

Gravity SDOH Domain Workstream

The Gravity Project seeks to identify coded data elements and associated value sets to represent social determinants of health (SDOH) data documented in electronic health records (EHRs), across four clinical activities: screening, diagnosis, goal setting, and interventions. The project focuses on three specific social risk domains: food insecurity, housing instability and quality, and transportation access. These domains were selected based on existing research linking these factors with health and utilization as well as active experiments related to these domains, including in federal, state, or local demonstration projects.

The Gravity Project is an HL7® Fast Health Interoperability Resource (FHIR®) Accelerator project that addresses the needs for both semantic and structural level interoperability of SDOH electronic data. The project developed a series of replicable processes to facilitate the identification of data elements for each respective domain. The first task established the scope of the project and included the launch of a public collaborative, facilitated through the HL7 Confluence site, in May 2019. The second task engaged that public collaborative in the identification of consensus approved use cases, which specified the functional requirements for collecting and exchanging SDOH data in a clinical setting. The third task focuses on developing data element definitions for the three aforementioned SDOH domains. As part of this task, the Gravity Project team has established and refined a process to gather, review, and adjudicate robust data definitions for SDOH data documentation across the four identified clinical activities.

Engagement of the community, input from a broad range of stakeholders, and consensus agreement are imperative to the second and third tasks of this project. The Gravity Project strives to include the viewpoints and expertise of representatives from clinical and non-clinical healthcare providers, community service organizations, payers, associations, government agencies, standards developing organizations, and others across the healthcare continuum, in order to identify and define the most meaningful and useful domain-specific definitions and data sets possible.

Other recognized SDOH domains will be prioritized and addressed in future phases of the Gravity Project. Food insecurity was selected as the first executable SDOH domain based on the maturity of the work already done in this area and the availability of existing concepts in the key coding terminologies (LOINC, SNOMED-CT, and ICD-10).

The final consensus approved food insecurity data set was published in November 2019 and the coding gap analysis completed in January 2020. The team is currently submitting coding recommendations to standards developing organizations (SDOs) as part of the fourth task in order to address the coding gaps identified for the data elements defined in task three. This work is ongoing and dependent upon the emerging definitions and data elements from each specific domain.