

Food Insecurity Domain

Food Insecurity is the first of three Social Determinants of Health domains the Gravity Project will address during Phase 1 work.

Coding Submissions

The Gravity Project seeks to identify coded data elements and associated value sets to represent social determinants of health (SDOH) data documented across the following four clinical activities: screening, diagnosis, goals, and interventions. It focuses on identifying, developing, and validating 1) the data elements needed to document SDOH data across all four clinical activities, and 2) national standards to support the electronic capture and exchange SDOH data across a variety of systems and settings of care and social services. The following formal submissions have been made to coding stewards in order to address the food insecurity data concept gaps identified during the domain work. Codes that are accepted by the respective standards developing organizations will be published in upcoming releases.

[ICD-10 Coding Submission May 2020](#)

[LOINC Coding Submission April 2020](#)

[SNOMED Coding Submission - Interventions June 2020](#)

[SNOMED Coding Submission - Diagnoses June 2020](#)

Food Insecurity Data Elements

[Final Food Insecurity Master List - Published 16 April 2020](#)

[Click here to download the Food Insecurity Master List.](#)

[Food Insecurity Consensus Voting Comments and Dispositions - Published 31 January 2020](#)

[Click here to download the Consensus Voting Comments and Dispositions spreadsheet.](#)

Adjudicated Data Element Submission Statistics

Below is a list of how many of each food insecurity data element type has been adjudicated as of the date listed.

Date	Screening Tool/Questions	Diagnosis/Needs	Goals	Interventions	Total
17Oct19	56 tools / 203 questions	60	13	147	220
12Sep19	56 tools / 191 questions	60	12	146	218
29Aug19	41 tools / 126 questions	44	11	103	158
15Aug19	36 tools / 95 questions	42	9	100	151
01Aug19	28 tools / 71 questions	38	9	87	134
18Jul19	9 tools / 34 questions	23	4	28	90

Interventions Framework

This is an updated draft (31 January 2020) of the framework for intervention data element concepts. Thank you to everyone who submitted comments on the initial version!

- Referral. A type of order wherein clinicians/providers request services and/or assessment from other professionals and/or programs.
- Provision. For the purposes of the project, provision covers any concrete support that is able to be given to the patient directly at the point of service.
- Counseling. Psychosocial procedure that involves mental/behavioral strategies such as listening, reflecting, etc. to facilitate recognition of course of action/solution.
- Education. Procedure that is synonymous with those activities such as teaching, demonstration, instruction, explanation, and advice that aims to increase knowledge and skills, change behaviors, assist coping.
- Assessment. Assessment includes both the process of provider clinical observation and interpretation and the utilization of assessment tools. In both activities the aim is to arrive at outcomes that define the status of the patient in order to guide further care.
- Evaluation of eligibility. Chosen to mark the activities prior to determination of eligibility. (Crucial for federal food assistance programs).

- Assistance. Non-clinical aid with the tasks of care such as applications and setting up appointments.
- Coordination. Organizing activities and sharing information.

Intervention Examples

- Referral to:
 - Role (case manager, care navigator)
 - Organization (community action agency)
 - Program (senior congregate meal, SNAP)
- Provision of: e.g., food, fresh fruit and vegetable voucher
- Counseling: e.g., barriers to, readiness for, cognitive behavioral therapy
- Education: e.g., nutrition related skills education
- Assessment for/of: e.g., food insecurity, patient goals
- Evaluation of eligibility for: e.g., WIC, home delivered meals
- Assistance with application for: WIC, SNAP
- Coordination of: e.g., care plan, care team

Screening Tools

Screening Tool	Description	Source(s)
AHC	The Centers for Medicare & Medicaid Services (CMS) Center for Medicare and Medicaid Innovation (CMMI) have made the Accountable Health Communities (AHC) Health-Related Social Needs (HRSN) Screening Tool to use in the AHC Model. This screening tool assesses 5 core domains: <ul style="list-style-type: none"> • Housing instability • Food insecurity • Transportation problems • Utility help needs • Interpersonal safety 	https://innovation.cms.gov/Files/worksheets/ahcm-screeningtool.pdf
CommunityConnect	The CommunityConnect Social Needs Screening Tool was developed to capture social, medical, and behavioral health needs. The tool was designed to promote motivational interviewing, client engagement and rapport, allowing case managers from a range of disciplines to use the screening telephonically and in-field with patients. The screening consists of 42 questions and crosses 10 domains including: housing instability, food security, transportation, interpersonal safety, vision & dental, behavioral and social support, medical, finances, education and employment, and legal needs.	SN Screening Handout.pdf
FIES-SM	The Food Insecurity Experience Scale (FIES) Survey Module (FIES-SM) consists of eight questions regarding people's access to adequate food, and can be easily integrated into various types of population surveys.	http://www.fao.org/3/a-bl404e.pdf
Health Information National Trends Survey (HINTS)	HINTS collects data about the use of cancer-related information by the American public. These data provide opportunities to understand and improve health communication.	https://hints.cancer.gov/data/survey-instruments.aspx
Health Leads	The Health Leads Social Needs Screening Toolkit is a comprehensive blueprint for health systems seeking to identify and screen patients for adverse social determinants of health.	https://healthleadsusa.org/resources/the-health-leads-screening-toolkit/
HFIAS	Household Food Insecurity Access Scale (HFIAS) for Measurement of Food Access: Indicator Guide provides a simple and user-friendly approach for measuring the impacts of development food aid programs on the access component of household food insecurity. The guide includes a standardized questionnaire and data collection and analysis instructions. The HFIAS is composed of a set of nine questions that have been used in several countries and appear to distinguish food insecure from food secure households across different cultural contexts. The information generated by the HFIAS can be used to assess the prevalence of household food insecurity (access component) and to detect changes in the food insecurity situation of a population over time.	https://www.fantaproject.org/sites/default/files/resources/HFIAS_ENG_v3_Aug07.pdf

Household Food Security Survey Module (HFSSM)	The HFSSM focuses on self-reports of uncertain, insufficient or inadequate food access, availability and utilization due to limited financial resources, and the compromised eating patterns and food consumption that may result. The HFSSM contains 18 questions about the food security situation in the household over the previous 12 months. Each question specifies a lack of money or the ability to afford food as the reason for the condition or behaviour. The questions range in severity from worrying about running out of food, to children not eating for a whole day. <i>Note: This is a Canadian survey adapted from the US Food Security Measurement Method.</i>	https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/canadian-community-health-survey-cycle-2-2-nutrition-2004-income-related-household-food-security-canada-health-canada-2007.html#appa
Hunger Vital Sign	The Hunger Vital Sign™ (HVS) is a validated 2-question food insecurity screening tool that allows clinicians to accurately identify households at risk of food insecurity and address patient needs appropriately.	https://childrenshealthwatch.org/wp-content/uploads/CHW_HVS_whitepaper_FINAL.pdf
IHELP	IHELP is a tool for collecting pediatric social histories. It includes both household needs (financial strain, insurance, hunger, domestic violence, housing stability and housing conditions) and several child-specific domains (child educational needs, child legal status, and power of attorney/guardianship).	https://sirenetwork.ucsf.edu/sites/sirenetwork.ucsf.edu/files/IHELP_QUESTION.docx
Kaiser Permanente Your Current Life Situation (YCLS)	Kaiser Permanente's Your Current Life Situation (YCLS) survey was developed to capture a range of social and economic needs, including living situation, housing, food, utilities, childcare, debts, medical needs, transportation, stress, and social isolation.	https://sirenetwork.ucsf.edu/sites/sirenetwork.ucsf.edu/files/Your%20Current%20Life%20Situation%20Questionnaire%20v2-0%20%28Core%20and%20supplemental%29%20no%20highlights.pdf
Kleinman	Dr. Arthur Kleinman determined that a person's own opinions and viewpoints can affect their health. This set of open-ended questions has been used to explore how and why individuals believe what they do about illnesses and treatments to support shared decision making.	https://www.ncbi.nlm.nih.gov/pubmed/17660098 http://files.professionalchaplains.org/conf/2018/workshops/handouts/SA2_04_2018_Conf_90M_Handout_2.pdf
NC Department of Health and Human Services (NCDHHS)	DHHS, in partnership with a diverse set of stakeholders from across the state, developed a standardized set of SDOH screening questions.	https://www.ncdhhs.gov/about/department-initiatives/healthy-opportunities/screening-questions
NC Safe Environment for Every Kid (SEEK)	SEEK is an evidence-based, practical model for improving primary healthcare for children and their families. SEEK helps primary healthcare professionals (PCPs) address common psychosocial problems, such as parental depression and substance use. The SEEK Parent Questionnaire-R (PQ-R) screens for the targeted psychosocial problems.	https://files.nc.gov/ncdhhs/documents/SDOH-Screening-Tool_Paper_FINAL_20180405.pdf https://files.nc.gov/ncdhhs/documents/SDOH-Screening-Tool_Paper_FINAL_20180405.pdf
Medicare Total Health Assessment (THA)	The Medicare Total Health Assessment (MTHA) is a survey used to assess several things, including food insecurity, in the elderly. The survey is offered to Medicare Advantage members in advance of Annual Wellness Visits that are a CMS-mandated benefit offering.	https://sirenetwork.ucsf.edu/sites/sirenetwork.ucsf.edu/files/Medicare%20THA%20questionnaire%20v2%20%28rvd%2012-5-14%29%20with%20Sources.pdf
PRAPARE	The Protocol for Responding to and Assessing Patients' Assets, Risks, and Experiences (PRAPARE) is a national effort to help health centers and other providers collect the data needed to better understand and act on their patients' social determinants of health.	http://www.nachc.org/wp-content/uploads/2018/05/PRAPARE_One_Pager_Sept_2016.pdf http://www.nachc.org/wp-content/uploads/2015/06/WANTK.pdf
SWYC	The Survey of Well-being of Young Children (SWYC)™ is a freely-available, comprehensive screening instrument for children under 5 years of age.	https://www.floatinghospital.org/The-Survey-of-Wellbeing-of-Young-Children/Age-Specific-Forms
US Household Food Security 6 Item	Six-Item Short Form of the Food Security Survey Module For surveys that cannot implement the 18-item or 10-item measures, this "Short Form" 6-item scale provides a reasonably reliable substitute. It uses a subset of the standard 18 items. This is the same six-item questionnaire that is in the Guide.	https://www.ers.usda.gov/media/8281/short2012.doc https://www.ers.usda.gov/media/8282/short2012.pdf

US Household Food Security 10 Item	U.S. Adult Food Security Survey Module (10 items) Three-stage design with screeners. Screening keeps respondent burden to the minimum needed to get reliable data. Most households in a general population survey are asked only three questions. The questionnaire has been modified very slightly from that specified for households without children in the Guide.	https://www.ers.usda.gov/media/8280/ad2012.doc https://www.ers.usda.gov/media/8279/ad2012.pdf
US Household Food Security 18 Item	U.S. Household Food Security Survey Module (18-items) Three-stage design with screeners. Screening keeps respondent burden to the minimum needed to get reliable data. Most households in a general population survey are asked only three questions (five if there are children in the household). The questionnaire has been modified slightly from that in the Guide, and the questions have been re-ordered to group the child-referenced questions after the adult-referenced questions.	https://www.ers.usda.gov/media/8278/hh2012.doc https://www.ers.usda.gov/media/8279/ad2012.pdf
We Care	WE CARE (Well Child Care, Evaluation, Community Resources, Advocacy, Referral, Education) is a clinic-based screening and referral system developed for pediatric settings. The 12-question WE CARE screening tool assesses needs in 6 domains: parental educational attainment, employment, child care, risk of homelessness, food security, and household heat and electricity.	http://sirenetwork.ucsf.edu/sites/sirenetwork.ucsf.edu/files/HL%20BMC%20Screening%20Tool%20final%20%28English%29.pdf

Terminology, Definitions and Resources

Term	Definition or Description	Source(s)
Food access	There are many ways to measure food store access for individuals and for neighborhoods, and many ways to define which areas are food deserts—neighborhoods that lack healthy food sources. Most measures and definitions take into account at least some of the following indicators of access: <ul style="list-style-type: none"> • Accessibility to sources of healthy food, as measured by distance to a store or by the number of stores in an area. • Individual-level resources that may affect accessibility, such as family income or vehicle availability. • Neighborhood-level indicators of resources, such as the average income of the neighborhood and the availability of public transportation. 	https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/#definitions https://www.ers.usda.gov/publications/pub-details/?pubid=82100
Food desert	The Food Access Research Atlas maps census tracts that are both low income (li) and low access (la), as measured by the different distance demarcations. This tool provides researchers and other users multiple ways to understand the characteristics that can contribute to food deserts, including income level, distance to supermarkets, and vehicle access.	https://www.ers.usda.gov/data-products/food-access-research-atlas/documentation/#definitions https://www.ers.usda.gov/publications/pub-details/?pubid=82100
Food security	Access by all people at all times to enough food for an active, healthy life.	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/
Food security range: high food security	No reported indications of food-access problems or limitations.	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/#ranges
Food security range: marginal food security	One or two reported indications—typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake.	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/#ranges
Food insecurity	Limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.	Bickel G, Nord M, Price C, Hamilton W, Cook J. Guide To Measuring Household Food Security, Revised 2000. Alexandria, VA: US Department of Agriculture, Food and Nutrition Service; 2000. https://www.fns.usda.gov/guide-measuring-household-food-security-revised-2000
Food insecurity range: low food security	Reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake.	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/#ranges

Food insecurity range: very low food security	Reports of multiple indications of disrupted eating patterns and reduced food intake.	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/#ranges
Hunger	Term should refer to a potential consequence of food insecurity that, because of prolonged, involuntary lack of food, results in discomfort, illness, weakness, or pain that goes beyond the usual uneasy sensation.	https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security/#CNSTAT

Data Element Concept Leads

Role	Name	Organization
Coding Subject Matter Expert	Linda Hyde	EMI Advisors, LLC
Technical Director	Lisa Nelson	MaxMD
Food Insecurity Subject Matter Expert	Sarah DeSilvey	Larner College of Medicine at the University of Vermont
Food Insecurity Subject Matter Expert	Donna Partel	Academy of Nutrition and Dietetics