



Memorial Sloan Kettering  
Cancer Center™



# **FOOD: Food to Overcome Outcomes Disparities**

**Immigrant Health and Cancer Disparities Center  
Memorial Sloan Kettering Cancer Center**



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# Thank You to Our Patients and Our Partners



**NYC**  
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Cornell University  
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# Presentation Overview

- Food insecurity and cancer
- Initiatives to address food insecurity in cancer patients
  - Integrated Cancer Care Access Network (ICCAN)
  - Co-located food pantries
  - Study on FOOD pilot & results
  - Provider education
- Implementation challenges and policy considerations



# Food Insecurity and Cancer

- Cancer patients are a particularly vulnerable population
- Compromised nutritional status is frequently associated with chemotherapy and radiation
- Inadequate nutrition associated with
  - Impaired healing
  - Immunosuppression and infection risk
  - Decreased quality of life
  - Increased recovery times



# Food Insecurity Among Our Patients

- **61%** of ICCAN patients screen as **food insecure** at intake (N=2800)
- **77%** of patients said that since starting treatment they have **less money to spend on food**
- Transportation, treatment related costs, more expensive diets
- **88%** of ICCAN patients said they **needed help** finding emergency food resources
  - Many more than those who screen as food insecure



# Insufficient Access to Community Emergency Food Resources and SNAP

- Barriers to community emergency food resources include:
  - Language
  - Limited hours/days of operation
  - No transportation
  - Immigration status
- Only 13% of ICCAN patients reported ever receiving food from a food pantry
- 32% of patients received SNAP benefits
  - 70% of SNAP recipients were food insecure
    - Predictors of food insecure SNAP users
      - Limited English proficiency
      - Uninsured or received both Medicaid and Medicare



# Integrated Cancer Care Access Network (ICCAN)

- Addresses social and economic barriers to cancer care for underserved patients using needs assessments, access facilitators and financial navigators
  - Financial assistance/navigation
  - **FOOD**
  - Health insurance and access
  - Transportation
  - Legal aid (bills, immigration status, wills, eviction, etc.)
  - Psychosocial support



# FOOD Pantry Program Co-located in Clinics

- 10 → 14 locations, each run once a week
  - 5 H+H facilities → 7 H+H this Spring
  - 4 MSK sites
  - 1 other voluntary hospital → 3 this Spring
- Easily accessible
- Streamlined referral processes into pantry and from pantry to other services
- Inclusive eligibility criteria
  - Any patient receiving cancer treatment who reports a food need is provided food
  - No income test, proof of ID, etc.
  - 16
- Averages 150 patients/week (up to 50 patients per site)
- Since 2011, more than 25,000 visits (equivalent to 225,000 meals)
  - Served over 2,800 unique patients and 5,600 family members



# Pantry Services

- Shelf-stable foods
  - Milk, animal protein (tuna/sardines), lentils, whole grain products, oatmeal, peanut butter, low sodium beans and vegetables
- Choice Pantry
  - As much choice as possible ( milk v. almond milk, etc.)
    - Culturally familiar choices
    - Healthy options (whole grains, plant-based foods)



# Fresh Produce

- **Green Bronx Machine**
  - Operates out of a primary school in an underserved neighborhood
  - Grows food at a community garden and inside the classroom
  - Students harvest produce weekly->pantry staff collect, distribute
  - Items include tomatoes, collard greens, and microgreens
- **GrowNYC**
  - Operates NYC farmers' markets, local farms produce distributor
  - Food ordered one week in advance and delivered to pantry
  - Items seasonal: dark leafy greens, root vegetables, herbs, squash
- **Health Bucks**
  - DOHMH fresh produce coupons for GreenMarket redemption, many of which are right outside H+H facilities
  - In 2018 we distributed over 2,000 Health Bucks



# Pantry Logistics

- Food for the pantry sourced 3 ways
  - Purchased from retail food delivery services and delivered directly to the site
  - Provided by local food pantries and picked up by FOOD staff with transportation provided by the hospital
  - Corporate donations
- Costs vary up to \$32 per person/week
- Each pantry runs once a week
  - Usually 9 am-1pm (busiest clinic time)
- Staffing
  - Food Navigator
  - Undergraduate and graduate level interns assist with food distribution and navigation services
- Space varies



# Pantry Utilization

- Wide variability: 1 to weekly pickups
- 19% picked up food one or two times
- Patients picking up more than once averaged pickups every other week
- Patients often use pantry on days when they do not have an appointment – they make a special trip just for the food
- If patients are not able to retrieve a bag, they can send a friend or family member to pick up



# Pantry Data Collection

- Upon enrollment, patients complete an intake assessment
  - Comprehensive needs assessment
  - USDA Food Security Screener
  - Quality of life
  - Depressive symptoms
  - Financial toxicity
  - Patient Generated Subjective Global Assessment (BMI, changes in eating, obstacles to eating)
  - Treatment adherence
- Patients periodically re-assessed
  - Includes food choices, preferences, pantry feedback
- Food Navigators keep detailed case management notes
  - referrals and services provided
- REDCap database



# FOOD and Symptom Management

- The Brooklyn Infusion Center (MSK) pantry
  - Funded by a quality improvement grant
  - Implemented in February 2019
- Medically-tailored pantry includes foods aimed at alleviating patient symptoms
  - Symptoms of interest: loss of appetite, taste changes, diarrhea, vomiting, nausea, heartburn, constipation
  - Food choice list created with feedback from MSK RD
- Patients assessed with the PRO-CTCAE, which measures symptom severity and impact on daily life
- Examining costs of fully medically tailored model



# Nutrition Education

- Connect patients with hospital nutritionists (where available) for one-on-one education
- Distribute and review IHCD healthy eating packet
  - Information specific for cancer diagnosis and treatment
  - Unit prices/Budget shopping
  - Healthy recipes using items from our pantry
- Nutrition education internship program partnering with local colleges/graduate programs
- Facilitate on-site nutrition workshops hosted by Common Pantry and other nutrition-focused community organizations



# NIH(NCI) R01 Funded FOOD RCT

- 3-arm RCT
  - Voucher (\$128/month)
  - Home grocery delivery (\$128/month)
  - Access to medically-tailored clinic-based pantry (\$128/month)
- Outcomes:
  - Food security
  - Nutrition, Weight
  - Quality of life, Depression
  - Treatment completion
  - Cost effectiveness
- Target accrual 480 patients at 4 Bronx sites
- Stage I, II, and III breast cancer patients receiving chemotherapy or radiation therapy



# Early Detection: Provider and Staff Training

- IHCD online Food Security Module for health care providers
- Raises awareness about food insecurity and provides tools for staff to screen patients
  - USDA Food Security Screener
- Provides basic information on food programs for referral
  - FOOD Program, SNAP/WIC, local food banks
- <https://www.mskcc.org/sites/default/files/node/19132/documents/food-training-module.ppt>



# FOOD Pantry Program Implementation Challenges

## Patient-facing

- Screening
- Stigma
- Privacy
- Tip of the iceberg (food insecurity; window into other needs)

## Food

- Procurement
- Delivery
- Handling (food safety, registration)

## Institutional

- Space
- Staffing (competing demands)

## Outcomes tracking

- Utilization/variation and predictors
- Quality of Life
- Symptom management
- Disease management/progression



# Food Policy and Program Implications

- Need for examination of costs, savings, outcomes across a range of interventions and indicators
- Emergency Medicaid-Food Voucher Program
  - A food voucher attached to Emergency Medicaid would provide seriously ill patients with food resources they could otherwise not access
- Translation of FOOD into other clinic settings (primary care, diabetes, cardiac)



# Thank You to Our Funders and Supporters

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