



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



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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

- Goya Foods
- Laurie Tisch Illumination Fund
- National Cancer Institute
- New York City Council
- New York Community Trust
- New York State Health Foundation

