siren
Social Interventions Research & Evaluation Network

• National research and dissemination initiative
• Housed at the University of California, San Francisco
• Founded in June 2016
• Focused on building and disseminating evidence about health care sector strategies to improve social conditions.

https://www.sirenetwork.ucsf.edu
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siren
Social Interventions Research & Evaluation Network

Catalyze & conduct high quality research

Collect & disseminate research findings

Provide evaluation, research & analytics consultation services

https://www.sirenetwork.ucsf.edu  siren@ucsf.edu  @SIREN_UCSF
Growing interest in addressing SDH in clinical settings

Insurance Companies and Healthcare Providers Are Investing Millions in Social Determinants of Health Programs

When patients’ social needs are met, doctors feel less burnout

CVS-Aetna is partnering with a New York-based social care platform to bring social services to high-risk members

UnitedHealthcare Awarding $1.1 Million to Northeast Ohio Nonprofits to Help Address Social Determinants of Health

Solera Health, Blue Cross Blue Shield Institute team up on social determinants of health initiative

The two companies will work together to tailor a platform that will connect patients to community-based providers and other resources.

Health plans voice support for bill to address SDOH efforts

AMA, UnitedHealthcare Develop ICD-10 Codes to Support Social Determinants of Health

Best Practices to Develop a Social Determinants of Health Strategy

A discussion with members of Humana’s Bold Goal team identified best practices for building a successful social determinants of health strategy.

Medicaid Beneficiaries Do Much Better When Plans Address Their Social Determinants of Health
Five activities to facilitate integration between medical and social care.
Sources of SDH data

Area-level (e.g. Census, other national surveys)

Patient-level

EHR (e.g. race/ethnicity, insurance status, language, etc.)

Publicly available (e.g. credit rating, criminal history, etc.)

Patient-reported
Examples of social risk data being collected

- Food security
- Housing security
- Housing quality
- Transportation
- Utility needs
- Legal needs
- Child care
- Safety concerns
- Social support

http://sirenetwork.ucsf.edu/tools-resources/mmi/screening-tools-comparison/adult-nonspecific
Standardized structured coding
Codifiable domains in common social risk screening tools

<table>
<thead>
<tr>
<th>Tool</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>AHC</td>
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<tr>
<td>PRAPARE</td>
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<tr>
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</tbody>
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Gravity Project Goals

Develop consensus on SDH-related concepts and codes in order to facilitate interoperable data use and aggregation.

Food Insecurity
Housing Instability & Quality
Transportation Access

https://confluence.hl7.org/display/GRAV/The+Gravity+Project
Project Steps

1. Develop use case package
2. For each of food, housing, and transportation:
   1. Develop consensus set of data elements
   2. Develop coding recommendations
   3. Develop HL7 FHIR Implementation Guide
   4. Test and refine
Project Process

• Public process open to all
• Guided by steering committee (federal agencies, key experts)
• FHIR Accelerator Project of HL7
Participation

- 17 public calls since May launch
- Average of 107 participants / call
- Total of 806 participants
Project Deliverables To-Date
Gravity Use Case Package

1. Use cases:
   1. Document SDH data in conjunction with the patient encounter
   2. Document and track SDH related interventions to completion
   3. Gather and aggregate SDH data for uses beyond the point of care

2. Patient story

3. Personas

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Project Steps

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Project Steps

1. Develop use case package ✔

2. For each of food, housing, and transportation
   1. Develop consensus set of data elements
      1. Data element submissions ✔
      2. Data element consensus development
   2. Develop coding recommendations
   3. Develop HL7 FHIR Implementation Guide
   4. Test and refine
Data element submissions

1. Screening
   - 56 tools
   - 203 questions
   - 60 data elements

2. Diagnosis
   - 16 data elements

3. Goals

4. Interventions
   - 147 data elements

Food insecurity
Interventions frameworks

- Referral
- Provision of direct supports
- Counseling
- Education
- Assessment
- Evaluation of eligibility for services
- Assistance with benefits enrollment, appointments, etc.
- Coordination of services
Food program definitions

- Food pantry program
- Food prescription program
- Food provision program
- Home delivered meals
- Medically tailored meals
- School meal and snack program
- Summer meal and snack program
- Special supplemental nutrition program for women, infants, and children (WIC)
- Supplemental nutrition assistance program (SNAP)
Project Steps

1. Develop use case package ✓

2. For each of food, housing, and transportation
   1. Develop consensus set of data elements
      1. Data element submissions ✓
      2. Data element consensus development
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   4. Test and refine

Food insecurity

Oct-Dec ‘19

Nov ‘19-Jan ‘20

Dec ‘19-Jan ‘20

Feb-Sept ‘20
1. Develop use case package ✓

2. For each of food, housing, and transportation
   1. Develop consensus set of data elements
      1. Data element submissions
      2. Data element consensus development
   2. Develop coding recommendations
   3. Develop HL7 FHIR Implementation Guide
   4. Test and refine

Housing

Dec-Jan ‘19
Jan ‘19-Apr ‘20
TBD
TBD
Standardized structured coding
Gravity Project – Open Questions

1. Data privacy: What data should be documented in the EHR?
2. Preventing discrimination based on SDH
3. Perverse incentives, e.g., MassHealth
Questions?

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https://confluence.hl7.org/display/GRAV/The+Gravity+Project

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