

# The Gravity Project



Housing Data Concept Review

May 14, 2020



# Welcome

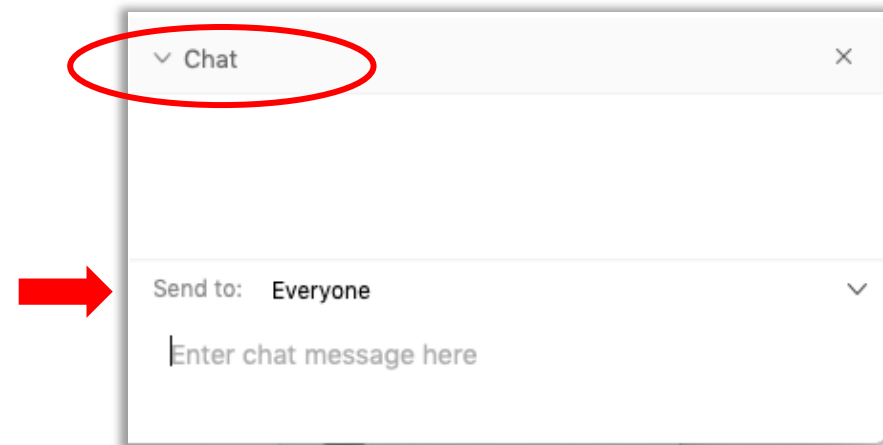
Thank you for joining the **Gravity Project** Workgroup meeting!

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 and In-Kind Support To-Date



The University of Vermont  
LARNER COLLEGE OF MEDICINE



Yale School of Nursing

sirenUCSF



BlueCross  
BlueShield  
Association

eat  
right.

Academy of  
Nutrition  
and Dietetics



AMA

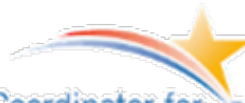
AmeriHealth.  
Caritas



UnitedHealthcare

HIGHMARK

The Office of the National Coordinator for  
Health Information Technology



juxly

newwave

Humana.

lyft

# Gravity Project Sponsorship

- The Gravity Project is currently seeking additional sponsors for our 2020 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](mailto:GravityProject@emiadvisors.net) or visit <https://confluence.hl7.org/display/GRAV/Gravity+Project+Sponsors>

# Agenda

Topic	Presenter
Announcements	Lynette
Project Roadmap and Upcoming Schedule	Lynette
Housing Domain Data Concepts Submission Status Update	Linda
Debrief: Diagnoses	Sarah
Discussion: Interventions: Professions, Agencies and Organizations, Provisions	Sarah
Community Homework and Next Steps	Sarah

Please submit questions and comments using the Webex chat feature.

# Track HL7 May Virtual Connectathon Progress

- The May HL7 Virtual Connectathon 24 is happening right now!
  - General information
  - <https://confluence.hl7.org/display/FHIR/2020-05+Connectathon+24>
  - **Track Connectathon progress and notes**  
<https://docs.google.com/spreadsheets/d/1Ww4ctlSToRRavdsviKqVjFXV3PJSVSOzTgXOn0PnmW4/edit>



# Upcoming Connectathon (Testing) Events

- NEW! Care Coordination Track (includes Gravity Use Case)  
<https://confluence.hl7.org/display/FHIR/2020-05+Care+Coordination+Track>
- Upcoming Virtual Connectathon
  - MiHIN InterOpathon  
<https://confluence.hl7.org/display/GRAV/2020-05-28+MiHIN+InterOpathon+Virtual>

# Gravity and COVID-19 Collaboration Site

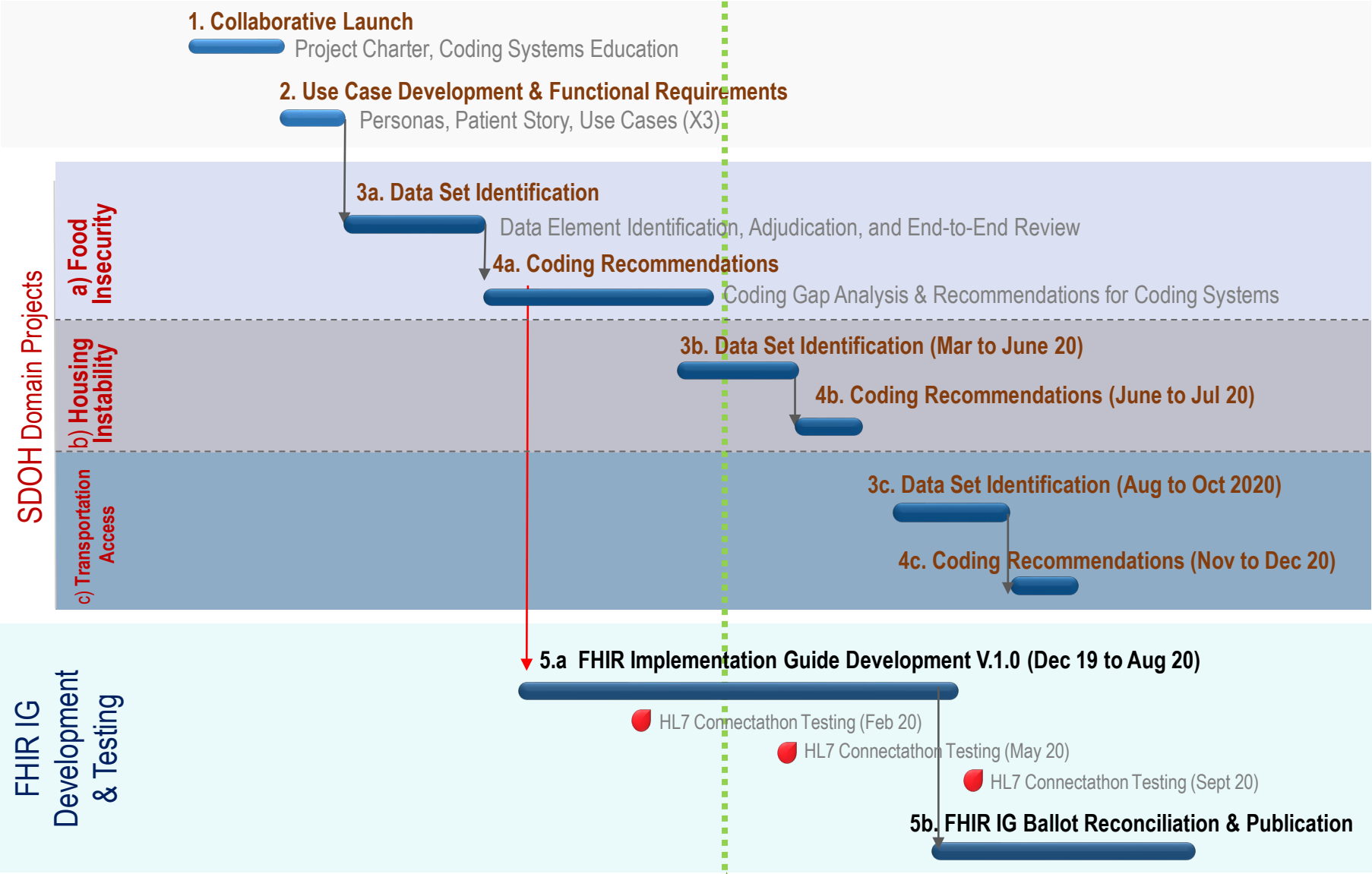
- Visit and contribute to the new Gravity Project SDOH COVID-19 Response page:  
<https://confluence.hl7.org/display/GRAV/Gravity+SDOH+COVID-19+Response+page>
  - No login is required to view or download the blog
  - An HL7 Confluence login is required to post on the blog
    - Instructions for requesting a login:  
<https://jira.hl7.org/secure/CreateInfo.jspa?pid=11200&issuetype=11300>

# Gravity Project Schedule and Activities (Feb through May)

Date	Gravity WG Meeting Tasks	Homework
02/13	<i>Review: Consensus Voting and Dispositions Results</i> <i>Review: Data Element Concept Submissions To-Date</i> <i>Overview: Coding Work</i>	<i>Submit: Housing Instability Data Elements</i> <i>Review: Coding Systems</i>
03/19	<b>Housing Instability Domain Kickoff</b> <b>SDOH FHIR IG and Connectathon Updates</b>	<i>Submit: Housing Instability Data Elements</i>
04/02	<i>Review: Housing Instability Data Element Concepts</i> <b>SDOH FHIR IG and Connectathon Updates</b>	<i>Submit: Housing Instability Data Elements</i>
04/16	<i>Review: Housing Instability Data Element Concepts</i> <b>SDOH FHIR IG and Connectathon Updates</b>	<i>Submit: Housing Instability Data Elements</i>
04/30	<i>Review: Housing Instability Data Element Concepts</i> <b>SDOH FHIR IG and Connectathon Updates</b>	<b>Housing Instability Data Element Submission</b> <b>Deadline May 1</b>
05/14	<i>Review: Housing Instability Data Element Concepts</i> <b>SDOH FHIR IG and Connectathon Updates</b>	
05/28	<i>Review: Housing Instability Data Element Concepts</i> <i>Overview: End-to-End Review Process</i> <b>SDOH FHIR IG and Connectathon Updates</b>	



# Gravity Timeline (High Level)



SDOH Domain Projects

a) Food Insecurity  
b) Housing Instability  
c) Transportation Access

FHIR IG Development & Testing

# Housing Domain Data Concepts Submission Status Update

# Data Element Submissions Summary

**Total Submissions Received = 13**

Screening Tool/ Questions	Diagnosis	Goal	Intervention
29 Tools / 360 Questions	15	10	74

**Submissions Reviewed = 9**

Disposition	Disposition	Disposition	Disposition
Add – 13 Tools/115 Questions	Add – 7	Add – 3	SNOMED Add – 27 CPT/HCPCS – Add – 3
Duplicates – 2 Tools/4 Questions	Duplicates – 1	Duplicate – 0	Duplicates – 0 Synonymous – 0
Do Not Add – 4 Tools/152 Questions	Do Not Add – 4	Do Not Add – 0	Do Not Add – 5
Park – 8 Tools/43 Questions	Park – 2	Park – 0	Park – 5
Hold – 2 Tools/3 Questions	Hold – 0	Hold – 3	Hold – 4

**Total Submissions Returned\* = 4**

\* Adjudication completed and file returned to submitter with dispositions

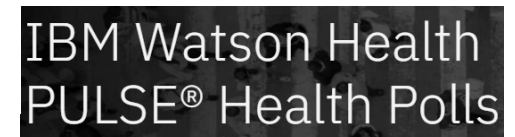
# Adjudication Dispositions

Adjudication Status	Definition	Disposition
Duplicate Data Element	Conceptually similar, same code(s), same answers for questions	Submitter will be added as contributor for the data element in the Master file
Add Data Element	In scope, fit for purpose, not too broad and not too narrow	Data element will be added to the Master file
Do Not Add - Park	Not in scope for this domain but may be useful for another Gravity Domain (housing insecurity, transportation)	Will be added to a Parking File for future review
Do Not Add	Not in scope for this domain or another Gravity domain, not well formed, not fit for purpose	Will be noted on adjudication file with reason
On-Hold (Info Needed)	Need additional clarification from submitter	Will be noted on adjudication file with additional information needed
Withdrawn	After discussion between submitter and SMEs, concept was withdrawn by submitter	Will be noted on adjudication file with reason

# Data Element Submitters



**Washington Association for Community Health**  
Community Health Centers • Advancing Quality Care for All





# How to Review Housing Instability Adjudicated Data Submissions (Master List)

<https://confluence.hl7.org/display/GRAV/Housing+Instability+and+Homelessness+Domain>

- The Housing Master List with adjudicated data elements will be published on Confluence page **following each community meeting**

# Debrief: Housing Diagnoses Codes

# Housing Insecurity – Domain and Sub-Domains

## Housing Insecurity

Homelessness – History of Homelessness – Overcrowding –  
Doubling Up – Housing Instability – Multiple Moves – At Risk  
of Eviction – Behind on Rent – Inadequate Housing

Now, can we screen for these?  
And how to organize them?

# Mapping Screeners to Sub-Domains

- American Housing Survey  
2019 Housing Insecurity  
Supplement (All)
- Children's HealthWatch Survey
- PRAPARE
- AHC/Naruzzaman et al.
- VA HOMELESS
- WellRx
- WeCare
- Health Leads

Homelessness  
History of Homelessness  
Overcrowding  
Doubling Up  
Multiple Moves  
At Risk for Eviction  
Behind on Rent  
Inadequate Housing

# Housing Insecurity- Domain and Sub-domains

- Housing Insecurity
  - Housing Instability
    - Behind on Rent
    - Multiple Moves
    - At Risk for Eviction
    - (Doubled Up?)
    - (Overcrowding?)
    - (History of Homelessness?)
  - Homelessness
    - (Current/Literal) Homelessness
  - (Overcrowding)
  - Inadequate Housing
    - (Overcrowding)



*But what is already here?*

# Diagnoses- Current State

- Z59 Problems related to housing and economic circumstances
  - Z59.0 Homelessness
  - Z59.1 Inadequate Housing
  - Z59.2 Discord with neighbors, lodgers, and landlord
  - Z59.3 Problems related to living in a residential institution
  - *Z59.4 Lack of adequate food and safe drinking water*
  - *Z59.5 Extreme poverty*
  - *Z59.6 Low income*
  - *Z59.7 Insufficient social insurance and welfare support*
  - Z59.9 Other problems related to housing and economic circumstances

# Diagnoses

ICD CODE	SNOMED
Z59.0 Homelessness	Homeless
	Housing Lack
	Homeless family
	Homeless single person
	Lives in squat



# Diagnoses

ICD CODE	SNOMED
Z59.1 Inadequate Housing	Housing unsuited to needs
	Overcrowded in house
	Lack of space in house
	Lack of space for privacy in accommodation
	Lives in damp conditions
	Damp in house
	Lack of heat in house
	Lives in sheltered housing
	Housing contains exposed wiring
	Housing contains unsafe equipment
	Housing contains unsafe appliance
	Housing structurally unsound
	Living in house without electricity
	Living in house with technical defects

# Diagnoses

ICD CODE	SNOMED
Z59.2 Discord with neighbors, lodgers, and landlord	Discord with neighbors, lodgers, and landlord
	Problem with neighbors
	Discord with lodgers
	Discord with landlord

# Diagnoses

ICD CODE	SNOMED
Z59.3 Problems related to living in a residential institution	Problems related to living in a residential institution

# Diagnoses

ICD CODE	SNOMED
Z59.9 Other problems related to housing and economic circumstances	On urgent housing list
	On housing list
	Awaiting housing improvement
	On waiting list for accommodation
	Eviction notice served
	Eviction from dwelling

# Diagnoses

ICD CODE	SNOMED
Z76.89 Persons encountering health services in other specified circumstances	Unsafe stairs in house
R45.82 Worries	Feels at risk of crime in the neighborhood

# Notably absent

But perhaps should be there....

- History of homelessness
- Behind on rent

Because they cross other domains

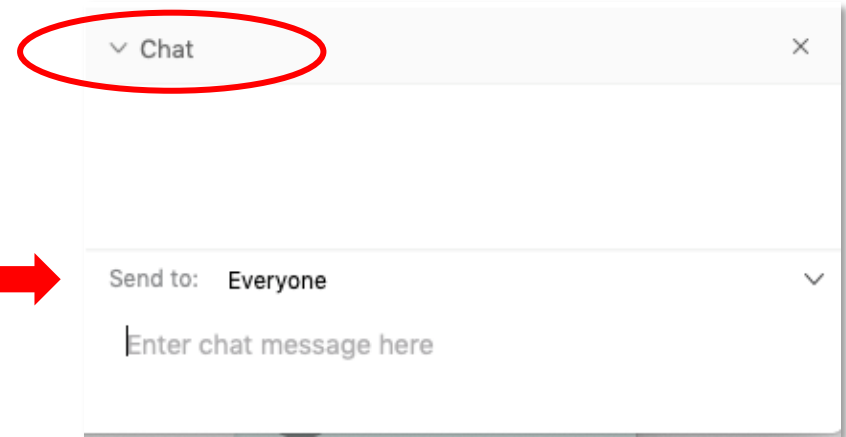
- IPV

ICD	SNOMED
Z91.410 Personal history of adult physical and sexual abuse	History of domestic violence
T74.11x Adult physical abuse, confirmed	Domestic violence
Z91.89 Other specified personal risk factors, not elsewhere classified	At risk for violence

# Questions?

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Please send all chats to Everyone.



# Discussion: Interventions Programs and Agencies



# Interventions: Professions, Agencies, and Organizations

- Professions
  - Case manager
  - Care manager
  - Social worker
  - Community health worker
- Agencies/Organizations
  - Housing agency
  - Medical-legal partnership
  - Legal aid
  - Community action agency
  - Benefit enrollment assistance
  - Coordinated Entry
- Housing voucher
- Provisions

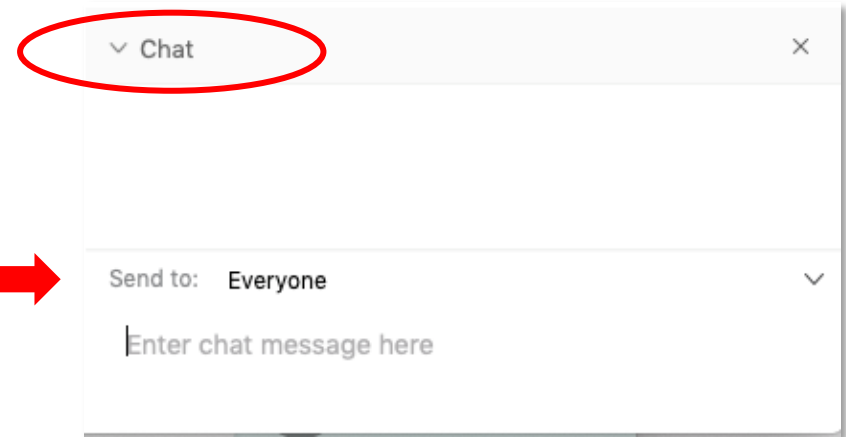
# HUD Housing Program Types

- Emergency Shelter
- Transitional Housing
- Day Shelter
- Safe Haven
- Rapid-Rehousing
- Permanent Supportive Housing
- Housing with Services
- Housing Only
- *Others?*
  - *(healthcare funded temporary emergency housing?)*

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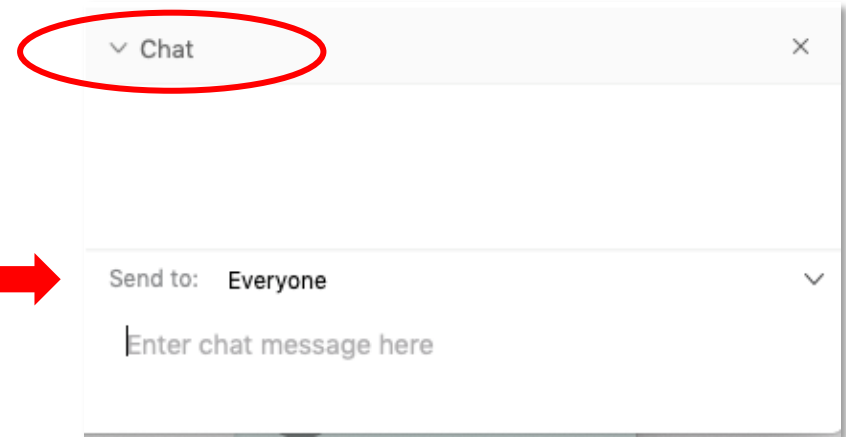
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# Community Homework and Next Steps

# Review Past Meeting Materials

- View materials and recordings on Gravity Project Materials Confluence page
  - <https://confluence.hl7.org/display/GRAV/The+Gravity+Project+Materials>

# Next Steps

- 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**
- Join the Gravity Project as a Committed Member or Other Interested Party:
  - <https://confluence.hl7.org/display/GRAV/Join+the+Gravity+Project>

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

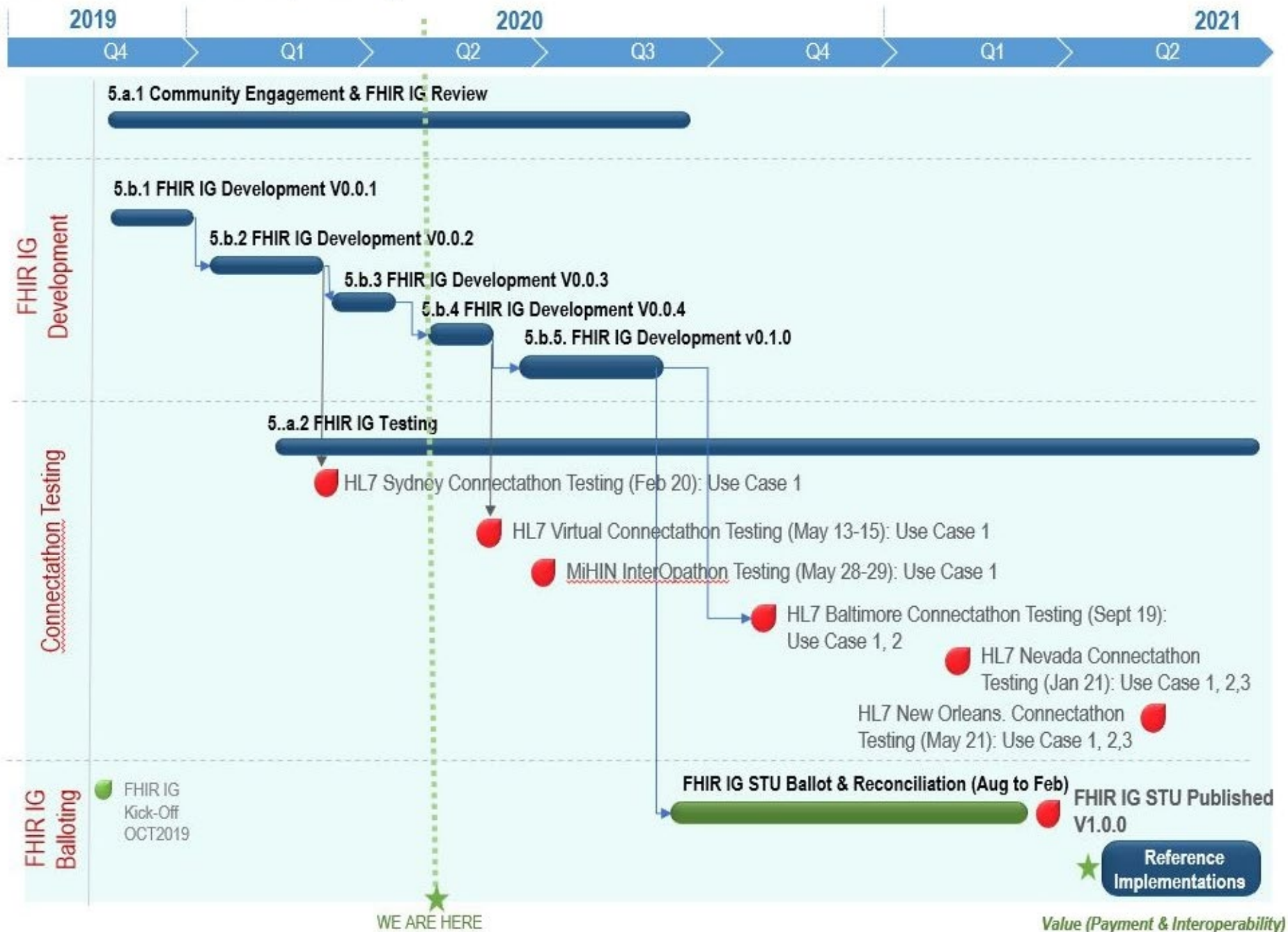
Additional questions? Contact: [gravityproject@emiadvisors.net](mailto:gravityproject@emiadvisors.net)



# Background Slides

# SDOH FHIR IG and Connectathon Updates

# FHIR IG Timeline (Detail)



# 2020 Connectathons

- Detroit MiHIN Interopathon – May 28-29
  - **Virtual Event**
- Baltimore, MD HL7 Connectathon – Sept 19-20
  - Stay tuned
- <https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+Connectathons>

# 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>

# FHIR IG Updates

- V0.0.3 is now available – Quick Links Access
  - <http://build.fhir.org/ig/HL7/sdoh-cc/>
- V0.0.4 – end of April (end of day 5/1)
  - Most likely will not have Use Case 2 materials included
  - Use Case 2 guidance is being developed in a separate artifact that will be merged into version V0.0.5

# Use Case 2 – Review of Content Requirements Work

2. Document and track SDOH related interventions to completion.

- Consent Information
- Patient Information
- Referral Information
  - Who is making the Referral
  - Who is receiving the Referral
  - What type of services are requested
- Supporting Information
  - Other Information that may inform the Referral Process
  - Screening Information, Clinical Assessment, other care planning information
- Feedback Information
  - Enrollment Information and Enrollment Status
  - Other care planning information
  - Services provided

Spreadsheet for review/comment, introduced at the April 30<sup>th</sup> meeting

# Next Steps for FHIR IG Development and Testing

- Connectathon Planning
  - System Participants
  - Human Participants

## Express Interest:

<https://confluence.hl7.org/display/GRAV/Connectathon+Participation+Sign-Up>

## Register for Entrance to the Event:

<https://www.hl7.org/events/fhir/connectathon/2020/05/>

## Review Recorded Prep Session:

<https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+Connectathon+Participant+Meetings>