Strategies to Address Socioeconomic and Racial and Ethnic Disparities in Chronic Diseases by Incorporating Food and Nutrition Programs into the Primary Healthcare Setting

June 2022

Position

Chronic diseases, such as cardiovascular disease, stroke, and diabetes, are some of the leading causes of death in the United States (U.S.).[1] Consuming an unhealthy diet, characterized by high intake of sodium, added sugars, and saturated fats, contribute to the development of chronic diseases. Stable availability, access, affordability, and utilization of nutritious foods across the lifecycle can help reduce the risk of chronic diseases and help treat and manage chronic diseases. Unfortunately, many individuals in the U.S. are food and nutrition insecure[2] and do not have access to affordable, nutritious food. Incorporating recommended food and nutrition programs into the healthcare system is a viable option to help patients access and consume healthy foods.

The American Heart Association supports efforts to increase equitable access to nutritious, affordable food in the healthcare delivery system and to connect under resourced patients with community resources that will enable consumption of healthy eating patterns. Incorporating food and nutrition programs into the healthcare system is an effective strategy to prevent and treat chronic diseases, lower healthcare costs, and improve quality of life.

Background

Public Health Impact of Chronic Disease

Chronic diseases, including diabetes, stroke, cardiovascular disease (CVD), and mental illness, are the main drivers of rising healthcare costs in the U.S., accounting for 90 percent ($3.8 trillion) of annual healthcare costs. CVD alone accounts for 12 percent of total U.S. health expenditure, considerably more than any other disease.[3] CVD is the leading cause of death in the U.S.,[1] accounting for almost 900,000 deaths in 2019.[4] On average, one CVD death occurs every 36 seconds.[3] Nearly half (126.9 million) of all Americans adults have at least one form of CVD (i.e. coronary heart disease, stroke, heart failure or hypertension) while 28.2 million are living with diabetes.[3]

other racial and ethnic group, at 58.8 percent and 60.1 percent respectively.[3] The COVID-19 pandemic has only exacerbated these disparities.

MNT helps reduce risk of chronic diseases, delays disease progression, and enhances efficacy of medical/surgical treatment.

outcomes and reduced healthcare burden including decreased hemoglobin A1C levels[25] and lower body mass index (BMI).[26] A review on the impact of food prescription programs on dietary behavior and cardiometabolic parameters found that these programs increase fruit and vegetable consumption by 22 percent and decrease BMI by 0.6 kg/m2 and HBA1c by 0.8 percent.[22] A modelling study on food prescription programs found that adding healthy food prescriptions to Medicare and Medicaid may prevent 3.28 million CVD cases and 120,000 diabetes cases, saving $100.2 billion in formal healthcare costs.[27]

Food prescription programs have largely been funded through the farm bill reauthorization process. The 2018 farm bill provided $250 million of permanent federal funding for the Gus Schumacher Nutrition Incentives Program (GusNIP), formerly known as the Food Insecurity Nutrition Incentives (FINI) program. Part of the increased funding for FINI was earmarked for food prescription pilot programs. As data is collected on the produce prescription pilot programs, policymakers will need to decide whether to expand the pilots and make produce prescriptions a permanent program – and whether it needs to be scaled beyond GusNIP, but also work in coordination with Medicaid and Medicare.

Medically Tailored Meals

Medically tailored meals (MTM) are a cost-effective intervention to address diet-related diseases and food access to at-risk individuals. MTM provides home delivery of fully prepared meals designed by an RD to meet the specific dietary needs of an individual living with one or more chronic diseases. This intervention is ideal for patients living with chronic diseases who are unable to shop for or prepare meals for themselves.

The research suggests that MTM is associated with improved health outcomes for people living with chronic diseases such as HIV, diabetes, heart failure, and chronic liver disease. A trial evaluating the impact of MTM participants living with [illegible] including [illegible]

Key considerations for implementing food and nutrition programs in healthcare settings

Incorporating food and nutrition programs within the healthcare systems is a feasible option to address prevention and treatment of diet-related chronic diseases. However, there are a few considerations that need to be made before these programs can be effectively implemented in healthcare settings.

Developing a standardized tool

A standardized dietary assessment tool is essential to effectively implement food and nutrition programs within the healthcare system. The assessment tool help providers identify vulnerable patients to refer them to appropriate services. Despite the knowledge that a healthy diet is necessary to maintain health,[32, 33] dietary intake is rarely quantitively assessed. This is typically due to time constraints and other clinical barriers such as lack of training and knowledge and competing priorities during clinical visits.[34, 35] A dietary assessment tool provides the necessary documentation for limited or poor diet quality leading to actionable modifications for improvement. It must be quick to use, evidence-based and summarize the patient's entire dietary pattern.

Food insecurity and referrals must be tracked within the healthcare system. The electronic health record (EHR) is the ideal platform for the health care team to capture dietary data and deliver dietary resources to patients because it allows secure storage of data and access to this data at point of care.[36] Previous research supports conducting wellness assessments via EHR portals as a feasible strategy for assessing diet quality within healthcare settings.[37, 38] The U.S. Department of Health and Human Services (HHS) and CMS are taking steps to ensure that social needs screenings become normal practice within the healthcare system, such as initiating the Accountable Health Communities model, but adoption of social needs screenings in healthcare practice should be universal.[39]

Clinic to community linkages

The healthcare system is a gateway for connecting patients with clinic-community partnerships for food and nutrition programs to address chronic disease risk factors and symptoms, as well as increase healthy food access to patients living with nutrition and food insecurity. Integrating food and nutrition programs into the healthcare system strengthens clinic to community linkages, increases existing resources, and improves service delivery. These linkages ensure that people with or at risk for chronic diseases have access to the resources they need – in this case, food – to prevent, delay or manage chronic diseases once they occur.

Access to food and nutrition programs is facilitated by RDs or other professionals such as health educators, nurses, and CHWs. Numerous studies have shown that connecting patients with community resources in the healthcare setting is effective at reducing risk factors of chronic diseases.[40-43] These interventions are often carried out by CHWs and in parallel to clinic visits with providers. By having CHWs lead these interventions, the accessibility of

nutrition education can expand and be adapted to targeted populations, and programs can be delivered in more familiar community-based locations, which is a key asset to referring and engaging more patients.[44, 45] CHWs can serve as a link between food and nutrition programs and the community to promote access to services and improve the quality and cultural competence of service delivery. Coupling improved clinical training and referral capacity together with increased financial support for intervention both in and outside the healthcare system will help ensure that patients are assessed and referred to appropriate interventions available in every community.

Integrating food and nutrition programs within healthcare delivery systems also encourages collaboration with local farms and gardens. Building in sustainable models to connect healthcare settings and community farms/agriculture have the potential to bolster the local economy and indirectly address structural inequities. These programs promote sustainability of local farms and gardens while also improving the local environment in communities that historically have less access to healthy foods.

AHA Policy Recommendations

The American Heart Association supports efforts to increase prioritization of nutrition and equitable access to healthy, affordable food in the healthcare delivery system and to connect patients with community resources that improve access to and consumption of healthy food. By increasing coverage for nutrition services through health insurers like Medicare and Medicaid and expanding existing food and nutrition programs, patients can be connected with the resources they need to prevent, treat, and manage chronic diseases that drive health care costs across the U.S.

Centers for Medicare and Medicaid Services (CMS):

Medicaid

1. Broaden coverage for medical nutrition therapy and other food and nutrition programs, such as food prescription programs and medically tailored meals, by adding these services to the 'mandatory' category of Medicaid benefits or broadening interpretation for existing categories to allow coverage.
2. Use existing opportunities and waiver programs to fund food and nutrition programs in state Medicaid programs (e.g., Medicare Part C Supplemental Benefits [for medically tailored meals]/Part C Value-Based Insurance Design Model; Medicaid Managed Care; 1115 Medicaid demonstration waiver; 1915C waiver) with the ultimate goal for food and nutrition programs to become standard Medicaid services.
3. Recognize RDs as qualified billing providers and expand eligibility requirements to become providers through Medicaid. Currently, many states' Medicaid programs do not credential RDs, despite them being independent providers of MNT under Medicare

The American Heart Association is grateful to the members of the expert advisory group (EAG) who contributed to the development of this policy statement. We would like to acknowledge the following people and thank them for their input and review of this policy statement.

Judith Wylie-Rosett
Albert Einstein College of Medicine

Deepika Laddu-Patel
University of Illinois Chicago

Linda Van Horn
Northwestern University Feinberg School of Medicine

Patricia Haggerty
National Institutes of Health, Office of Dietary Supplements

Kendra Ivy
Morehouse School of Medicine

Abby Ershow
National Institutes of Health, Office of Dietary Supplements

Saria Lofton
University of Illinois, College of Nursing

References

NCHS Data Briefs

Economic Research Report No (ERR-298) 55 pp

Circulation

Circulation

JAMA Pediatr

MMWR Morb Mortal Wkly Rep