

Gravity Project FHIR IG

[PSS Help and FAQs](#)

[Comments](#)

1a. Project Name	Gravity Project SDOH Data Elements FHIR IG
1b. Project ID	1567
1c. Is Your Project an Investigative Project (aka PSS-Lite)?	No
1d. Is your Project Artifact now proceeding to Normative directly or after being either Informative or STU?	No
1e. Today's Date	
1f. Name of standard being reaffirmed	n/a
1g. Project Artifact Information	
1h. ISO/IEC Standard to Adopt	
1i. Does the standard include excerpted text from one or more ISO, IEC or ISO/IEC standards, but is not an identical or modified adoption?	
1j. Unit of Measure	
2a. Primary/Sponsor WG	Patient Care
2b. Co-Sponsor WG	Vocabulary
2c. Co-Sponsor Level of Involvement	Other Involvement. Specify details in text box below
2c. Co-Sponsor Involvement	Updates at WG Meetings and technical reviews when the project needs additional assistance or guidance, especially in the area of creating "trial codes" that support testing, then "go away" and are replaced by permanent codes issued from the appropriate Code System.
2c. Co-Sponsor Update Periods	
2b. Co-Sponsor WG 2	Public Health
2c. Co-Sponsor Level of Involvement	Other Involvement. Specify details in text below
2c. Co-Sponsor Involvement	Updates at WG Meetings and technical reviews when the project needs additional assistance or guidance, especially in the area of creating bidirectional closed-loop referral requests between clinical environment and community-based organizations or public health programs.
2c. Co-Sponsor 2 Update Periods	

2b. Co-Sponsor WG 3

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 3 Update Periods

2b. Co-Sponsor WG 4

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 4 Update Periods

2b. Co-Sponsor WG 5

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 5 Update Periods

2b. Co-Sponsor WG 6

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 6 Update Periods

2b. Co-Sponsor WG 7

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 7 Update Periods

2b. Co-Sponsor WG 8

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 8 Update Periods

2b. Co-Sponsor WG 9

2c. Co-Sponsor Level of Involvement

2c. Co-Sponsor Involvement

2c. Co-Sponsor 9 Update Periods

2b. Co-Sponsor WG 10

2c. Co-Sponsor Level of Involvement	
2c. Co-Sponsor Involvement	
2c. Co-Sponsor 10 Update Periods	
2d. Project Facilitator	Lisa Nelson
2e. Other Interested Parties (and roles)	<p>Structured Documents - FHIR Documents - where Resource Templates plug into C-CDA on FHIR documents</p> <p>Attachments - expanding Clinical Data Exchange to include SDOH data elements.</p> <p>PC (Care Plan Team) - Patient Centered Care Planning (how to use existing Patient-Centered Goal template, and outcome observation, use of Care Plan resource)</p> <p>Learning Health Systems - Care Team Member Roles</p> <p>CIMI - Modeling for profiled resources</p> <p>CBCP - Consent/Privacy&Security; where consent might fit into the use cases</p> <p>OO - Referral Orders and Tracking (mechanisms to do closed loop referrals)</p> <p>CIC - Registry Usage of the information (confirm data element content is valuable and appropriate for secondary use)</p> <p>CQI - Quality Measure usage of the information (confirm the element content is valuable and appropriate for quality measure uses)</p> <p>CDS - Clinical Decision Support.</p> <p>Patient Engagement</p>
2f. Modeling Facilitator	Monique Van Berkum
2g. Publishing Facilitator	Cheng Liu
2h. Vocabulary Facilitator	Rob Hausam
2i. Domain Expert Representative	Evelyn Gallego
2j. Business Requirements Analyst	Evelyn Gallego
2k. Conformance Facilitator	Lisa Nelson
2l. Other Facilitators	IG Quality - TBD
2m. Implementers	Data Integrator/HISP (MaxMD); Payer organizations, EHR vendor, Health IT Vendors interested in collecting SDOH data from Consumers; Community Based Organizations or Public Health organizations.

3a. Project Scope

The Gravity Project creates and maintains a consensus-building community to expand available Core Social Determinant of Health (SDOH) Data for Interoperability and accelerate standards-based information exchange by using HL7 FHIR. Gravity Project is part of the HL7 FHIR Accelerator Program.

Many of the recent innovations at scale in this area begin with the strategic collection of SDOH data. As examples, the Centers for Medicare & Medicaid Services Innovation Center (CMS Innovation Center) Comprehensive Primary Care Plus Model requires providers to assess patients' social risks; and the CMS Innovation Center's Accountable Health Communities Model developed a social risk assessment tool to help identify and address social risks across clinical and community-based settings. However, there is no consensus on the coding and standards-based modeling to facilitate the data uses envisioned for SDOH information.

This project seeks to incrementally develop one (1) FHIR IG covering 3 primary use cases for three (3) SDOH Domain: Food Insecurity, Housing Stability and Quality, and Transportation Access.

Participation in many Connectathon events will be conducted to build greater consensus on needed implementer. The May 2020 ballot could be a STU ballot or a comment ballot depending on the degree of readiness. Subsequent iterations will refine the guidance for the SDOH Core Data for Interoperability and expand the use case coverage until the full scope of this PSS is reached.

The goal is to add a minimal number of core SDOH data elements that support key interoperability use cases, and work within and across the context of other HL7 projects to bring together the capabilities to demonstrate the range of data exchange needed for the 3 use cases. This project seeks to:

- (1) determine a minimal data set required to exchange valuable SDOH information for identified use cases and
- (2) develop FHIR Implementation Guides, resource profiles, and necessary extensions to specify how to syntactically and semantically exchange that data between care settings, and work closely with Code System SDOs to address data coding needs.

The project also will work with other FHIR Accelerator Projects (Da Vinci CDex implementers and CARIN implementers engaged in giving patients access to their health records) to

- (3) add SDOH core data elements in their developing client and server reference implementations to validate the Implementation Guide, Profiles, and Extensions work in a software system,

- (4) develop automated test suites to validate data representation, and
- (5) build real world pilots that successfully demonstrate integration of SDOH information in new capabilities adopted in production.

Attachments

[SDH Coding Collaborative Project Charter 051419.pdf](#)

3b. Project Need	<p>The influence of social determinants on health outcomes is increasingly recognized in emerging payment reform programs, federal and state-based policies, and information technology initiatives. Social determinants of health (SDOH) are defined by the World Health Organization as the conditions in which people are born, live, work, and age.</p> <p>The growing awareness of how SDOH shape health has contributed to efforts to address actionable socioeconomic risk factors through the health care delivery system. Recommendations from national groups, including the American Academy of Pediatrics, American Academy of Family Physicians, Agency for Healthcare Research and Quality, National Quality Forum (NQF), and Institute for Health Care Improvement underscore the various roles the health care system could play in helping to reduce patients' social risk factors.</p> <p>These national "calls to action" for health care systems have spurred the proliferation of innovations, including a wide range of social risk screening tools and practice-based interventions. Some of these innovations have helped to reduce social risks, improve health outcomes, and lower costs. The experimentation in this area has been bolstered by new value-based payment models and accountable care organizations (ACOs), which together offer an array of incentives to advance coordinated care between medical and social service organizations.</p> <p>However, many of the recent innovations at scale in this area begin with the strategic collection of SDOH data. As examples, the Centers for Medicare & Medicaid Services Innovation Center (CMS Innovation Center) Comprehensive Primary Care Plus Model requires providers to assess patients' social risks; and the CMS Innovation Center's Accountable Health Communities Model developed a social risk assessment tool to help identify and address social risks across clinical and community-based settings.</p> <p>Presently, clear shared definitions for these SDOH Core Data for Interoperability and FHIR based information exchange resources do not exist. SDOH covers a very broad space which is categorized and defined in many different ways. The Gravity Project aims to address only three SDOH areas from among the many identified SDOH domains. The project will create and maintain a consensus-building community to expand available SDOH Core Data for Interoperability for the Food Insecurity, Housing Instability, Transportation Barriers domains, and accelerate standards-based information exchange by using HL7 FHIR.</p>
3c. Security Risk	No
3d. External Drivers	The shift to value based care and the growing recognition of the impact addressing SDOH issues can have on increasing the value of care, decreasing its cost, and improving care outcomes
3e. Objectives/Deliverables and Target Dates	<p>Our initial milestone will be a draft FHIR IG including developed Use Cases, Concept Domains and temporary codes to support Connectathon Testing of just the first 1. Food Security and Food Insecurity Observations in early December, 2019.</p> <p>We will then improve that IG with feedback from the Connectathon and use the improved version for additional Connectathon Testing in January 2020.(Same narrow scope of just the Food Security and Food Insecurity Observations, but more robust guidance for implementers.)</p> <p>A "For Comment" Ballot is planned for May 2020 (may consider STU ballot if appropriate).</p> <p>Following the May 2020 ballot, the Gravity community will expand the SDOH content where it has developed consensus definitions and modeling. Priorities for additional profile development will follow this order and will utilize work done elsewhere in the FHIR Community where possible:</p> <ol style="list-style-type: none"> 2. Food Insecurity Health Concern (Condition) 3. Food Insecurity Screening Questions and Answers (Questionnaire) 4. Food Security Care Planning Goal (Goal) 5. Planned and Completed Food Insecurity Interventions (ServiceRequest and Procedure) 6. Health Status Evaluation/Progress Toward Goal (observation) <p>It may take several iterations to add the additional profiles needed to complete all three use cases in the first Food Security domain.</p> <p>On-going participation in Connectathons and subsequent ballot cycles will be used to incrementally add the similar set of SDOH Core Data Elements (and Profiles, such as 1-6 above) for Housing Stability and Transportation Barriers covering all three use cases.</p>
3f. Common Names / Keywords / Aliases:	"Gravity Project", "SDOH Data Elements", "SDOH Core Data for Interoperability"
3g. Lineage	This is the initial project PSS from the Gravity FHIR Accelerator Project

3h. Project Dependencies	<p>This FHIR implementation guide will use the US Core profiles. If this FHIR implementation guide is unable to use a US Core profile we will request approval from US Realm SC, and provide the US Realm approved rationale for deviation in the implementation guide where applicable.</p> <p>Connectathon Testing will be incorporated within Connectathons driven by HL7, Da Vinci and CARIN.</p>
3i. HL7-Managed Project Document Repository URL:	https://confluence.hl7.org/display/GRAV/Gravity+SDOH+FHIR+IG
3j. Backwards Compatibility	No
3k. Additional Backwards Compatibility Information (if applicable)	
3l. Using Current V3 Data Types?	Unknown
3l. Reason for not using current V3 data types?	
3m. External Vocabularies	Yes
3n. List of Vocabularies	LOINC, SNOMED, ICD-10, CPT/HCPCS
3o. Earliest prior release and/or version to which the compatibility applies	n/a
4a. Products	FHIR Extensions, FHIR Implementation Guide, FHIR Profiles
4b. For FHIR IGs and FHIR Profiles, what product version(s) will the profiles apply to?	FHIR R4
4c. FHIR Profiles Version	US Core 3.0.x (for FHIR R4), C-CDA on FHIR (for FHIR R4)
4d. Please define your New Product Definition	
4d. Please define your New Product Family	
5a. Project Intent	Implementation Guide (IG) will be created/modified
5a. White Paper Type	
5a. Is the project adopting/endorsing an externally developed IG?	No
5a. Externally developed IG is to be (select one)	
5a. Specify external organization	
5a. Revising Current Standard Info	
5b. Project Ballot Type	STU to Normative
5c. Additional Ballot Info	Gravity Project is a FHIR Accelerator Project.
5d. Joint Copyright	No

5e. I understand I must submit a Joint Copyright Letter of Agreement to the TSC in order for the PSS to receive TSC approval.	no
6a. External Project Collaboration	<p>The influence of social determinants on health outcomes is increasingly recognized in emerging payment reform programs, federal and state-based policies, and information technology initiatives. Social determinants of health (SDH) are defined by the World Health Organization as the conditions in which people are born, live, work, and age.</p> <p>The growing awareness of how SDOH shapes health has contributed to efforts to address actionable socioeconomic risk factors through the health care delivery system. Recommendations from national groups, including the American Academy of Pediatrics, American Academy of Family Physicians, Agency for Healthcare Research and Quality, National Quality Forum (NQF), and Institute for Health Care Improvement underscore the various roles the health care system could play in helping to reduce patients' social risk factors.</p> <p>These national "calls to action" for health care systems have spurred the proliferation of innovations, including a wide range of social risk screening tools and practice-based interventions. Some of these innovations have helped to reduce social risks, improve health outcomes, and lower costs. The experimentation in this area has been bolstered by new value-based payment models and accountable care organizations (ACOs), which together offer an array of incentives to advance coordinated care between medical and social service organizations.</p>
6b. Content Already Developed	Use Cases will be 98% developed by Gravity Project
6c. Content externally developed?	No
6d. List Developers of Externally Developed Content	The Use Case Package describing the Use Cases, Patient Story, and Personas relevant to Phase I of the Gravity Project's work on Food Insecurity, Housing Instability, and Transportation Barriers was developed by the Gravity Project Community. The finalized Use Case Package is available on the HL7 Confluence site.
6e. Is this a hosted (externally funded) project?	No
6f. Stakeholders	Quality Reporting Agencies, Payors, Other
6f. Other Stakeholders	Clinicians, Community Based Organizations, Patients
6g. Vendors	EHR, PHR, Health Care IT
6g. Other Vendors	
6h. Providers	Emergency Services, Local and State Departments of Health, Healthcare Institutions (hospitals, long term care, home care, mental health), Other
6h. Other Providers	Community Based Organizations
6i. Realm	U.S. Realm Specific
7a. Management Group(s) to Review PSS	FHIR
7b. Sponsoring WG Approval Date	Sep 23, 2019
7c. Co-Sponsor Approval Date	Sep 26, 2019
7c. Co-Sponsor 2 Approval Date	Oct 17, 2019
7c. Co-Sponsor 3 Approval Date	
7c. Co-Sponsor 4 Approval Date	

7c. Co-Sponsor 5 Approval Date

7c. Co-Sponsor 6 Approval Date

7c. Co-Sponsor 7 Approval Date

7c. Co-Sponsor 8 Approval Date

7c. Co-Sponsor 9 Approval Date

7c. Co-Sponsor 10 Approval Date

7d. US Realm Approval Date Oct 01, 2019

7e. CDA MG Approval Date

7f. FMG Approval Date Oct 02, 2019

7g. V2 MG Approval Date

7h. Architecture Review Board Approval
Date

7i. Steering Division Approval Date Oct 22, 2019

7j. TSC Approval Date
