The Gravity Project Multi-Domain ICD-10-CM Submission

A Presentation to the ICD-10-CM Coordination and Maintenance Committee, March 10th, 2021

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Gravity Director Clinical Informatics

The Gravity Project

The Gravity Project…

Launched 5/2019

Goal- Develop consensus-driven data standards to support use and exchange of social determinants of health (SDOH) data within the health care sectors and between the health care sector and other sectors.

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Gravity Project Management Office (PMO)

- **Evelyn Gallego,** Program Manager, EMI Advisors

- **Carrie Lousberg**, Project Manager, EMI Advisors

- **Mark Savage,** SDOH Policy Lead**,** USCF/SIREN

- **Sarah DeSilvey,** Clinical Informatics Director, University of Vermont

- **Bob Dieterle,** Technical Director, EnableCare
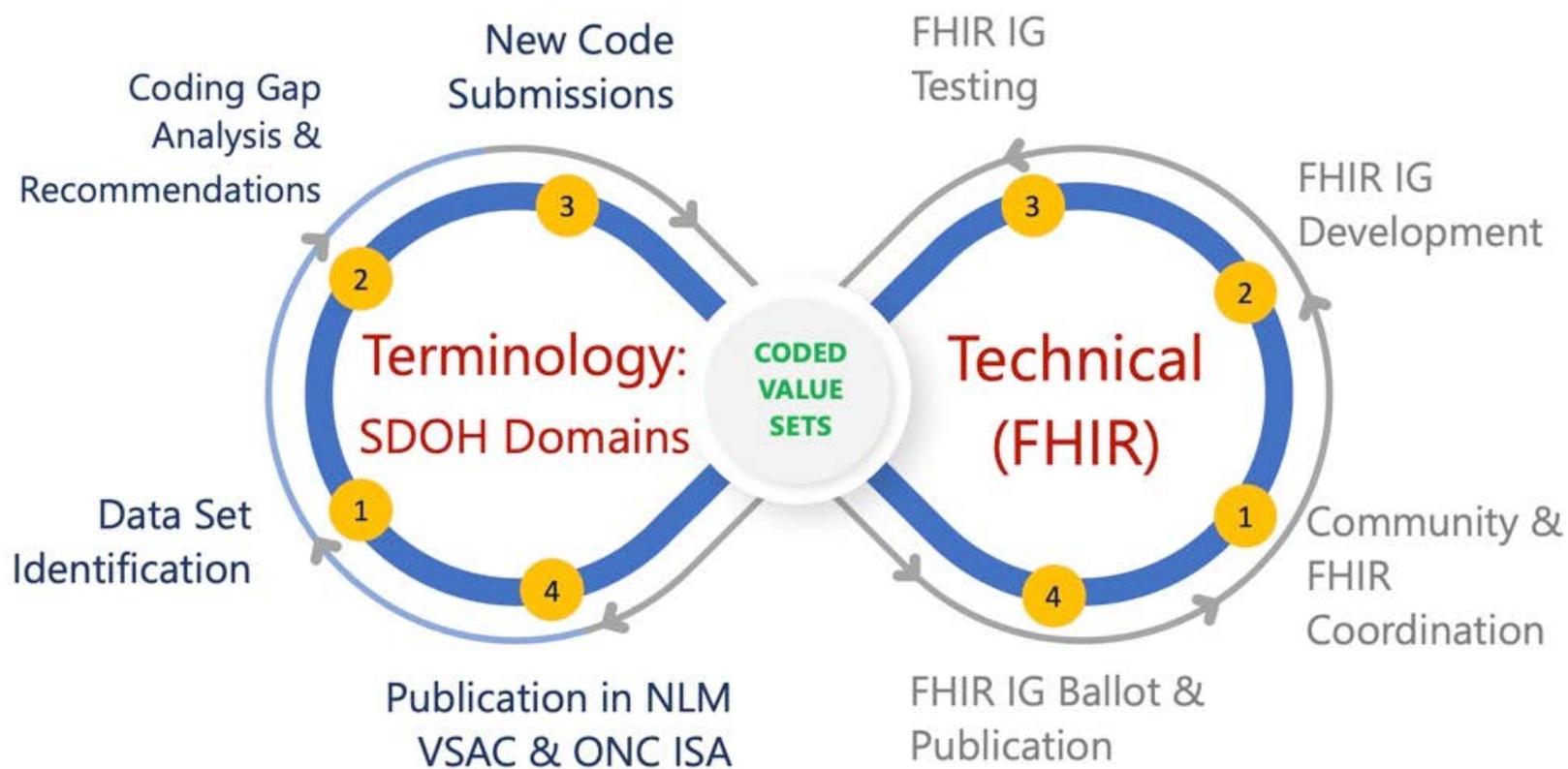
Gravity Use Cases

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

Gravity Overview: Integration of Two Streams

Executive Committee Members

- Payers:
  - Deborah Donovan, Highmark
  - Andrea Gelzer, AmeriHealth
  - Sagran Moodley, UnitedHealthcare
- Providers
  - Mark Carrozza, AAFP
  - Tom Gianulli, AMA
  - Michelle Proser, NACHC
- HIT experts and vendors
  - Aaron Seib, Onyx
- HL7: Walter Suarez
- SIREN: Caroline Fichtenberg

- Patients:
  - Erin Mackay, National Partnership for Women & Families
  - Lina Walker, AARP
- Social Service Organizations
  - Rachel Krausman, United Way/211
  - Daniel Stein, National Interoperability Collaborative
- Federal government
  - Kelly Cronin, HHS/ACL
  - Sam Meklir, HHS/ONC

Strategic Advisory Committee (SAC) Members

Health IT Vendors

- Anisha Abdul-Ali, *OCHIN*
- Joy Doll, *Nebraska Health Information Initiative*
- Howard Follis, Juxly
- Andrew Hamilton, *Alliance Chicago*
- David Kendrick, *MyHealth Access Network/SHIEC*
- Susheel Ladwa, *Onyx*

Federal Agencies

- Chris Dymek, *Agency for Healthcare Research and Quality*
- Adi V. Gundlapalli, Tim Carney, Jennifer Wiltz, *Centers for Disease Control and Prevention*
- Robert S. Tagalicod, *Health and Human Services (HHS) Office of the Chief Information Security Officer*
- Jawanna Henry, Albert (Al) Taylor, HHS *Office of the National Coordinator for Health Information Technology*
- William (Bill) Winfrey, *Centers for Medicare & Medicaid Services*

Payers

- Jennifer Babcock, *Association for Community Affiliated Plans*
- Shannon Cosgrove, *Blue Shield of California*
- Deborah Donovan, *Highmark*
- Andrea Gelzer, *AmeriHealth Caritas*
- John Lumpkin, *BCBS North Carolina*
- Sagran Moodley, *United Health Care*
- Andrew Renda, *Humana*
- Amit Shah, *GuideWell (BCBS FL)*
- Joanna Thomas, *Arkansas BlueCross BlueShield*
- Carlos Villerral, *Blue Cross Blue Shield Institute*

Providers

- Nancy Myers, *American Hospital Association*
- Julia Skapik, *National Association of Community Health Centers*
- Corey Smith, *American Medical Association*

Patients, Community-Based Organizations, and other Stakeholders

- Jane Pirsig Anderson, *Alliance for Strong Families and Communities*
- Courtney Baldridge, *National Association of Area Agencies on Aging*
- Keri Christensen, *National Committee for Quality Assurance*
- Melissa Moorehead, *Data Across Sectors for Health/ All In*
- Margo Edmunds, *AcademyHealth*
- Jennifer Sisto Gall, *Lyft*
- Hong Truong, *California Health Care Foundation (CHCF)*

Public Collaboration

Gravity has convened over **1,700+** participants from across the health and human services ecosystem:

- clinical provider groups
- community-based organizations
- standards development organizations,
- federal and state government
- payers
- technology vendors

Public Calls 4-5:30 EST every other Thursday

https://confluence.hl7.org/pages/viewpage.action?pageId=4689
2669#JointheGravityProject-GravityProjectMembershipList

Terminology Team Collaborative Structure

- Clinical and Process Insight
- Terminology and Taxonomy Insight
- Literature and Evidence
- Risk r/t Health Outcomes
- Practical Fit

Subject Matter Experts

Food Insecurity

- Dona Pertel- American Academy of Nutrition and Dietetics

- Mathew Rabbitt- HUD

Housing Insecurity

- Allison Bovel- Ammon- Children's HealthWatch

- Richard Sheward- Children's HealthWatch

- Susan Walker- HMIS Analyst

- George Carter- HUD

Transportation Insecurity

- Jennifer Sisto-Gall – Lyft

- Alexandra King- Community Transportation Association of America

- Dr Ipek Sener- Texas A&M Transportation Institute

- Michael Adelberg – Research Lead, Medical Transportation Access Coalition
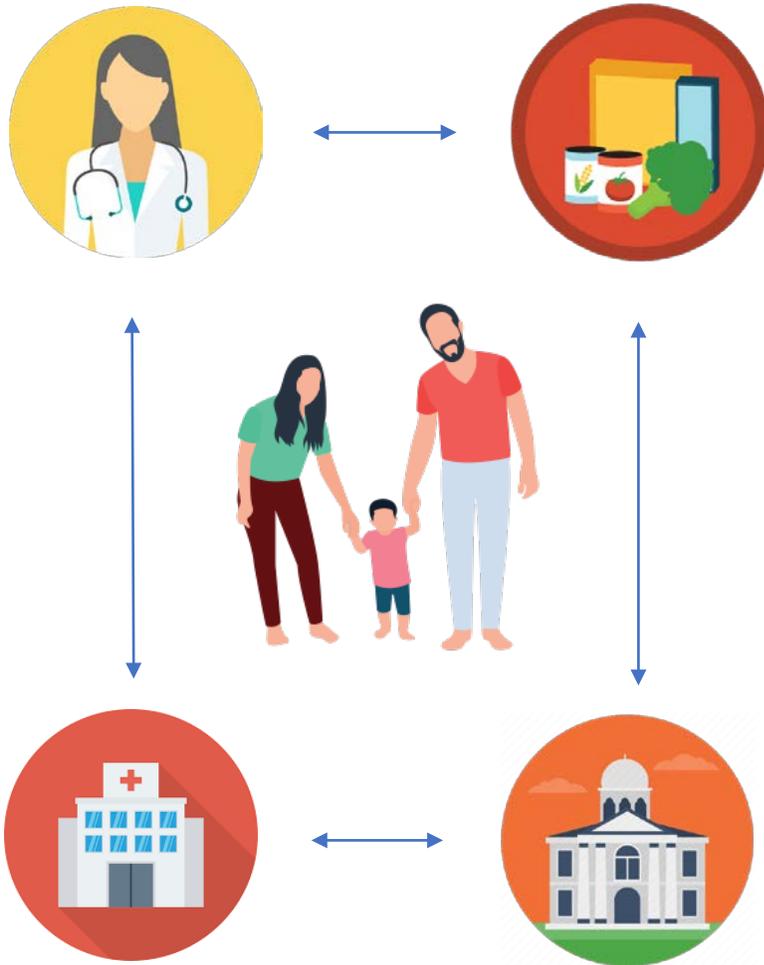
Financial Insecurity

- Dr Adam Schickedanz- UCLA Health

- Dr Jeffrey Colvin- U Missouri/Kansas

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Collaborative Perspectives on Data

What kinds of data does the provider need to care for their patients?

the hospital need to study the effects of provider interventions?

the community-based org need to address the need of their clients?

the state need to plan for population health needs?

And what are the principles we need to consider to keep patients at the center?

Clinical Significance of the Submission

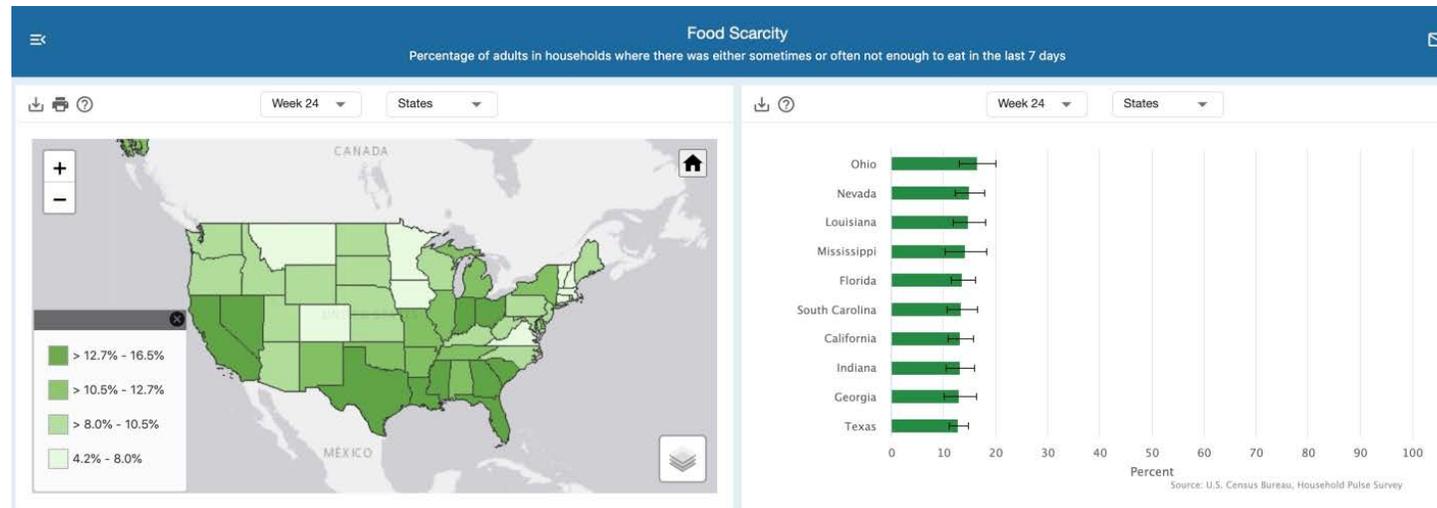# Clinical Significance of the Submission: Approach

- ⭐ Healthy People 2030 Objective

- Brief review of literature on associated health risks

- Brief patient story

Clinical Significance of the Submission: Food Insecurity

- ## Food Insecurity ⭐
  - Increased rates of each of poor child and maternal general and mental health and increased rates of the CDC 10 diseases of concern [1]
  - *"Patient with COPD and DM- readmission driven by inability to follow recommended diet after discharge"*
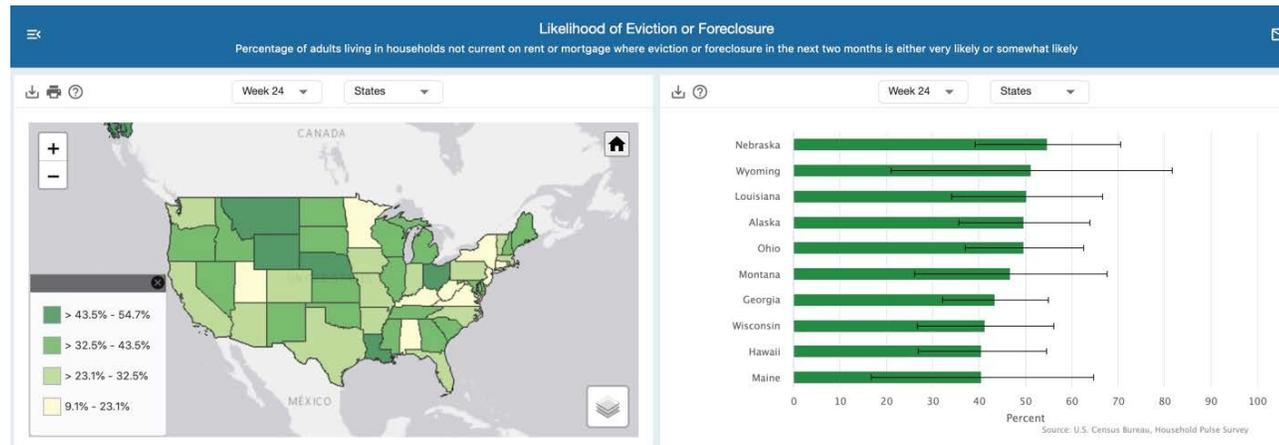

US Census Pulse Survey, Accessed 2/28/21

Clinical Significance of the Submission: Housing Instability

- Housing Instability ⭐
  - Including: Housing Cost Burden, Risk of Eviction, Multiple Moves, etc
  - Increased rates of poor maternal mental and poor general health and child developmental risk [2,3]
  - *"Mom and three young kids- struggling with depression, behind on rent and at risk of eviction"*

US Census Pulse Survey, Accessed 2/28/21

Clinical Significance of the Submission: Homelessness and Transportation Insecurity

Healthy People 2030 Objective

- ## Homelessness ⭐
  - Key point is ***stratification into sheltered and unsheltered to aid in necessary chronic and acute care and discharge planning***

- ## Transportation Insecurity
  - Delayed or missed care, barriers to care plan, increased care coordination requirements [4]

Clinical Significance of the Submission: Financial Insecurity and Material Hardship

- ## Financial Insecurity, NEC
    - Including Financial Strain, bankruptcy, and burdensome debt
    - Increased poor mental and general health
    - Indicator of other economic SDoH

- ## Material Hardship, NEC
    - Including inability to obtain clothing, utilities, childcare, and other basic needs
    - *Able to apply to digital inequities leading to poor healthcare/education access during the pandemic*

Clinical Significance of the Submission: Physical Environment and Health

- Z58 Problems related to the physical environment ★
  - Healthy People 2030 Goal: Promote healthier environments to improve health.
  - Z58.6 Inadequate drinking-water supply ★
    - Healthy People 2030 Goal: Increase the proportion of people whose water supply meets Safe Drinking Water Act regulations

Clinical Significance of the Submission: Education, and Veterans

- Less than a high school diploma ⭐
  - Decreased life expectancy and increased rates of chronic disease and poor reported health[5]

- Personal history of military service
  - *Previous concept did not apply to Veterans, only deployment*

References:

1. Christian A. Gregory, Alisha Coleman-Jensen. Food Insecurity, Chronic Disease, and Health Among Working-Age Adults, ERR-235, U.S. Department of Agriculture, Economic Research Service, July 2017

2. Chilton M, Cook JT, Geppert J, Ettinger de Cuba S, Heeren T, Coleman S, Rose-Jacobs R, Frank DA. US Housing insecurity and the health of very young children. Am J Public Health. 2011 Aug;101(8):1508-14. doi: 10.2105/AJPH.2011.300139.

3. University of Wisconsin Population Health Institute. County Health Rankings Key Findings 2019

4. Health Research & Educational Trust. (2017, November). Social determinants of health series: Transportation and the role of hospitals. Chicago, IL: Health Research & Educational Trust. Accessed at www.aha.org/transportation

5. Virginia Commonwealth University Center on Society and Health (2015) Education: It Matters More to Health than Ever Before, Accessed on 3/1/221

Contact Us

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 @thegravityproj

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