



# Integrating Nutrition Interventions into Healthcare

New York State  
Food as Medicine  
Coalition

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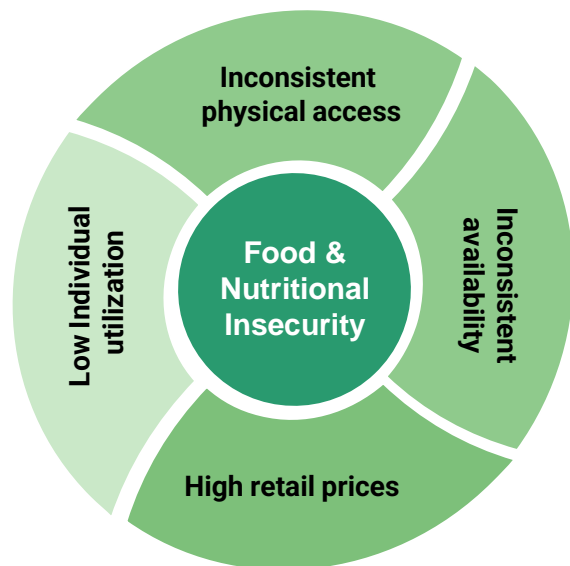




# UNDERSTANDING FOOD & NUTRITION INSECURITY

## Contextual Conditions

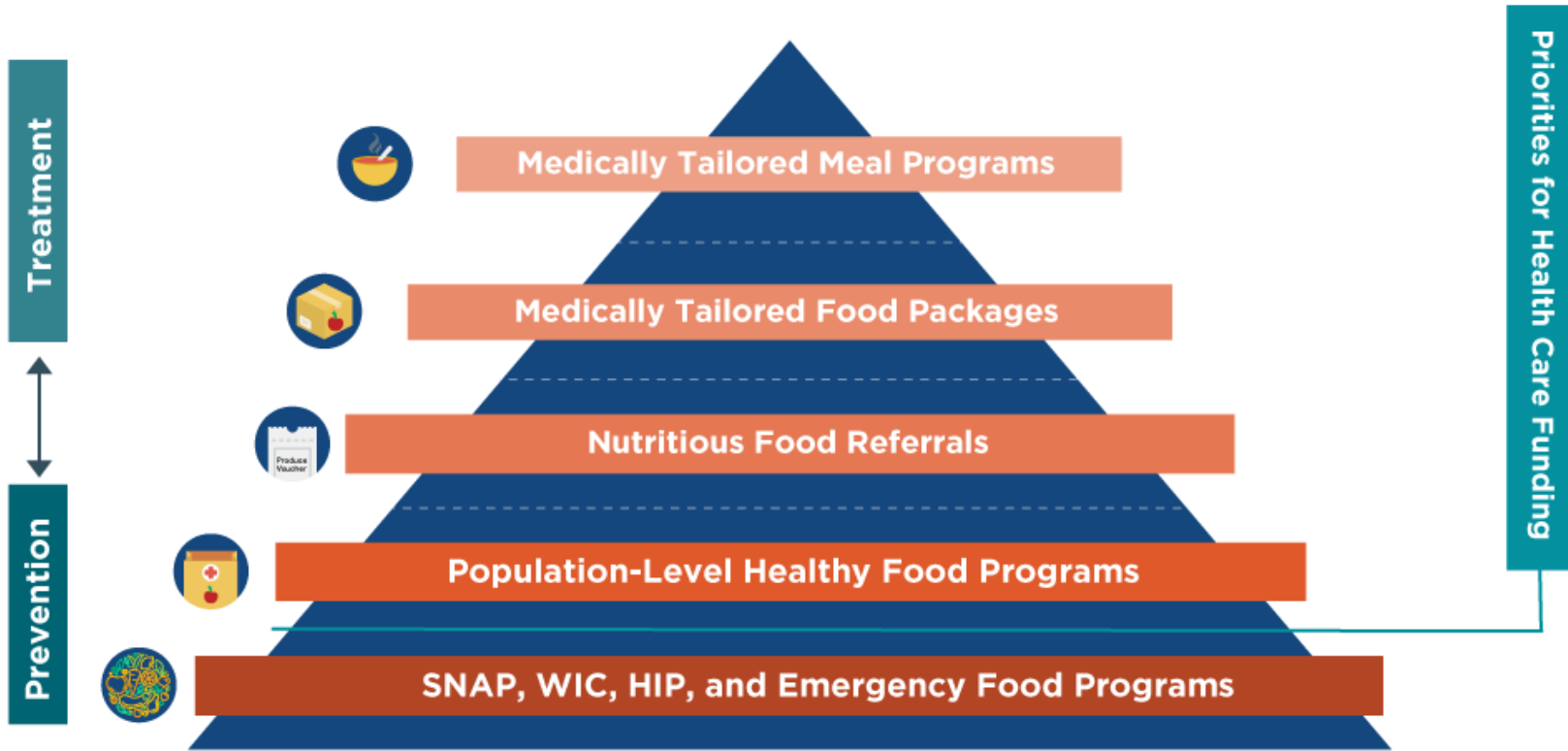
Systematic Racism; Structural Economics; Environmental Health Consumer & Cultural Norms; Public Policy & Regulations; Presidential Budgets; Medicare & Medicaid; Seasonal Availability; Cultural Institutionalization of Hunger



## Secondary Drivers

- Proximity to formal, informal, and mobile markets
- Lack of affordable, sustainable transportation
- Lack of healthy foodstuffs in retail
- Food waste in the system
- Disruptions in the supply chain
- Poor distribution networks
- Poor eating behaviors
- Lack of disposable income
- Inadequate access to food benefit programs
- High food costs
- Lack of diet-specific education
- Culturally relevant and practical food recipes
- Lack of food storage

# FOOD IS MEDICINE PYRAMID

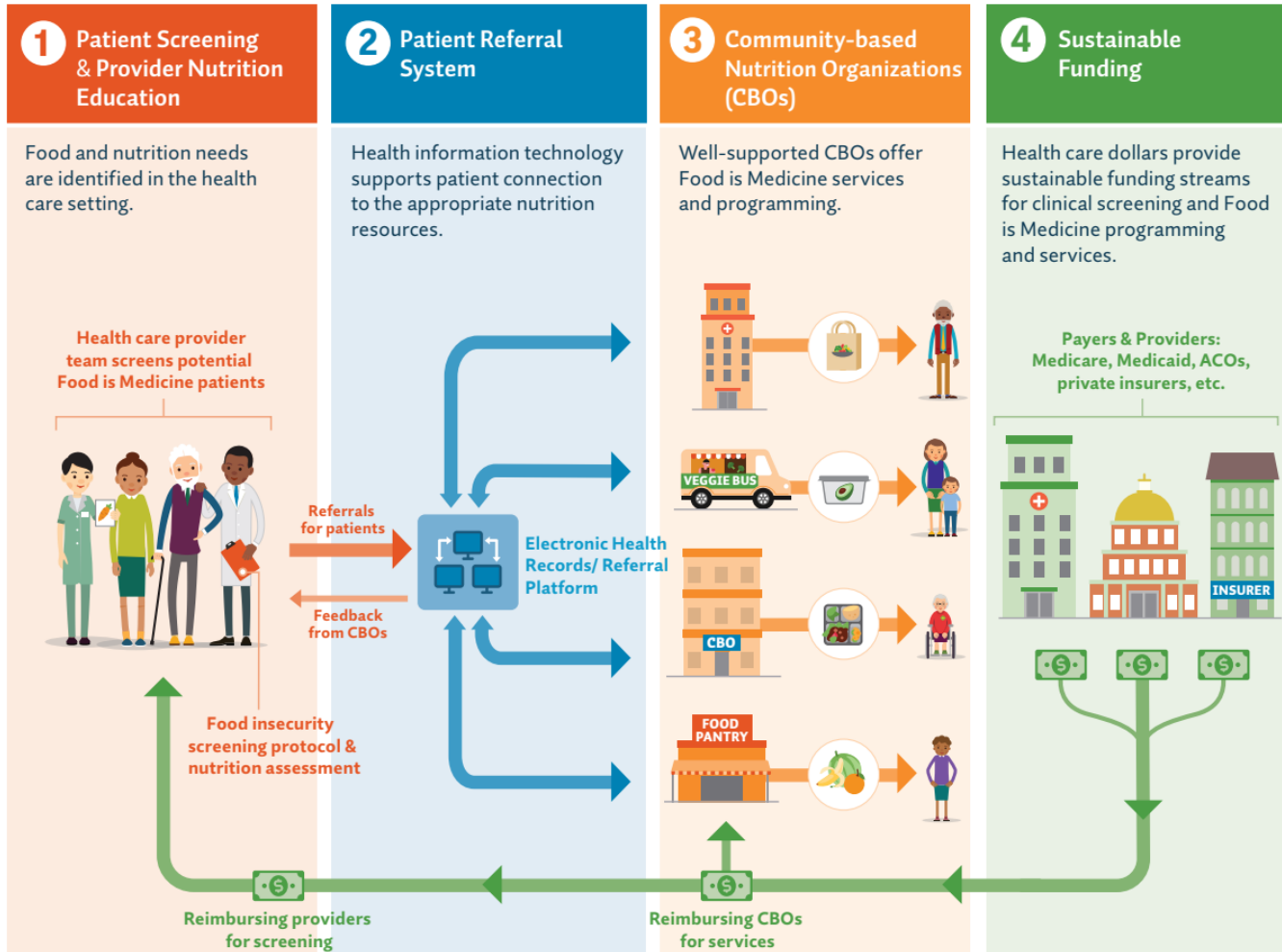


# Roadmap for Change in Five Focus Areas

## Improving access to Food is Medicine interventions

Research has shown that **Food is Medicine** interventions can play a powerful role in improving health outcomes and controlling health care costs. However, access to these interventions remains limited.

**Our vision: a health care system where food & nutrition interventions are fully integrated into care.**



# What is a PRx?

A Produce Prescription (PRx) Program is a medical treatment or preventative service for eligible patients due to diet-related health risks or conditions, food insecurity, or other documented challenges in access to nutritious foods, and are referred by a healthcare provider or health insurance plan. These prescriptions are fulfilled through food retail and enable patients to access healthy produce\* with no added fats, sugars, or salt, at low or no cost to the patient. When appropriately dosed, Produce Prescription Programs are designed to improve healthcare outcomes, optimize medical spending, and increase patient engagement and satisfaction.

National Produce Prescription Collaborative, March 2021 \*according to USDA WIC-eligible fruits and vegetables

[GusNIP](#), [National Produce Prescription Collaborative](#)



**Medically tailored groceries defined:** Distributions of unprepared or lightly processed foods that recipients are meant to prepare for consumption at home; the contents are sufficient to prepare nutritionally complete meals or provide a significant portion of the ingredients for such meals, including produce, whole grains and legumes, and lean proteins.

Medically tailored groceries range from boxes of store-bought shelf products to a format similar to a meal kit, with ingredients portioned by meal and small allocations of items like spice blends and sauces.<sup>88</sup> Distribution sites include food pantries located on-site in health care settings, community food pantries, and other community sites. Some programs offer home delivery. Nutrition education and recipes are sometimes made available to recipients, and the food items are approved by an RDN as appropriate for certain medical diets and health conditions, such as a diabetes-appropriate food box. Generally, however, food is not tailored to individual cultural needs, food preferences, or preparation abilities. Recipients are screened for food insecurity or deemed eligible for the intervention due to participation in a means-tested program such as Medicaid or SNAP.

Note: WIC meets the definition of a medically tailored grocery intervention.

[https://www.aspeninstitute.org/wp-content/uploads/2022/01/Food-is-Medicine-Action-Plan-Final\\_012722.pdf](https://www.aspeninstitute.org/wp-content/uploads/2022/01/Food-is-Medicine-Action-Plan-Final_012722.pdf)



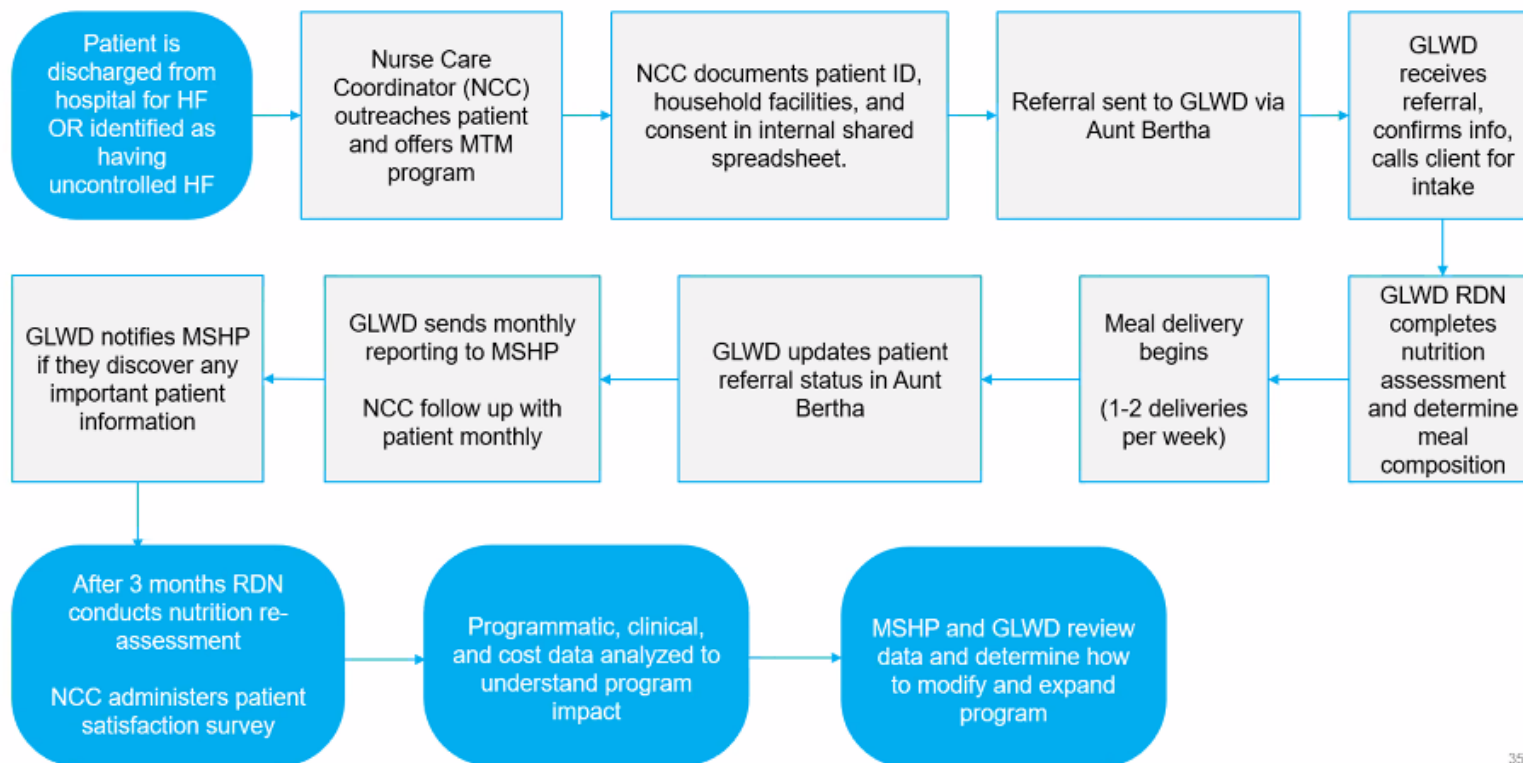


### Table 3: Overview of Food is Medicine Interventions

Food is Medicine interventions involve a range of key design and implementation decisions, each with the potential to impact health outcomes. In distinguishing the three intervention categories covered in this report, we largely focus on the preparation level of the food provided (complete meals, a range of perishable and nonperishable grocery items, or only produce) and the amount of food provided (complete or near-complete nutritional needs, partial nutritional needs, or supplemental nutritional needs). This categorization is not intended as a bright-line rule but rather as a helpful schema. Indeed, the line between medically tailored groceries and produce prescriptions is already quite blurry as produce prescriptions are sometimes expanded to offer a greater quantity of food or even to cover non-produce items.

	Medically tailored meals	Medically tailored groceries*	Produce prescriptions*
Preparation level and type of food	Ready-to-eat (reheated in an oven or microwave) meals and snacks	A range of perishable and nonperishable grocery items, including produce, that will require further preparation	Produce—fresh, frozen, or canned (no added salt, sugar, or fat)—which, depending on the items, may require further preparation
Amount of food	Complete or near-complete (over 50% of caloric needs met) nutrition	Partial or near-complete nutrition	Supplemental nutrition

## Workflow for MSHP Medically Tailored Meal Program



# High Value → Quick ROI

## Cost of standard healthcare vs medically tailored meals:

  
Avg. cost of an ED visit  
\$2,168

=



3 months of  
3 meals per day

  
Avg. cost of hospitalization  
\$9,700

=



13 months of  
3 meals per day

# Medically Tailored Meals

Capable of  
saving  
**\$38.7**  
billion  
annually





## CURRENT GAPS IN PROGRAMS & KNOWLEDGE

- Food insecure adults have **annual healthcare expenditures \$1,834 higher** than adults who are food secure (**\$52.8B excess costs in US annually**)
- **60% of US adult population** suffers from at least **one chronic health condition**, with diet-related conditions being the most prevalent
- **1 in 10 adults** meets the US Dietary Guidelines recommendations for fruits and vegetables

### What We Know

- Food insecurity has a proven correlation to **worsened mental health outcomes, physical health outcomes, health-damaging behaviors, and increased care utilization / costs**
- Primary Food as Medicine (FAM) interventions (*MTM, Medically Tailored Groceries, and Produce Prescriptions*) are **replicable, scalable, and effective**
- FAM interventions have proven research showing **reduced food insecurity, improved dietary intake, and improved participant mental health**
- Successful food and nutrition interventions **are rarely one size fits all**
- Food interventions **should enhance, not replace**, current social service support offered in the US

### What We Need to Know

- The **effects on clinical health outcomes and optimal program design are still under-researched**
- Under-researched program design components include **optimal dose-response curve / intensity of intervention, program duration, location convenience, integration of household members, and best operationalized delivery**
- While nutrition education and FAM interventions have been successful, the **maximized benefits of multi-pathway interventions** (i.e., food + education, food only, etc) have not been compared

# Appealing to partners

HIPAA Compliance  
Decreases in utilization  
Biomarkers  
ROI  
Increases in  
satisfaction and  
medication adherence

