

November 2019

Food Insecurity Issue Brief

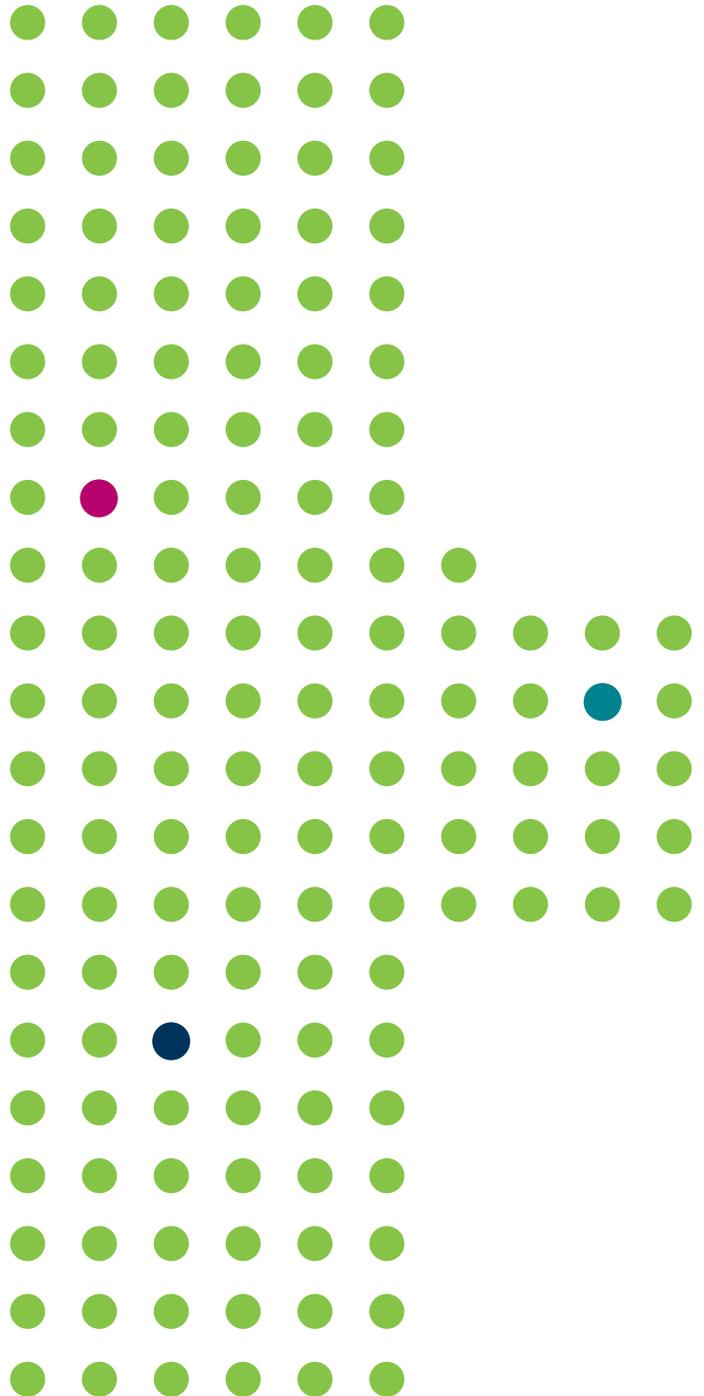
BOLD GOAL,
POPULATION HEALTH STRATEGY
OFFICE OF THE CHIEF MEDICAL OFFICER

The intent of this brief is to increase knowledge and inform our stakeholders of opportunities to address social determinants of health, a core function of Humana's Bold Goal, Population Health Strategy. Our Bold Goal is dedicated to improving the health of the communities we serve 20% by 2020 and beyond by addressing the health of the whole person.

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The facts

It is widely understood that the quality of food we eat affects our health. However, for many Americans, an unhealthy diet is not a choice, but rather a consequence of food insecurity. Defined, food insecurity is limited or uncertain access to enough food to live a healthy, active life.¹ While food insecurity is closely tied to economic stability, the factors leading to food insecurity are much more complex, ranging from income, employment and disability to race, ethnicity and neighborhood characteristics.²

Because the factors are so varied and complicated, the rate of food insecurity has remained essentially unchanged for a number of years, and even increased for certain population segments. In fact, 11.1% of households were food insecure in 2018, which means there are more than 12 million children living in homes with limited access to adequate food.³

Food insecurity is particularly high among:³

- Women or men living alone
- Black- and Hispanic-headed households
- Households with incomes near or below the federal poverty line
- Households with children, particularly those headed by single women or single men

Food insecurity's impact on healthcare

\$1,834

Higher annual healthcare expenditures for a food insecure adult⁴

47%

Increased likelihood of an adult in a food insecure household being admitted to the hospital⁵

27%

Increase in hypoglycemia admissions during the last week of the month for low-income, diabetic adults due to food budget exhaustion⁶

The United States Department of Agriculture (USDA) makes a clear and explicit distinction between food insecurity and hunger.

- **Food insecurity**

is a household-level economic and social condition of limited or uncertain access to adequate food.

- **Hunger**

is an individual-level physiological condition that may result from single food insecurity.

¹Feeding America, www.feedingamerica.org/hunger-in-america/senior-hunger-facts

²<https://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health/interventions-resources/food-insecurity>

³Coleman-Jensen, A, et al. Household Food Security in the United States in 2018. United States Department of Agriculture. Sept 2019. https://www.ers.usda.gov/webdocs/publications/94849/err270_summary.pdf?v=963.1

⁴Berkowitz SA, Basu S, Gundersen C, Seligman HK. State-Level and County-Level Estimates of Health Care Costs Associated with Food Insecurity. *Prev Chronic Dis* 2019;16:180549. DOI: <https://doi.org/10.5888/pcd16.180549>.

⁵Berkowitz, S.A.; Basu, S.; Meigs, J. B. and Seligman, H.K. (2018), Food Insecurity and Health Care Expenditures in the United States, 2011–2013. *Health Serv Res*, 53: 1600-1620.

⁶Seligman, H., Bolger, K., Guzman A., et al. 2014. Exhaustion of food budgets at month's end and hospital admissions for hypoglycemia. *Health Affairs*. 33(1): 116-123.

What is food insecurity?



Ranges of food security⁷

The USDA uses multiple labels to describe ranges of food security:



High food security

No reported indications of food-access problems or limitations.

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.

Low food security

Reports of reduced quality, variety or desirability of diet. Little or no indication of reduced food intake. Food insecurity without hunger.

Very Low food security

Reports of multiple indications of disrupted eating patterns and reduced food intake. Food insecurity with hunger.

Impact on military and veterans

In 2017, data from an annual Census Bureau survey showed that more than 16,000 active-duty service members received Supplemental Nutrition Assistance Program (SNAP) benefits,⁸ and a 2018 study found that 1.5 million veterans live in a household that completely relies on SNAP to supplement their food intake.⁹

Impact on seniors

For seniors, the rate of food insecurity remains elevated above the rate experienced before the Great Recession (6.3% in 2007 versus 7.7% in 2017), and the number of seniors who are food insecure has reached 5.5 million—more than double from 2001 (2.3 million).¹⁰ There is concern that this trend will only worsen as more Americans age into retirement, as 11.3% of persons between 50 and 59 are food insecure, while 4.7% are very low food secure (VLFS). Shockingly, from 2001 to 2017, the number of food insecure and VLFS persons in the 50–59 age group increased by 46% and 80%, respectively, and the number in each group rose 95% and 139%.¹¹

⁷USDA Economic Research Service

⁸<https://www.nbcnews.com/news/military/why-are-many-america-s-military-families-going-hungry-n1028886>

⁹Sobol Z. Why Are So Many Veterans Food Insecure? | Move For Hunger. Move For Hunger. <https://www.moveforhunger.org/why-are-so-many-veterans-food-insecure/>. Published 2019.

¹⁰Ziliak, J. P. & Gunderson, C. (2019). The state of senior hunger in America in 2017. Prepared for Feeding America.

¹¹Ziliak, J. P. & Gunderson, C. (2019). Hunger Among Adults Age 50-59 in 2017. Prepared for Feeding America.

The political landscape of food insecurity ● ● ● ● ●

The U.S. first acknowledged the government's role in addressing hunger during the Great Depression. Early interventions came in the form of public relations campaigns to educate homemakers on how to stretch the meager foodstuffs distributed by local, state and federal governments. Millions tuned in to hear "Aunt Sammy" share recipes optimizing caloric intake.¹²

National programs for food support

Today, there are a number of programs to combat food insecurity among vulnerable populations. The USDA Food and Nutrition Service administers 15 programs, including SNAP for low-income families, the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), the Commodity Supplemental Food Program for low-income seniors, and the National School Lunch Program.

While these programs provide a critical safety net for millions of Americans, the USDA states that 37.2 million people—or 1 in 9—lived in food insecure households in 2017 (the most recent year of reporting available).¹³ Because the health impacts are well established, Managed Care Organizations (MCOs) in Medicare Advantage (MA) and Medicaid have increasingly taken on the responsibility of addressing food insecurity and other health-related social needs.¹⁴

Medicare Advantage

MA plans have long had the ability to provide home meal delivery as supplemental benefits for members, though only for those recently discharged or with one or multiple chronic conditions. These benefits are time-limited and not intended to address food insecurity; rather, they are intended to prevent an inpatient admission—or readmission—in the near term. But beginning with the 2019 plan year, the Centers for Medicare & Medicaid Services (CMS) gave MA plans greater flexibility to offer primarily health-related benefits to address social needs, such as adult care services and caregiver support.

For plan year 2020, MA plans may also offer Special Supplemental Benefits for the Chronically Ill (SSBCI), which may be "not primarily health-related and may be offered non-uniformly to eligible chronically ill enrollees."¹⁵ Additional information provided in an [April 24, 2019 memo](#) clarified that plans have "broad discretion" in developing SSBCI as long as there is "reasonable expectation of improving or maintaining the health or overall function of the enrollee as it relates to the chronic disease." Further, SSBCI may be tailored to meet individual needs (rather than a class of individuals), and social determinants of health (SDOH) may be used to limit eligibility. In 2020, approximately 250 MA plans reaching 1.2 million beneficiaries will offer SSBCI, including expanded meal delivery and transportation for nonmedical needs, like grocery shopping.¹⁶

¹²Chandler, A. How the Great Depression Still Shapes the Way Americans Eat. *The Atlantic*. Dec. 22, 2016.

¹³<https://www.ers.usda.gov/webdocs/publications/94849/err-270.pdf?v=963.1>

¹⁴Shrank WH, Keyser DJ, Lovelace JG. Redistributing Investment in Health and Social Services—The Evolving Role of Managed Care. *JAMA*. 2018;320(21):2197–2198. doi:10.1001/jama.2018.14987

¹⁵Announcement of Calendar Year (CY) 2020 Medicare Advantage Capitation Rates and Medicare Advantage and Part D Payment Policies and Final Call Letter. <https://www.cms.gov/Medicare/Health-Plans/MedicareAdvtgSpecRateStats/Downloads/Announcement2020.pdf>.

¹⁶<https://www.cms.gov/newsroom/press-releases/trump-administration-drives-down-medicare-advantage-and-part-d-premiums-seniors>



Also new for 2020, the Center for Medicare & Medicaid Innovation (CMMI) announced a new Value-Based Insurance Design (VBID) model, which will now allow targeted MA benefits to be based solely on socioeconomic status (defined by CMMI as enrollees eligible for the Low-Income Subsidy). The purpose of VBID is to test innovative benefits to reduce healthcare costs, improve quality and generally improve care delivery. Intended to run through 2024, VBID provides a valuable opportunity to study how addressing the nonmedical needs, such as food insecurity, of low-income beneficiaries may improve health outcomes.¹⁷

Medicaid

At the state level, Medicaid agencies have learned that unmet social needs lead to higher healthcare costs and an inability to move out of poverty and are therefore placing more focus on SDOH. For example, **North Carolina**, using a **Medicaid Section 1115 waiver**, is addressing SDOH on a number of fronts:

- Identified four priority SDOH domains on which to focus.
- Developed a standardized set of SDOH assessment questions, including **The Hunger Vital Sign™** for food insecurity, for healthcare providers to use when screening patients for food insecurity.
- Built NCCARE360, a statewide resource platform, in partnership with **Unite Us**, which allows all service providers to send and receive referrals, communicate and track outcomes in order to better integrate health and human services.
- Invested \$650 million in Healthy Opportunity Pilots to test evidence-based interventions related to food, housing, transportation and interpersonal safety.



The Hunger Vital Sign™

This two-question screening tool enables Humana and other clinicians to quickly assess the food needs of a patient and their household.

1. ***“Within the past 12 months we worried whether our food would run out before we got money to buy more.”***

Was that often true, sometimes true, or never true for you/ your household?

2. ***“Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.”***

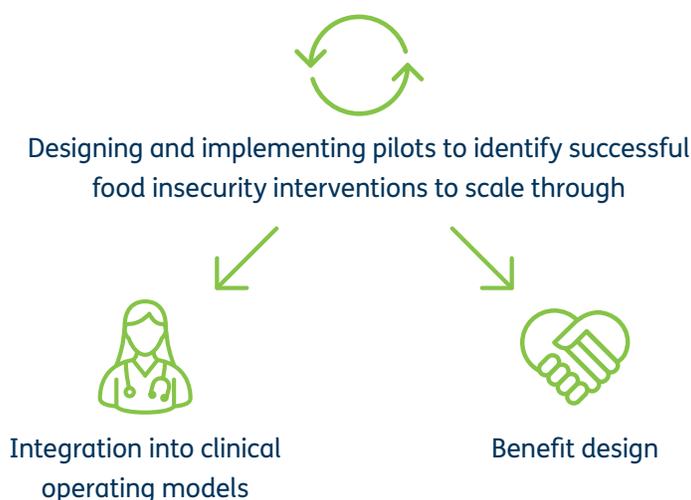
Was that often true, sometimes true, or never true for you/ your household?

A response of “sometimes true” or “often true” to either or both questions should trigger a referral for food security support.

¹⁷<https://innovation.cms.gov/initiatives/vbid/>

How Humana is addressing food insecurity ● ● ● ●

Payer strategies to address food insecurity and other SDOH generally fall into one of two categories: creating supplemental benefits or supporting/referring to community-based organizations (CBOs), such as food banks.¹⁸ Humana’s overarching strategy is to treat food insecurity as a clinical gap in care. With this in mind, Humana’s Bold Goal Population Health Strategy team has a three-pronged approach, informed by research and advanced analytics:



Integrating strategies into the clinical setting

Humana-conducted research with the Hunger Action Alliance in Tampa, Florida, found that older adults are highly susceptible to being food insecure—and the primary care setting is an ideal place to identify their need.¹⁹ That is why much of Humana’s work has been focused on empowering clinicians with the training and tools to screen for and discuss the health impacts of food insecurity, and to connect their patients to resources in the clinic or local community to close that gap.

Humana’s relationship with Feeding America is key to this strategy. In fact, the Bold Goal team collaborated with Feeding America to publish **Food Insecurity and Health**, a resource toolkit for healthcare professionals to screen patients for food insecurity and refer those in need to community resources and support for help. This relationship has allowed for quick setup of local interventions. For instance, Feeding South Florida, a Feeding America-affiliated food bank, has partnered with the Bold Goal team to conduct pilots in Broward County, Florida clinics to screen patients for food insecurity and connect them to community resources.²⁰

¹⁸Thomas KS, Durfey SNM, Gadbois EA, et al. Perspectives of Medicare Advantage Plan Representatives on Addressing Social Determinants of Health in Response to the CHRONIC Care Act. *JAMA Netw Open*. Published online July 12, 2019;2(7):e196923. doi:10.1001/jamanetworkopen.2019.6923

¹⁹L. Kihlström, M., et al. (2019) Food Insecurity and Health-Related Quality of Life: A Cross-Sectional Analysis of Older Adults in Florida, U.S., *Ecology of Food and Nutrition*, 58:1, 45-65, DOI: 10.1080/03670244.2018.1559160

²⁰McGrath, E., et al. (2017, March). Measuring Food Insecurity and Healthy Days in a Primary Care Setting. 27th Annual Art and Science of Health Promotion Conference, Colorado Springs, CO. <http://apps.humana.com/marketing/documents.asp?file=3105791>



While we know the primary care physician (PCP) office is the preferred setting for the identification of health needs in patients, there is limited research on the impact to clinical workflow of implementing SDOH screenings and referrals for patients. Therefore, Humana has partnered with Feeding America, the Houston Food Bank and the University of Houston to conduct research to better understand and assess the impact of food insecurity screenings and referrals in the healthcare setting, including measuring the time it takes and noting any other workflow impacts.

We also know that to be successful, food insecurity interventions, like clinical interventions, must be held to high quality standards. Humana is leading efforts to standardize benchmark measurements and expectations to help physicians effectively address food insecurity by working with the National Quality Forum to define quality measures around food insecurity. This work will result in the ability to incentivize and reward providers based on validated measures tied to patient outcomes.

Internally, teams across the enterprise have integrated food insecurity into their interactions with members. In 2018, Humana completed over 500,000 food insecurity screenings—with appropriate referrals—and is on track to meet or exceed the goal of 1 million screenings in 2019. In future months, this work will be supported with a food insecurity predictive model, which will help identify MA members who are most at risk.



Food is medicine

The food we eat can play a role in preventing or treating disease. While distinct from food insecurity—a lack of consistent access to enough food for an active, healthy life²¹—nutrition is also essential to good health.

A number of recent studies have established the potential impact of medically tailored meals and food pharmacy models. In one study, the weekly delivery of 10 ready-to-consume meals tailored to individual medical needs appeared to be associated with fewer hospital and skilled nursing admissions and less overall medical spending.²²

While evidence to date is promising, more research is needed to demonstrate the effectiveness of these interventions. To support this research, the 2018 Farm Bill, which authorizes programs and funding for the Food and Nutrition Service, created the Produce Prescription Program. This program will invest up to approximately \$5 million annually in pilot projects to “(i) provide fresh fruits and vegetables to low-income individuals suffering from or at risk of developing diet-related health conditions, and (ii) evaluate the impact of these types of projects on dietary health, food security and health care use and costs.”²³

²¹<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-us/definitions-of-food-security.aspx>

²²Berkowitz, S, et al. Association between receipt of a medically tailored meal program and health care use. *JAMA Intern Med.* 2019. Epub ahead of print. PMID: 31009050. DOI: 10.1001/jamainternmed.2019.0198

²³<https://www.ers.usda.gov/agriculture-improvement-act-of-2018-highlights-and-implications/local-and-regional-foods/>



Designing plan benefits around food insecurity

Policy changes announced by CMS for MA in 2018 and 2019 have expanded Humana’s ability to address food insecurity through benefits. For plan year 2019, MA plans in Louisville, Kentucky, Richmond, Virginia and Tampa, Florida are testing an innovative post-acute and chronic condition meal benefit with Meals on Wheels™, reaching approximately 6,000 members. This food benefit is unique in that it also addresses transportation challenges by delivering meals to members’ homes as well as loneliness concerns by providing a Friendly Visitor benefit to those who screen positive for loneliness. In 2020, this benefit will extend to another 8,300 Dual-Eligible Medicare Advantage Special Needs Plan enrollees in Tennessee.

In 2020, Humana will be one of the first participants in the new VBID model, which allows plans to target supplemental benefits to members based only on socioeconomic status. In effect, 27 plans will include Humana’s Healthy Foods Card benefit, which will provide approximately 50,000 eligible members with \$25 or \$50 each month to purchase groceries. This benefit will not only help address the financial gap for members with limited resources, but also build an evidence base for interventions that address food insecurity while improving quality outcomes and total cost of care.

The Humana Foundation

The Humana Foundation has also made food insecurity a priority. Through the Strategic Community Investment Program, the Foundation seeks to advance health equity in Bold Goal communities.²⁴ In 2018, the Foundation invested \$7.4 million in nine organizations across seven of these communities, most of which target food insecurity directly or as a component of their programs.²⁵ Included in this investment are:

- **Healthy BR’s Geaux Get Healthy project:** Addresses food deserts in Baton Rouge, Louisiana
- **San Antonio Food Bank’s Senior Wellness Intervention Model program:** Provides comprehensive services to food insecure seniors to improve their health and household stability.

²⁴Humana’s Bold Goal communities: San Antonio, Houston, Louisville, Baton Rouge, New Orleans, Knoxville, Kansas City, Chicago, Richmond, Atlanta, Jacksonville, Tampa Bay, and Broward County, FL

²⁵<https://www.humanafoundation.org/>

Humana's priorities to pursue in the future ● ● ● ●

Humana has recognized several opportunities to continue the important work of addressing food insecurity in the coming months and years. These include:

- **Conduct food insecurity research to demonstrate causative, rather than correlative, outcomes**
While there is considerable research available about the efficacy of food insecurity interventions and their association with health,²⁶ additional evidence is needed to establish the direct connection of food insecurity to health outcomes and expenditures.
- **Scale food insecurity interventions effectively and efficiently**
Analysis has already begun on uncovering the root causes of food insecurity—whether it is episodic or cyclical—and potential interventions. Because interventions are cost-intensive, Humana is using individual tailoring, made possible through SSBCI and other MA benefit flexibility, to make the biggest impact possible with populations most at risk.
- **Explore the “comorbidity” of social determinants of health**
Social determinants of health do not occur in silos. Someone who is food insecure is also likely to have other barriers—for instance, transportation needs may contribute to food insecurity for households in a food desert. In 2019, the Bold Goal team conducted a survey of MA members for a comprehensive set of SDOH, helping to inform future strategy and interventions.
- **Expand food insecurity strategy to new lines of business, particularly Medicaid**
Humana can support Medicaid families by helping them enroll in and maintain eligibility for SNAP and WIC benefits, which can be critical lifelines. Humana can also help families learn how to stretch limited resources and prepare healthy meals on a budget. Plus, the recent addition of more fruits and vegetables to WIC has improved both maternal and infant health outcomes.²⁷
- **Coordinate reporting and data governance**
Though food insecurity screenings are now being broadly adopted, better record keeping is needed to prevent over-screening and poor member experience, while measuring the impact over time. The data can also be used to understand where unmet needs still exist and where expanded benefits, CBO capacity-building, or advocacy for more social services could help.
- **Support community resource capacity challenges**
Humana, physicians and other partners are increasingly referring people for food insecurity, but CBOs such as food banks often already have limited resources. Humana will explore ways to build the capacity of these crucial organizations, whether through direct contributions or with in-kind resources such as referral platforms.

²⁶<http://www.annfamned.org/content/17/5/436.abstract>

²⁷https://www.medpagetoday.com/obgyn/pregnancy/80797?xid=nl_mpt_DHE_2019-07-02&eun=g1323977d0r&utm_source=Sailthru&utm_medium=email&utm_campaign=Daily%20Headlines%202019-07-02&utm_term=NL_Daily_DHE_Active

