

An Overview of Food Insecurity Coding in Health Care Settings

Existing and Emerging Opportunities

Special Note

This brief was last updated on January 16, 2018.

Since food insecurity coding is an evolving process, the brief will be updated as needed to reflect new opportunities. Updates will be posted to:

Food Research & Action Center (frac.org) and
Children's HealthWatch (childrenshealthwatch.org)

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Food insecurity, by definition, has the potential to affect the emotional and bodily health of our patients. Addressing food insecurity in clinical practice, and documenting and sharing our care, is key to fostering the health of our patients and communities.

Introduction

More than 41 million Americans live in food-insecure households, negatively affecting the health, productivity, and well-being of our nation.¹ According to one estimate, the direct and indirect health-related costs of hunger and food insecurity in the US are more than \$160 billion a year.²

In response to the high prevalence of food insecurity,³ its effects on health care utilization,⁴ and the serious health consequences of food insecurity for individuals and families,⁵ steps to address food insecurity in health care settings are taking shape in both clinical and health system domains.⁶ A growing number of health care providers are screening for food insecurity and connecting at-risk patients to existing federal nutrition programs, including the Supplemental Nutrition Assistance Program (SNAP), the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), afterschool and summer feeding programs, child care meals, and school breakfast and lunch. Providers also are referring patients to other food and nutrition resources in local communities, such as food prescription programs, food banks, and food pantries. In addition, hospitals, state health agencies, and accountable care organizations are taking population health approaches to incorporate food insecurity into community health needs assessments,⁷ maternal child health screening initiatives,⁸ and quality measures.⁹

Despite the increase in interest and attention to food insecurity in health care settings, available health care terminology

and codes to document food insecurity and related activities are both underutilized and under-developed. Promoting and improving opportunities to document assessments and interventions related to food insecurity in electronic health records (EHRs) are critical for:

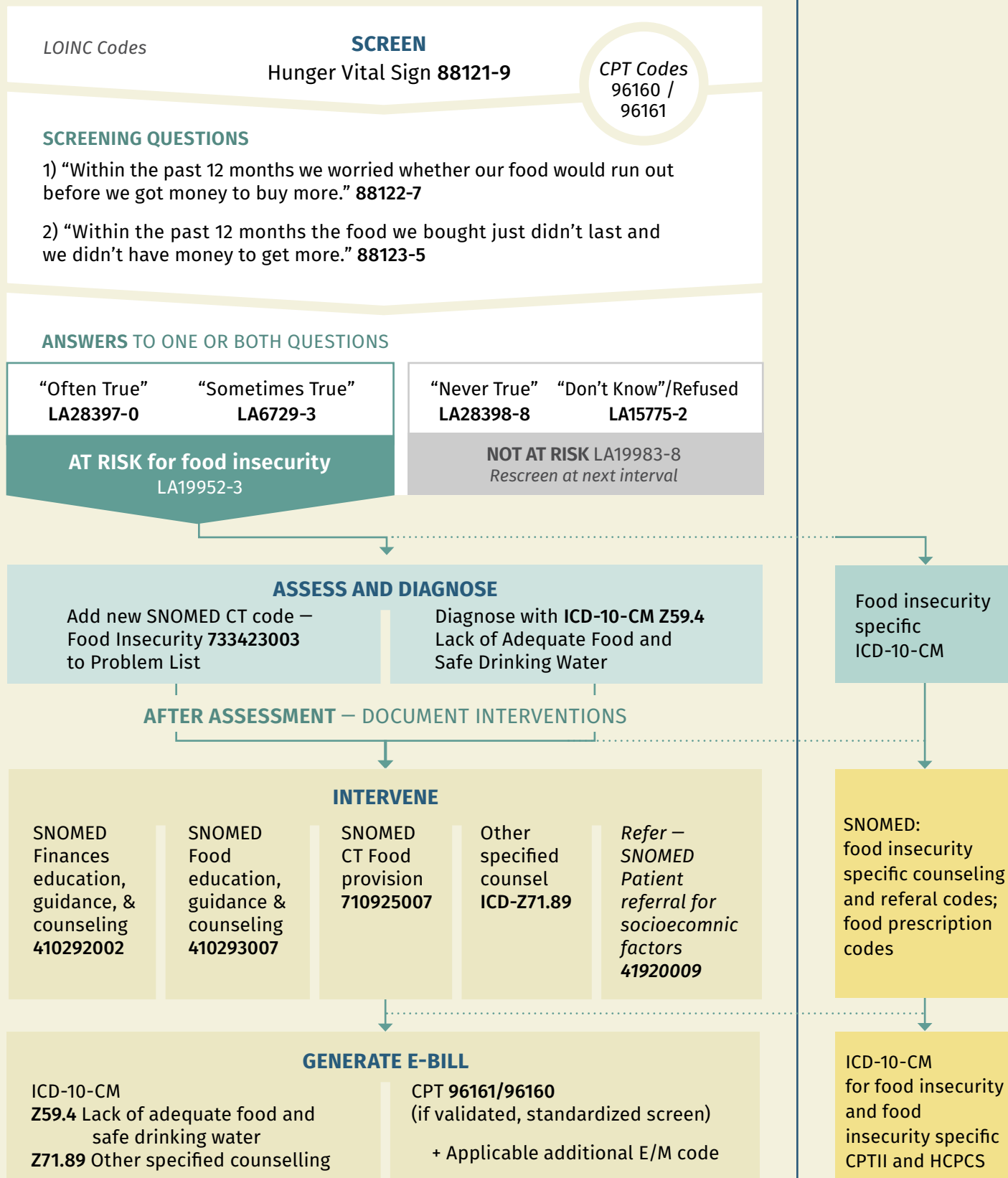
- Enabling documentation of food insecurity screening and assessment;
- Providing comprehensive health care to individual patients experiencing food insecurity;
- Obtaining population data for clinical resource planning;
- Improving reimbursement for food insecurity assessment and intervention;
- Fostering research and quality improvements related to food insecurity; and
- Sharing food insecurity assessments and interventions with outside entities, including payers, community agencies, and other healthcare providers and health systems.

This issue brief reviews existing and emerging opportunities to document food insecurity screening, assessment, intervention, and billing for each part of a patient visit using discrete codes and language from standardized EHR medical vocabularies.

Flow of Food Insecurity Coding in an Office Visit

EXISTING Opportunities

FUTURE Opportunities



SECTION 1

Promising Coding Opportunities in EHRs

A. Food Insecurity Screening – LOINC

There are many tools used to screen for concepts related to food security, including the WE CARE tool,¹⁰ SEEK™,¹¹ the Health Leads recommended tool,¹² the PRAPARE tool,¹³ and the Accountable Health Communities tool.¹⁴ A growing number of health providers and health systems use the 2-question Hunger Vital Sign™ tool, developed by Children’s HealthWatch.¹⁵ The tool has been validated for all ages and is based on the US Department of Agriculture (USDA) Food Security module,¹⁶⁻¹⁸ which has been considered the gold standard screening form for food security.

Both the Hunger Vital Sign™ and the Accountable Health Communities tool (which includes the Hunger Vital Sign™, among other health-related social needs questions) measure economically-driven lack of food and concern about lack of food, and are consistent with the official federal definition of food insecurity.¹⁹ Furthermore, the screens’ “often true, sometimes true, never true” answers are in line with the USDA module, capture concepts of food insecurity

severity, and have recently been shown to be more sensitive than similar screens with “yes, no” answers.²⁰

When a validated screen is used in the context of a clinical visit, the questions and answers can be coded using a system called LOINC® (Logical Observation Identifiers Names and Codes). “LOINC is a common language (set of identifiers, names, and codes) for identifying health measurements, observations, and documents.”²¹ LOINC® is predominantly used to document lab results, and is increasingly used for validated screening tools.

LOINC® encodes valid instruments by giving each question and answer an alphanumeric code that is interoperable, i.e. able to be shared across all EHRs. This means users can both use LOINC® to craft internal follow-up for screening question responses and communicate these needs in referrals or orders; it also means that those standardized data can be aggregated across health systems for research and population

FIGURE 2

Hunger Vital Sign™ LOINC® Codes

Hunger Vital Sign™ Summary Code 88121-9

For each statement, please tell me whether the statement was often true, sometimes true, or never true for your household:

- 1 Within the past 12 months, we/you worried whether our/your food would run out before we/you got money to buy more. **88122-7**
 - Often true – LA28397-0
 - Sometimes true – LA6729-3
 - Never true – LA28398-8
 - Don't know/refused – LA15775-2
- 2 Within the past 12 months, the food we/you bought just didn't last and we/you didn't have money to get more. **88123-5**
 - Often true – LA28397-0
 - Sometimes true – LA6729-3
 - Never true – LA28398-8)
 - Don't know/refused – LA15775-2

*Households or individuals screen **positive** for risk of food insecurity if the response is “often true” or “sometimes true” to either or both statements.*

Presence of risk of food insecurity?
88124-3

- AT RISK – LA15992-3
- NOT AT RISK – LA19983-8

health initiatives. The Hunger Vital Sign™ National Community of Practice applied for LOINC® codes for the Hunger Vital Sign™. These codes are detailed along with the Hunger Vital Sign™ questions and answers in Figure 2. (For more information, see the Hunger Vital Sign LOINC Details Page.)

B. Food Insecurity Assessment – SNOMED CT and ICD

Results of all food insecurity screening should be documented. In health care, providers typically also interpret screening results to yield an assessment. Patients who screen at-risk for food insecurity should have this concern assessed, and then if determined to be food insecure, the assessment also should be documented in the medical record so it can be addressed during the current and subsequent visits with the health care team.

In the US, health care providers generally use two sets of codes to categorize patient assessment: ICD-10-CM and SNOMED CT. Each provides an opportunity to document food insecurity assessments.

INTERNATIONAL CLASSIFICATION OF DISEASES AND RELATED HEALTH PROBLEMS (ICD) CODES

ICD codes are used in almost all areas of health care to indicate diagnoses and to support billing. They are attached to orders, such as labs or x-rays, to define why tests or procedures are necessary, and also to help guide the interpretation of results. They are typically referenced in the patient's electronic bill for an office visit, or on an order to trigger billing.

ICD codes are maintained internationally by the World Health Organization (WHO).²² In the US, the National Center for Health Care Statistics (NCHS) is responsible for ICD. NCHS has developed a “clinical modification” of

the international ICD code — ICD-10-CM.²³ Although ICD-10-CM codes in general conform to the WHO ICD conventions, there are subtle differences in available codes between the versions.

To diagnose food insecurity with ICD-10-CM, health providers can use code Z59.4 — “Lack of adequate food and safe drinking water.” The ICD-10-CM codes in the Z set from Z55-Z65 refer to “Persons with potential health hazards related to socioeconomic and psychosocial circumstances.” These codes were new to the ICD-10 update from ICD-9. Despite the improvement in ICD-10-CM, the new food insecurity code is still not sufficiently specific. For example, it does not distinguish between very low and low food insecurity (i.e., the severity of food insecurity), or between inadequate food availability versus safe drinking water. In a later section, this paper will review emerging opportunities to improve ICD-10-CM codes for food insecurity.

SYSTEMIZED NOMENCLATURE OF MEDICINE-CLINICAL TERMS (SNOMED CT) CODES

SNOMED CT codes are an international, clinically-based vocabulary for health care providers to document care delivery. In the US, they are predominantly used to describe clinical observations and findings, and are contained in a patient’s EHR Problem List. A Problem List includes concerns relevant to patients over time. While ICD diagnoses can change from visit to visit, the Problem List is a place in every patient’s EHR where chronic concerns are documented. Health care providers are required to regularly update the Problem List.

SNOMED CT is considered to be more granular than ICD, but with the increased breadth and specificity of ICD-10 CM, there is more equivalency between the code

sets. This is reflected in a publicly-available map between SNOMED CT and ICD-10 CM maintained by National Library of Medicine (NLM).²⁴ This map supports automatic generation of diagnostic ICD-10 CM codes from SNOMED CT codes captured documentation of clinical care. In addition to medical problems, SNOMED CT codes can be used to document almost all other aspects of care. For example, SNOMED CT codes can define body structures, describe environments, and mark clinical interventions.

SNOMED CT codes are maintained by a non-profit organization called SNOMED International, whose mission is to create “a global language for health.”²⁵ SNOMED International (snomed.org) is comprised of member governments and government agencies and is a member-owned and member-driven organization. NLM distributes the US Edition of SNOMED CT to licensed individuals via the UMLS Terminology Services.²⁶

The Hunger Vital Sign™ National Community of Practice successfully submitted a request for a specific SNOMED CT code for food insecurity in 2017 through the National Library of Medicine SNOMED CT request system. **The new SNOMED CT code for Food Insecurity is 733423003.** This code is the first discrete SNOMED CT code for documenting food insecurity assessments. Placing it in a patient’s Problem List will enable providers to follow the concern over time and could also facilitate research on interventions and outcomes.

SNOMED CT AND ICD-10 MAPPING IN EHRs

ICD-10-CM and SNOMED CT codes that are defined as similar can be mapped within EHRs to auto-translate into one another.²⁷ At the time of diagnosis with ICD-10-CM, EHRs enable providers to then translate

ICD diagnoses to related SNOMED CT codes that can be used to update the Problem List. Conversely, providers also can use SNOMED CT codes to generate ICD codes for claims through a problems-based assessment. If there is no existing translation between the two systems, providers can also search within like concepts.

ICD-10-CM Code	Mapped SNOMED CT Codes
Lack of Adequate Food and Safe Drinking Water Z59.4	<p><u>Current Mapped SNOMED:</u></p> <p>Insufficient Food Supply 706875005</p> <p>March 2018:</p> <p>Food Insecurity 733423003</p>

Currently, ICD-10-CM “Z59.4. Lack of adequate food and safe drinking water” maps to SNOMED CT, insufficient food supply (706875005). **In March of 2018, the new SNOMED CT food insecurity code (733423003) will also be mapped to Z59.4.** Until then, providers can manually add food insecurity (733423003) to a patient’s EHR-based problem list.

C. Food Insecurity Interventions

Interventions to address food insecurity vary across clinical settings. Some practices have on-site staff that provide counseling and in-person supports (e.g., helping a patient apply for SNAP or WIC, locate a free summer meal site, a congregate meal site, or an emergency food provider) and/or food resources (e.g., gift card to local grocery store, bag of food from on-site pantry or partner agency). Other settings make external referrals to agencies or programs offering nutrition assistance or other social services.

Current best practices include a comprehensive approach to both assess and respond to a patient’s immediate needs (e.g., connect the patient to an emergency food resource), and then refer the patient to internal or external assistance to access longer-term resources and solutions (e.g., SNAP or school meal application assistance).

All of these activities can be documented in EHRs to track food insecurity interventions. Successful documentation depends on understanding how to build each activity into the EHR. Documenting interventions is critically important not just for providing high quality patient care and follow up, but also for evaluating which interventions help patients achieve better health outcomes. These data can help an individual clinic or entire health system make the case around investing time and resources in screening and intervening to address food insecurity.

INTERVENTION TYPES – COUNSELING, ORDERS, AND REFERRALS

Interventions to address food insecurity can be categorized into activities related to counseling, writing orders, and making referrals. Each has a specific coding language in daily medical practice.

- Counseling involves interviewing and applying mental health and behavioral strategies
- Orders are concrete activities or prescriptions that providers request to address patient concerns
 - **Referrals are a type of order wherein providers request services from or interventions by other providers, including community resources, to assist with patient concerns**

In the US, codes for these activities sit in many different coding languages that are described further in the next section.

FOOD INSECURITY COUNSELING

Although there are no discrete codes specifically for counseling on food insecurity concerns, SNOMED and ICD offer codes for counseling activities that may include useful interventions for patients experiencing food insecurity. For example:

- **SNOMED CT has codes to describe counseling on financial and food matters**
 - **Finances education, guidance, and counseling; 410292002**
 - **Food education, guidance and counseling; 410293007**
- **ICD-10-CM includes code Z71.89, “other specified counseling” which can apply generally to counseling on nutrition, safety, and health**

FOOD INSECURITY ORDERS AND REFERRALS

There also are many types of non-counseling interventions for food insecurity. For instance, health care providers can order direct food prescriptions as well as refer patients to both internal and external agencies, federal nutrition programs, and other food resources for management and assessment. **Currently, to document referrals related to food insecurity, providers can use the SNOMED CT code “patient referral for socioeconomic factors,” 41920009.**

Examples of Food Insecurity Orders and Referrals Using SNOMED CT code 41920009 include:

- **Food Prescriptions:** In order to respond to the immediate needs of food-insecure patients, some clinics offer on-site food assistance through food pantries or food delivery. Other clinics collaborate with national or regional programs to offer food prescriptions. The structure of each of these depends on clinic and community resources and participating programs.

- **There is currently no unique code for food prescriptions.**
- **SNOMED CT has a code for food provision, 710925007 that could meet the intent of on-site food assistance**
- **Federal Nutrition Program Referrals:** Health care providers also can customize EHR systems to track use of resources and referrals for food-insecure patients. These fields should include referrals to the federal nutrition programs that eligible patients can access on a more regular basis than emergency food sources. Federal nutrition programs are available in every state and are effective in reducing food insecurity and for improving nutrition and health.²⁸⁻³¹ The key federal nutrition programs include the following:

For children and adults:

- **Supplemental Nutrition Assistance Program (SNAP)**

For pregnant women and families with children:

- **The Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)** for pregnant and breast-feeding mothers, infants, and children up to age five

For further information on food insecurity assessment and how to refer patients to nutrition and food resources, see *Addressing Food Insecurity: A Toolkit for Pediatricians*. frac.org/aaptoolkit

For Information on HIPAA concerns about sharing information, see *Food Banks as Partners in Health Promotion: How HIPAA and Concerns about Protecting Patient Information Affect Your Partnership* chlpi.org/wp-content/uploads/2013/12/Food-Banks-as-Partners_HIPAA_March-2017.pdf

- **Child and Adult Care Food Program**
- **School Breakfast Program**
- **National School Lunch Program**
- **Summer Meals**
- **Afterschool Nutrition**

For patients 60 and older (provided through the Older Americans Act 32):

- **Congregate Meals**
- **Home-Delivered Meals**

For patients with severe or chronic illness:

- **Investigate insurance-reimbursable medically tailored meal services available in many states**
- **Case Management Referrals:** If available, internal or external case management specialists who are trained to connect patients to all available resources can work with food-insecure patients as follows:
 - **Internal referrals:** A case manager, social worker, and/or a nutritionist within the clinic system can provide support to the patient.
 - **External referrals:** Health care providers can set up collaborations with community partners that are equipped to connect patients to resources and help navigate patients through necessary applications and connections. Direct referrals to an outside agency may require written patient consent in order to meet federal requirements for the transfer of patient information.

2-1-1®: Across the US, the United Way 2-1-1® system exists to connect individuals to essential community resources. 2-1-1® offers a range of services depending on the region, but it can be a key first

MEDICALLY-TAILORED MEALS BILLING OPPORTUNITIES

Efforts led by the Food Is Medicine Coalition have been successful in securing reimbursement for a subset of medically-tailored food — medically tailored home-delivered meals (MTMs) for critically, chronically-ill individuals. These efforts could prove instructive for efforts to augment reimbursement in cases where interventions are provided to support the nutritional needs of patients with food insecurity. MTMs are meals approved by a Registered Dietitian Nutritionist (RDN) that reflect appropriate dietary therapy based on evidence-based practice guidelines. Diet/meals are recommended by a RDN based on a nutritional assessment and a referral by a health care provider to address a medical diagnosis, symptoms, allergies or medication management and side effects to ensure the best possible nutrition-related health outcomes. An MTM prescription is often paired with medical nutrition therapy (MNT), an evidence-based application of the Academy of Nutrition and Dietetics' Nutrition Care Process focused on prevention, delay, or management of diseases and conditions, involving an in-depth assessment, periodic reassessment and intervention. The Affordable Care Act, through its focus on improved outcomes and lowering cost, has fostered an increase in MTM programs through creative public, non-profit, and insurer partnerships.^{38,39} Of note, MTMs have been covered by public insurers in some locations through:

- [Medicaid 1115 Waiver Demonstration Projects](#)
- [Medicaid 1915\(c\) Home and Community Based Services Waivers](#)
- [Medicare Part C \(Medicare Advantage Plans\)](#)
- [PACE Programs](#)
- [Dual Eligible Demonstration Projects \(Medicaid/Medicare\)](#)
- [Bundled Payment Models](#)
- [Delivery System Reform Incentive Payment Models \(DSRIP\)](#)

call for patients and clinics needing to connect with both regional and federal food resources.^{33,34}

Some further examples of external referrals include:

- Help Me Grow for early childhood referrals³⁵
- Emergency Food Providers
- Regional Anti-Hunger Organizations
- Medical-Legal Partnerships
- Social Service Agencies
- Medically Tailored Home-Delivered Meal Providers
- Local SNAP offices
- Local WIC clinics

D. Food Insecurity Billing and Claims Opportunities

A final step in a visit with a health care provider involves generating an electronic claim for services. This claim or bill contains the ICD-10-CM codes assigned during the visit and codes for visit charges. The charges are based on set visit criteria, including billable screening and procedures, and either prevention or complexity-based evaluation and management codes. In capitated systems where no actual billing occurs, the claim can be used to create a record of services and costs.

The billable components of the visit are primarily based on codes called Current Procedural Terminology (CPT®) codes. CPT® codes, trademarked and managed by the American Medical Association, are the most universal code set for billable services.³⁶ In addition to CPT®, Medicare employs a unique billing system for many services within a code set called Health Care Common Procedure Coding System (HCPCS).

There are no specific CPT® or HCPCS codes related to food insecurity screening and intervention activities. However, **the Hunger Vital Sign™ National Community of Practice worked with the American Medical Association and the American Academy of Pediatrics to verify that food insecurity screening can be billable in certain instances under general health risk screening CPT® codes.**³⁷ The health risk screening CPT® codes verified by the Hunger Vital Sign™ National Community of Practice that can be used to screen for food insecurity include:

- Administration of a patient-focused health risk assessment instrument — CPT® 96160
- Administration of caregiver-focused health risk assessment instrument for the benefit of the patient — CPT® 96161

Each of these codes includes scoring and documentation of a standardized instrument.

FOOD INSECURITY-RELATED ACTIVITIES BILLING

There are other strategies that can be used to reimburse food insecurity-related activities. *This is a general overview. We suggest clinics and providers work with regional coding specialists for comprehensive details on reimbursement procedure and options:*

- Some insurance programs allow a food insecurity diagnosis (Z59.4) to increase the complexity of the visit, which then triggers increased reimbursement. Providers should check with regional insurers.
- In non-preventative, problem-based visits, if food insecurity is assessed and the provider counsels the patient directly and documents sufficient time spent in counseling activities, preventative medicine counseling codes can be reported in

addition to evaluation and management (E/M) CPT codes for the visit and thus increase reimbursement. In this instance, providers would use the time-based preventative medicine counseling codes (CPT 99401-99406).

Since these are billable codes, the codes may generate a patient charge if screening is conducted with under-insured patients or patients on certain insurances that do not

cover these screening activities. In capitated models where there is no actual patient billing, these codes can be used to track screening rates for performance measurement.

Please refer to to Figure 1 (on page 6) for possible flow of food insecurity coding opportunities in the course of an office visit.

Section II reviews recommendations about ways to increase reimbursement for these codes.



SECTION II

Opportunities and Recommendations to Improve Food Insecurity–Related Documentation in EHRs

Key opportunities to support food insecurity-related EHR documentation include:

1. **Use and promote existing coding opportunities, as discussed in Section I;**
2. **Advocate for a more comprehensive and coherent set of food insecurity EHR documentation tools.**

The Hunger Vital Sign™ National Community of Practice is working with national health information experts to advocate for improved codes for food insecurity across the care continuum. The aim is to enable providers to better document patient concerns and facilitate further research and quality improvement opportunities related to food insecurity. *To join us in this work, please contact the Hunger Vital Sign™ National Community of Practice through the email addresses at the end of this brief.*

Current opportunities for more specific codes for food insecurity screening, assessment, intervention, billing, and quality reporting include:

Assessment (ICD):

- **ICD-10-CM.** As described earlier in this brief, there is just one ICD-10-CM code in the US, “Lack of adequate food and safe drinking water, Z59.4,” for use with both food and water adequacy. In WHO’s international ICD-10, these codes are split into Z59.4 “Lack of adequate food” and Z58.6 “Inadequate drinking water supply.” National experts in coding and the social determinants of health, along with members of the Hunger Vital Sign™ National Community of Practice, are working with NCHS to both 1) advocate for release of these existing international codes into ICD-10-CM for broader use, and 2) develop a unique new food insecurity ICD-10-CM to pair with the food insecurity SNOMED CT code.
- **ICD-11.** The WHO beta draft of ICD-11 has capacity for public comments on draft codes. The Hunger Vital Sign™ National Community of Practice has a one page brief on how to apply as a beta draft user in order to suggest a specific code for food insecurity. Contact us for details.

Interventions:

- **Develop coding that reflects food insecurity interventions.** This will include securing specific SNOMED CT codes for both referral for nutrition and food resources and food prescriptions. The process for this is similar to SNOMED CT concept codes — i.e., applications are made through the SNOMED Content Request System.

Billing:

- **Advocate nationally and locally to allow reimbursement of food insecurity screenings and related activities.** Reimbursement requests are supported by the availability of validated screening tools and the emerging data on the links between food insecurity and health outcomes.^{40,41} Medicaid reimburses for health risk screening CPT® as part of the Early and Periodic Screening, Diagnostic and Treatment Program, but authorization for frequency of reimbursement varies depending on state regulations.⁴² Blue Cross Blue Shield has regional and state variations in reimbursement.
 - **Working with local health professional associations, such as state chapters of the American Academy of Pediatrics and American Academy of Family Physicians, to advocate for state level changes in reimbursement has been demonstrated as an effective way to change state insurance policy.**⁴³

Quality Codes:

- The primary purpose of quality reporting/tracking codes are to inform health organizations and insurers about visit events related to quality measures without the need for complicated chart review. Advocates can help improve food insecurity quality improvement by developing consensus on performance measures

related to food insecurity activities. Ideally, these would be based on common quality reporting/tracking systems like:

- **CPT Category II: These codes are insurer-independent and thus enable evaluation of quality practices across populations and insurers**
- **MIPS: The Merit Based Reporting System is a new program that combines past Medicare quality programs. A component of MIPS is the MIPS Quality Performance Category**

Conclusion

Addressing and documenting food insecurity and other social determinants of health in the context of clinical care has the potential to improve patient and population health and to decrease health care costs. Growing interest in these activities has led an increasing number of health care providers to identify food insecurity and connect patients to nutrition and food resources.^{44,45} Despite considerable progress, the health care system can do more to ensure that providers can adequately document these activities in EHRs. Improving the quality and standardization of documentation around food insecurity will require on-going regional and national collaboration across providers, health systems, medical professional organizations, standards development organizations, non-profit organizations, federal and state government agencies, and insurers.

To get more involved and share your ideas, please contact the Hunger Vital Sign™ National Community of Practice.

About the Hunger Vital Sign™ National Community of Practice

Co-convened by Children's HealthWatch and the Food Research & Action Center (FRAC), the CoP facilitates conversations and collective action across a wide-range of stakeholders interested in addressing food insecurity through a health care lens. The group collects and conducts research on the connections between food insecurity and health; promotes the use of the Hunger Vital Sign™ to screen for food insecurity; and champions effective interventions to address food insecurity both at the practice and policy level. The group includes physicians, health care professionals, public health researchers, anti-hunger advocates, food and nutrition service providers, and policy experts.

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