kind Sponsors
  - HL7 FHIR Accelerator Start-Up Sponsors
  - HL7 FHIR Accelerator Founding Sponsors

- To express interest in sponsoring Gravity:
  - Click on the blue button
  - Or send email to: evelyn.gallego@emiadvisors.net
Project Founders and In-Kind Support

- Robert Wood Johnson Foundation
- siren
- UCSF
- Yale School of Nursing
- Academy of Nutrition and Dietetics
- AMA
- HL7 International
HL7 FHIR Accelerator Sponsors

siren

UCSF

AAFP

AmeriHealth Caritas

BlueCross BlueShield Association
FHIR IG Review Process
Antitrust Policy

ANSI Antitrust Policy

ANSI neither develops standards nor conducts certification programs but instead accredits standards developers and certification bodies under programs requiring adherence to principles of openness, voluntariness, due process and non-discrimination. ANSI, therefore, brings significant, procompetitive benefits to the standards and conformity assessment community.

ANSI nevertheless recognizes that it must not be a vehicle for individuals or organizations to reach unlawful agreements regarding prices, terms of sale, customers, or markets or engage in other aspects of anti-competitive behavior. ANSI’s policy, therefore, is to take all appropriate measures to comply with U.S. antitrust laws and foreign competition laws and ANSI expects the same from its members and volunteers when acting on behalf of ANSI.

Approved by the ANSI Board of Directors (May 22, 2014)
Gravity Project SDOH-CC IG Team

- Lisa Nelson, Technical Lead, MaxMD
- Monique Van Berkum, Modeling Lead, AMA
- Corey Smith, IG Project Coordination, AMA
- Matt Menning, AMA
- Jim Shalaby, Elimu Informatics
- Chen Liu, MaxMD
- Natasha Kreisle, MaxMD
- Matt Elrod, MaxMD
- Becky Gradl, Academy of Nutrition and Dietetics
- Linda Hyde, EMI Advisors
- Sarah DeSilvey, Food Insecurity Co-Lead, University of Vermont/ Yale School of Nursing
- Donna G. Pertel, Food Insecurity Co-Lead, Academy of Nutrition and Dietetics
Agenda

- Introduction to the HL7 FHIR standard and FHIR Implementation Guides
- Overview on Gravity FHIR IG Development
- Next Steps
Overview on FHIR and FHIR Implementation Guides
What is a FHIR?

Fast Healthcare Interoperability Resources

This is the current officially released version of FHIR, which is R4 (v4.0.0). For a full list of all versions, see the Directory of published versions.

Welcome to FHIR®

FHIR is a standard for health care data exchange, published by HL7®.

First time here?
See the executive summary, the developer's introduction, clinical introduction, or architect's introduction, and then the FHIR overview / roadmap & Timelines. See also the open license (and don't miss the full Table of Contents and the Community Credits or you can search this specification).

www.hl7.org/FHIR
What is a FHIR? For Gravity Community Members

- **RESTful Technology**
  - The next generation standard framework from HL7

- **Resources Designed Specifically for Healthcare**
  - Predefined data structures for sharing healthcare information in more standard and more meaningful ways

- **Recipes for Success**
  - Implementation guidance with Use Case driven examples that show implementers how to use FHIR to develop Application Interfaces (APIs) that allow data to flow in and out of existing applications
RESTful Technology

- Older Technology
  - HL7 Version 2 (V2)

- Newer Technology
  - HL7 Clinical Document Architecture (CDA)

- Newest Technology
  - HL7 Fast Healthcare Interoperability Resources (FHIR)
    - Combines the best features of V2 (messages) and CDA (documents)
    - Leverages the latest web standards for sharing data
    - Applies a tight focus on health information interoperability
Several hundred predefined healthcare-related data structures that make it easier and faster to implement Application Interfaces (FHIR APIs) that allow existing systems to share data in more standard, and more meaningful ways.

http://hl7.org/FHIR/resourcelist.html
FHIR Implementation Guides: How to Recipes!

Open, free, web-accessible specifications explaining how to create and use RESTful FHIR-based Application Interfaces (APIs) to support information sharing specific use cases.

FHIR Implementation Guide Registry
http://www.fhir.org/guides/registry/
Questions?

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Please send all chats to Everyone.
Overview on Gravity Project
SDOH FHIR IG Development
Setting the Stage for SDOH FHIR IG Development

Use Cases:
1. Gather SDOH info in Clinical Encounter
2. Track SDOH Interventions to Completion
3. Aggregate SDOH info

Master List:
- Screening
- Assessment/Diagnosis
- Goal
- Interventions (Planned, Requested, Completed)
A data element is a concept that has been defined specifically. When it is a coded concept, the definition uses a value set to describe the range of concepts relevant to the definition.

A value set contains a set of coded concepts that are a subset of codes from a Code System.

A code system is a set of concepts that are organized in a way that encompasses essential aspects of the concepts and assigned a code to represent that meaning.
If it isn’t documented, it never happened.
HL7 FHIR IG Development

- 3 Workstreams
  - Community Engagement/Education/Marketing
  - Connectathon Testing
  - FHIR IG Development/Balloting/Governance
Gravity Project Roadmap (Task 5: HL7 FHIR Integration)

- **Draft SDOH Implementation Guide Development for Q2 2020 Testing**
  - **Kick-off**
  - **Community Review**
  - **Community Review**
  - **Community Review**

- **Connection Testing**
  - HL7 Connectathon, Sydney, UC 1 (Feb)
  - HIMSS Demonstration, Orlando, UC 1 (Mar)
  - HL7 Connectathon, San Antonio, UC 1, 2, 3 (May)
  - HL7 Connectathon, Baltimore, UC 1, 2, 3 (Sept)

- **FHIR IG/Ballot**
  - UC1 V0.0.1 (Dec 12, 2019)
  - V0.0.2 (Jan 30, 2020)
  - V0.0.3 (Feb 28, 2020)
  - V0.0.4 (April 15, 2020)
  - V0.0.5 (June 15, 2020)
  - V1.0.0 (July 15, 2020)

- [https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG](https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG)
Incremental Process

- Learn more about FHIR and other FHIR IGs
  - Understand the emerging SDOH-CC IG, provide input on design choices

- Learn how to review and provide feedback
  - Review the SDOH-CC IG and contribute comments

- Learn how to participate in a Connectathon
  - Validate planned data element representation internally
  - Develop FHIR API client and/or server capabilities
  - Test the IG at Connectathons - confirm the recipe!
Committed to IG Quality

https://confluence.hl7.org/display/FHIR/3.+FHIR+IG+Quality+Criteria
Designed with Future Expansion in Mind

One Overarching IG for Common Shared Specifications for Consistency and Alignment

A set of IGs for the distinct Use Cases in different settings

SDOH Comm. Setting Use Cases
SDOH Clinical Care Use Cases
SDOH Research Use Cases
SDOH Quality Measure Use Cases
SDOH Risk Adjust. Use Cases
SDOH Pop/Pub Health Use Cases

Initial IG

SDOH Overarching Core Technical

Each IG defines Use Cases and Data Elements for the set of SDOH Domains covered by Gravity (e.g. Food Insecurity, Housing Stability and Quality, Transportation Access).

Implementation Guidance that is common to support multiple Use Cases is promoted into the Core Technical IG that includes overarching guidance for SDOH information exchange. This approach will promote alignment and reuse of consistent data representations and foster greater interoperability across settings.
Accelerating Adoption: Reuse + Innovation

- **Reuse:**
  - **US Core:** Patient, Practitioner, PractitionerRole, Organization, Coverage, Goal, Procedure, CarePlan
  - **Structured Data Capture (SDC):** Questionnaire, QuestionnaireResponse
  - **C-CDA on FHIR:** H&P, Progress Note, Discharge Summary, CCD, Referral Note, Consultation Note
  - **Da Vinci:** CDex (Clinical Data Exchange)
  - **Bidirectional Service Request (BSeR):** ServiceRequest
  - **(eCR) or FHIR Bulk Data**

- **New FHIR R4 Profiles for SDOH Content:**
  - Task, Bundle (Screen Patients), List, Consent
  - Food Insecurity Assessment Observation, Condition, Goal, Procedure, ServiceRequest, CarePlan
Implementation Guide Home Page

Contents:
- Description
- Acknowledgements
- Introduction
  - IG Purpose
  - Note to Reviewers and Balloters
  - How to Read This Guide
  - How to Use This Guide: Practical Guidance for Implementers
- Background
  - Gravity Project Overview
  - Gravity Project Challenge Statement
  - Scope
  - Out of Scope
  - Conceptual Framework
    - Data Modeling Framework
    - Role of the FHIR CarePlan Resource
- SDOH Content
  - Core Clinical Content
  - SDOH Food Insecurity Content
  - Other Content
- Personas and Patient Stories
- Use Cases
  - Use Case Actors
  - Data Sharing Transactions
- Profiles Used in this IG
  - SDOH Profiles Defined in this IG
  - Profiles Reused from US Core
  - Profiles Reused from SDC
  - Profiles Reused from CDex
  - Profiles Reused from BSeR
- Security and Consent
- Conformance Guidance
  - Conformance Verbs
  - Must Support
  - Missing Data
  - U.S. Core Data for Interoperability and 2015 Edition Common
  - Conformance to US Core Profiles
- Appendix A: FHIR Artifact Naming Conventions
- Appendix B: Placeholder Code Systems, Codes, and Value Sets
- Appendix C: Local Identifier Systems

https://trifolia-fhir-dev.lantanagroup.com/igs/lantana_prod_hapi_r4/SDOH-CC/

https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG

https://confluence.hl7.org/display/PHA/SDOH+IP
SDOH-CC IG: Unique Contributions

- Modular adoption of existing IGs
- Use of multiple FHIR IG development tools
- Placeholder Codes
- Use of Task-based workflows and FHIR messaging
- Integration of FHIR-based structured documents
- Design techniques that consider the cycle of care
FHIR IG Next Steps

- **Dec/Jan**: Community Feedback on initial FHIR IG Content (Due Jan 8th, send to GravityProject@emiadvisors.net)
- **Jan**: Begin Connectathon Participant Meetings
  - Get Ready for May 2020, Sept 2020 Connectathon Testing
- **Feb**: Community Consensus on encounter and patient information when making a referral
- **Feb**: Testing of Use Case 1 at Sydney Connetathon
- **March**: Next Gravity Community SDOH FHIR IG Overview

Sign Up for FHIR Connectathon Testing
Take the Doodle Poll

[https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG](https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG)
Working Group Meeting, Feb 4-7
- FHIR Connectathon, Feb 2-3
- Patient Care Track  
  - Focuses on SDOH Use Case 1, Gathering and Sharing Screening Data using Structured Data Capture, sharing clinical summaries that include SDOH information

SDOH Birds of a Feather Gathering, Feb 3rd
- Countries around the world come together to share information about SDOH projects in their realm
- Gravity Project Update
- Report-Out on Connectathon Activities
Questions?

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Please send all chats to Everyone.

Lisa Nelson: lnelson@max.md
Next Steps
Next Steps

- Enjoy the holiday season!
- Submit **housing instability** and **transportation access** data elements: https://confluence.hl7.org/display/GRAV/Data+Element+Submission
- Sign Up to join our 2020 Connectathon Events: https://confluence.hl7.org/display/GRAV/Connectathon+Testing
  - Looking for implementers across the health ecosystem—EHRs, HIEs, PHRs, digital health platforms, community-based services and referral platforms, system integrators
  - Ideal to have both clinical and non-clinical participants
- Stay tuned for the upcoming 2020 schedule
Thank you for participating in this national consensus-building process.

Additional questions? Contact: gravityproject@emiadvisors.net