Hunger and Health in Ohio: Putting Food to Work as Medicine

OHIO ASSOCIATION OF FOODBANKS

For health care providers, health insurers, policymakers and elected officials, and health and wellness stakeholders

May 2021

CLEAR LINK BETWEEN HUNGER AND HEALTH OUTCOMES

Food insecurity is a lack of consistent access to enough food for an active, healthy life. It can mean anxiety over food sufficiency or food shortages. It can mean reduced quality, variety, or desirability of diet. It can mean disruption in eating patterns and reduced food intake.[1] Food insecurity can be the result of a lack of any number of different resources – both household resources, including adequate funds to purchase food and time, knowledge, and tools to prepare it, as well as community and environmental resources, such as access and proximity to grocery stores.

But the experience of food insecurity is not only one of indignity, injustice, and short-term suffering. Food insecurity is also associated with some of the most costly and serious health problems in the U.S.[2] And too often, food insecure Ohioans have to make impossible choices that further threaten their health and well-being and their ability to mitigate or manage chronic disease, including choosing between buying food or paying for medicine or medical care.[3]

Cycle of Food Insecurity & Chronic Disease

Adapted: Feeding America Hunger + Health Conceptual Framework

Food insecurity has serious long-term consequences for health and well-being.

For children:

- poor overall health status;
- low birth weight;
- iron deficiency anemia;
- birth defects;
- asthma; and
- mental health and academic problems

For adults:

- diabetes;
- obesity (primarily among women);
- hypertension;
- pregnancy complications; and
- depression (including maternal depression)

For older adults and seniors:

- diabetes;
- depression;
- congestive heart failure;
- hypertension; and
- lower cognitive function.

Household food insecurity is a strong predictor of higher health care utilization and increased health care costs.[4]

Ohio's foodbanks have long recognized that we have an important role to play in mitigating the poor health outcomes that too often plague our clients and pile onto their household stress and hardship. As regional service providers with strong community ties as well as state-level partnerships, foodbanks are uniquely positioned to test and scale interventions and engagement models. As Ohio's largest charitable response to hunger, Ohio's foodbanks provide approximately 225 million meals to low- and moderate-income Ohioans each year[5] and have worked hard to increase the amount of fresh produce, wholesome dairy and protein items, and whole grains available to our clients. We know that household food security is a key social determinant of household health. Foodbanks approach the intersection of hunger and health by:

- Promoting increased access to nutritious foods through the hunger relief network, through programs like SNAP, and through public policy that supports overall household security;
- Developing partnerships with health care and health coverage providers to improve houshold food security and well-being through targeted screening, third-party referrals, services, and interventions; and
- Centering nutrition and health through education, community food access, and holistic support.

EVOLVING NATIONAL, STATE, AND LOCAL HEALTH CARE LANDSCAPE

Since the passage and implementation of the Patient Protection and Affordable Care Act (ACA), key shifts in the funding for and delivery of health care services have continued to evolve.

National Success Model

- Shift from fee-for-service to pay-for-performance
- Institute hospital readmission penalties and outcome-based incentives
- Expand coverage to underserved populations

Ohio Implementation

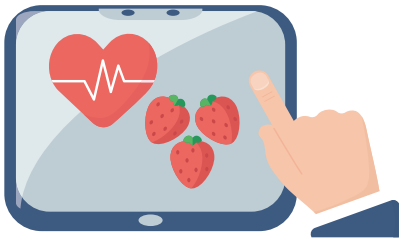
- Expand coverage to underserved populations
- Integrate whole-person approach (behavioral and physical care, social determinants of health or SDOH) in care delivery

State/Local Patient Care

- Invest upstream in early and/or cost-effective interventions
- Develop community-based partnerships
- Treat patients holistically through long-term lens

In Ohio in particular, the strategic shift to focus on the dual goals of lowering costs while improving individual and population health has fueled innovation and investment in Medicaid and Medicare patient outcomes. Ohio's foodbanks have already been significant partners in this work. Our foodbanks have participated in regional and national evidence-based research which has demonstrated the layered benefit to models like value-added services, patient incentive programs, and prescriptive food models. They have piloted or are piloting modernized referral relationships, provider-based screening templates and tools, disease-specific nutrition-based intervention, wraparound components like dietetic services and nutrition education, expansion of accessible, community-based food sources, and more. Generally, these interventions fall into one or more of three categories:

SCREENINGS, REFERRALS, AND ASSESSMENTS



- Food pharmacy/ prescriptive food offerings that improve food security while addressing disparity in health outcomes
- Food insecurity screening in health care settings, warm service referrals, and partnerships with third-party platforms
- Cross-sector data sharing to assess compliance, monitor and measure outcomes, improve service delivery, etc.

EDUCATION AND OUTREACH

- Connecting food insecure patients to federal nutrition programs like SNAP and other household resources
- Integrated nutrition education and/or food procurement practices with dietetic lens
- Event-based outreach, education, and/or clinical services that reaches food insecure individuals as strategy for interrupting food insecurity/chronic disease cycle

INTEGRATED HEALTHY FOOD ACCESS

- Place-based food pantries available to mitigate food insecurity and promote nutrition within clinical setting
- Transportation to convenient, healthy foods or delivery of healthy foods to targeted population as part of patient services menu
- Consistent, balanced foods supplied over long-term disease management or prevention plan, in partnership with chronic care providers

LESSONS LEARNED ABOUT INPUTS, OUTPUTS, AND CHALLENGES

The need to address social determinants of health (SDOH) as a core part of an overall strategy to drive down health care costs and improve health outcomes is not only self-evident but rigorously researched and well-documented. Indeed, increased prevalence of more than 40 serious health conditions in children, adults, and seniors has been linked with food insecurity.[6] Ohio's foodbanks – and leading researchers, insurers, and practitioners – know that investing in relatively low-cost, upstream interventions to SDOH pays dividends in reducing the likelihood of higher-cost, downstream health care expenditures. Much like basic immunizations, annual physicals, or recommended health screenings, interventions addressing SDOH are now commonly viewed as cost-effective and necessary preventative services. Unlike most preventative health services, however, these interventions face unique obstacles in implementation:

Lack of Permanent Funding

Currently, food as medicine initiatives in Ohio are generally funded through privately raised dollars or through one-time pilots. In Ohio, for example, Medicaid does not cover the cost of a produce prescription as a defined benefit. Including food security services as a covered benefit would lend stability and support scale.

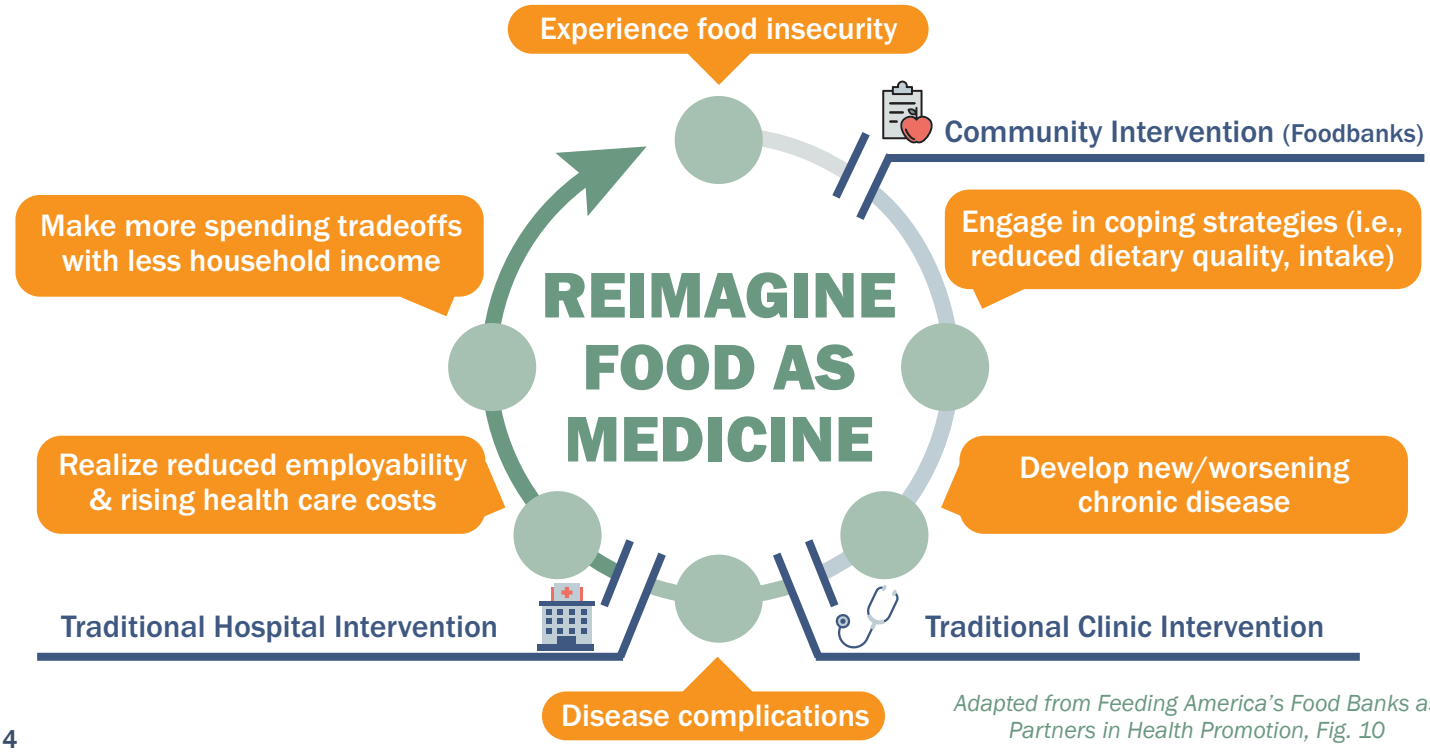
Legal/Regulatory Barriers

Concerns such as complying with HIPAA privacy regulations in establishing patient referrals, adapting electronic health record (EHR) systems for partnership data management, carefully structuring waivers to protect against possible inducement of patients, and others require sophisticated implementation and oversight.[7]

Inconsistent Adoption

With approximately 260 hospitals, 400 Federally Qualified Health Centers[8], thousands of primary care providers and specialists, 113 local health districts, 60 rural health clinics, and hundreds of pharmacies, operationalizing sustainable SDOH intervention models is best done at system, payer, or regulatory levels.

Ohio's foodbanks, along with peers across the country, have been testing, piloting, assessing, researching, and refining best practices for navigating these challenges and barriers and for implementing community interventions that engender improved health and well-being for food insecure patients. Research briefs, white papers, templates, and samples of some of this work are available online from the Ohio Association of Foodbanks at **ohiofoodbanks.org/hungerandhealth**. The remaining pages of this brief include basic synopses of the community interventions we most recommend, with guidance gleaned from our experience.



Adapted from Feeding America's Food Banks as Partners in Health Promotion, Fig. 10

RECOMMENDED SCREENING, REFERRAL, AND ASSESSMENT MODELS

- **Food insecurity screening:** We recommend that providers screen patients for food insecurity as part of standardized patient care using questions such as those recommended in the Hunger Vital Sign™. Ideally, this screening is integrated within the electronic patient medical record. When patients screen positive, health care and hunger relief provider partnerships can utilize several strategies for addressing food insecurity as a social determinant of patient health.

SCREENINGS, REFERRALS, AND ASSESSMENTS

- **Food pharmacy:** Generally, this intervention requires established referral agreements between the health care sector (hospital network, primary care provider, health clinic, public health district, managed care organization, traditional pharmacy, etc.) and the human services sector (regional foodbank, local food pantry, etc.). In this model, after a patient is screened as food insecure, the health care provider would provide a direct referral, or prescription, to an accessible outlet for healthy, no-cost foods as part of the patient's health management plan.

  The gold standard for the food pharmacy model requires additional coordination, data sharing, and case management from health care sector partners and human services sector partners. In Ohio, these partnerships can benefit greatly from existing technology-based platforms, including a platform developed by the Mid-Ohio Food Collective, and widely adopted by Ohio's foodbanks, called FreshTrak. Partners must acknowledge that such models do not come without cost and that, until such food and on-demand services are designated as a defined benefit by Medicaid or other plans/coverage, private dollars are essential for staffing, storage, food, transportation, legal, IT, and related costs. Here are a few basic examples of how a food pharmacy partnership could look:

  - A Federally Qualified Health Center (FQHC) screens a pregnant patient for food insecurity as part of prenatal visit, **capturing screening results in the patient's EHR**. FQHC staff assign patient unique identifier to allow FQHC and foodbank to **track patient activity and link activities to health outcomes longitudinally**. FQHC staff looks up patient in FreshTrak and links patient identifier to existing FreshTrak record, if applicable. Then, FQHC provides a prescription for free fruits and vegetables once per week to community-based food pantry in patient's neighborhood **designated as a food pharmacy partner in FreshTrak**.
  - Veterans Affairs (VA) Medical Center screens patients for food insecurity as part of standard care coordination and provides a prescription to **free food market located on-site** at VA Medical Center, where local foodbank provides **foods selected with common dietary restrictions, preferences, and consumption and preparation behaviors in mind**. VA physician uses unique patient identifier to measure impact of food security intervention on patient health outcomes.
  - Specialist caring for low-income patients with high cholesterol and comorbidities provides once-a-month prescription for fresh produce and lean protein and dairy items from regional foodbank, **where a registered dietitian provides recommendations for preparing meals low in saturated fat** and a benefits counselor **screens patients for participation in federal nutrition programs like SNAP**. Specialist **monitors compliance with healthy food prescriptions** as part of patient care.
  - Community pharmacist provides **coupon for free transportation** to monthly produce giveaway for all diabetic patients who are uninsured or covered by Medicaid or Medicare Part D, where **additional integrated services, including dietitian consultation**, are also provided.

- **Other referrals and assessments:** Providers can also refer patients that screen positive for food insecurity to consumer assistance hotlines operated by foodbanks to help connect clients with federal nutrition programs like SNAP and WIC and other resources. Third-party platforms are also proliferating in the health and human services sector to serve as a gateway for patients to identify and connect with resources to address their social determinants of health. Thanks to evolving technology like FreshTrak, foodbanks can responsibly partner with health care providers and plans to monitor patient interactions with the hunger relief network and facilitate assessments of interventions on health outcomes.

RECOMMENDED MODELS FOR INTEGRATING HEALTHY FOOD ACCESS

- **Place-based access to food in health care settings:** Integrating healthy food access into the patient care setting is really about rethinking disease intervention infrastructure. Here are a few examples of how health care providers can partner with foodbanks to integrate healthy food access as part of on-site patient care:

INTEGRATED HEALTHY FOOD ACCESS

    - A regional hospital network incorporates food insecurity screening into all of its chronic disease management visits. Patients positive for food insecurity can visit an on-site food pantry to **take home fruits, vegetables, lean protein, low-fat dairy, and whole grain products**. Items are stocked through partnership with the regional foodbank's procurement team.
    - A local system of medical clinics serving low-income, at-risk pregnant and postpartum mothers, infants, and young children provides **fresh fruits and vegetables, infant formula, whole milk, and foods rich in iron and protein** to support balanced diets for pregnant women and breastfeeding mothers and encourage exposure to a variety of healthy foods for positive early childhood development outcomes. The regional foodbank partners to procure and supply products to meet the dietary needs of clinic patients.
    - As part of monthly support groups for cancer patients at a neighborhood-based center, the location director partners with the foodbank to **host a mobile produce distribution** to connect patients with foods that can help nourish patients in treatment and encourage positive outcomes.

  Often, integrating access to free, healthy foods, nutrition education, and other services designed to address SDOH have the added result of incentivizing improved rates of patient participation and interaction in wellness visits, immunizations, prenatal visits, and chronic disease management.

- **Transportation to or delivery of convenient, healthy foods:** Insurers, managed care organizations, and health systems have long acknowledged that transportation to medical services is often a major barrier for low-income and/or elderly or disabled patients. When nutritious food access is treated as a necessary medical service, mobility to healthy food becomes a pressing issue. We recommend using models that expand existing medical transportation infrastructure to incorporate food access and nutrition services into patient care, such as transportation to food pantries, home-delivered meals, and Supplemental Nutrition Assistance Program (SNAP) application assistance.

RECOMMENDED EDUCATION AND OUTREACH MODELS

EDUCATION AND OUTREACH

- **Event-based outreach:** Conduct patient outreach and education, such as behavioral health referrals, tobacco cessation, or SDOH assessments, in tandem with open food pantry hours, hot meals, or produce giveaways. Bring your clinical services, such as disease screening, mobile medical clinics, or immunizations, on-site at mass food distributions or at high-volume food pantries. Partner with foodbanks and hunger relief agencies to interrupt the food insecurity and chronic disease cycle through value-added services.
- **Promoting improved nutrition:** Many foodbanks provide direct application completion assistance for nutrition programs like SNAP to improve household food security and nutrition. Providers, insurers, and managed care organizations can refer patients directly to foodbanks or partner with third-party platforms to do so. Often, foodbanks also incorporate nutrition education, recipes, cooking classes, and shopping tips into their services. Providers can partner with foodbank dieticians to promote increased access to value-added nutrition education.

THE FUTURE OF FOOD SECURITY AND POPULATION HEALTH

Ohio's foodbanks are eager to effect positive change in the health and well-being of food insecure Ohioans. Likewise, Ohio's health care and public sectors are wisely shifting to an approach that encompasses food and nutrition services into patient care and population health management. Private investment of funding, expertise, and resources in local projects, pilots, and expanding models for addressing food security as a social determinant of health are welcomed by our network.

To realize truly scalable and demonstrative reductions in health care costs and improvements in health care outcomes through interventions such as those outlined briefly in this toolkit, the Centers for Medicare & Medicaid Services, the State of Ohio, and the Medicaid Managed Care Organizations under contract in Ohio have several opportunities to support these upstream partnerships[9]:

- The State of Ohio can seek, and the Centers for Medicare & Medicaid Services can encourage and approve, waivers (i.e., Home and Community-Based Services 1915(c) Waiver, Section 1115 Demonstration Waiver) and/or a State Plan Amendment (SPA) to increase acccess to healthy foods from foodbanks as a health care benefit for Medicaid beneficiaries.
- Managed Care Organizations (MCOs) can include, and the State of Ohio can require or encourage the inclusion of, food and nutrition interventions as covered benefits under Medicaid MCO plans.
- The State of Ohio, and in particular its Department of Job and Family Services, its Department of Health, and its Department of Medicaid, can better align and streamline services for Ohioans dually eligible for Medicaid and SNAP and Medicaid and Women, Infants, and Children (WIC) nutrition assistance to improve the integration of service delivery for households vulnerable to chronic, diet-related diseases, infant and maternal mortality, and other conditions linked to food insecurity.

Through continued conversation, coordination, and collaboration, Ohio's foodbanks and social service providers addressing hunger can play a valuable role in reducing health care costs, improving health care outcomes, mitigating the onset of chronic diet-related diseases, and breaking the cycle of food insecurity and health disparity.

For more information about how to get involved, visit **ohiofoodbanks.org/hungerandhealth**.

CITATIONS

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7 "Addressing Food Insecurity in Clinical Care: Lessons from the Mid-Ohio Farmacy Experience," HealthAffairs Blog, January 3, 2020. https://www.healthaffairs.org/do/10.1377/hblog20191220.448706/full/

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9 "Expanding Access to Healthy Food for Medicaid Beneficiaries," American Heart Association Policy Position Statement, January 2019. https://www.heart.org/-/media/files/about-us/policy-research/policy-positions/access-to-healthy-food/expanding-access-to-healthy-food-for-medicaid-beneficiaries--policy-statement-2019.pdf?la=en

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