Food is Medicine: Weaving Together Research, Policy and Innovative Practice

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Disclosures

Presenters have no financial interest to disclose.

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Learning Objectives

At the conclusion of this activity, the participant will be able to:

1. Describe the evaluation being done in the field at various levels to demonstrate the efficacy of food and nutrition services for people living with HIV.

2. Identify several different models for delivering food and nutrition services for people living with HIV and the opportunities and challenges associated with each.

3. Analyze the Ryan White Food and Nutrition Services Program, in policy and practice, and discuss how this initiative can serve as a model for meeting the needs of other populations facing food insecurity and/or chronic health conditions.
Stony Brook University

Katelin Thomas, Maureen Simone and Eileen Bryant
Suffolk County, NY – notable facts

- Suffolk County population 1.5 million
- Over 3,000 people living with HIV/AIDS (PLWHA) in Suffolk
- HIV disproportionately impacting communities of color
- Cost of living among highest in the country
- One of the most segregated counties in the United States
- Minimal public transportation complicates service delivery
- Food insecurity prevalent among PLWHA
Stony Brook University – Suffolk County, NY
Stony Brook University

- Stony Brook University’s HIV program is funded by Ryan White Part A, Part B, Part D, Part F (AIDS Education and Training Center); New York State Department of Health AIDS Institute; and clinical research grants
- Stony Brook provides medical care to approximately 850 people living with HIV/AIDS
- Stony Brook’s Ryan White Part D program serves approximately 375 women, children and youth in Suffolk County
Food insecurity in Suffolk County

• Grocery stores/supermarkets disproportionately located in wealthier neighborhoods and are often inaccessible to those without a car
• Many people living with HIV in Suffolk rely on public transportation
• Convenience stores/gas station mini-marts/bodegas are often the only local places to purchase food in low-income communities
• Many of our clients lack appropriate food storage and preparation areas
• Clients are often unable to maximize cost effective food shopping techniques due to limited financial resources
• Food pantries/soup kitchens have limited hours of operation so they are often inaccessible to clients who work or do not have a car
• Public buses restrict the number of bags a passenger can bring onboard to what will fit on their lap or under their seat
How our program model developed

- Recognizing lack of food as barrier to care
- Grocery store gift cards
- Adding a Nutritionist to Part D program staff
- Nutritional assessments and education
- Grocery delivery to support nutrition goals
- Classes on topics including shopping on a budget, food preparation and safety, and mindful eating
- Provision of basic cooking supplies for clients when needed
- Enhanced nutritional services including regular grocery delivery for some clients
Program outcomes

• Accomplishment of individual nutritional goals for clients who received regular grocery delivery for a period of time was compared to clients who received occasional grocery delivery

• Individual nutritional goals vary based on co-morbidities and included management of weight, blood pressure, lipids and blood glucose

• Goals also included increasing consumption of fresh fruits, vegetables and whole grains, as well as decreasing consumption of processed foods
## Program outcomes – food choices

<table>
<thead>
<tr>
<th>Nutritional goals</th>
<th>Regular grocery delivery recipients</th>
<th>Occasional grocery delivery recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase orders for fresh/frozen vegetables</td>
<td>60% showed improvement</td>
<td>56% showed improvement</td>
</tr>
<tr>
<td>Increase orders for fresh fruits</td>
<td>78% showed improvement</td>
<td>34% showed improvement</td>
</tr>
<tr>
<td>Increase orders for whole grains</td>
<td>70% showed improvement</td>
<td>30% showed improvement</td>
</tr>
<tr>
<td>Decrease orders for sugar-sweetened beverages</td>
<td>33% showed improvement</td>
<td>10% showed improvement</td>
</tr>
<tr>
<td>Increase orders for non-dairy milk</td>
<td>50% showed improvement</td>
<td>5% showed improvement</td>
</tr>
<tr>
<td>Decrease orders for processed foods</td>
<td>60% showed improvement</td>
<td>20% showed improvement</td>
</tr>
</tbody>
</table>
## Program outcomes - clinical

<table>
<thead>
<tr>
<th>Nutritional goals</th>
<th>Regular grocery delivery recipients</th>
<th>Occasional grocery delivery recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weight management (loss or gain)</td>
<td>60% met goal</td>
<td>30% met goal</td>
</tr>
<tr>
<td>Hemoglobin A 1C (stable or decrease – for those with elevated level)</td>
<td>60% met goal</td>
<td>40% met goal</td>
</tr>
<tr>
<td>Triglycerides (stable or decrease)</td>
<td>50% met goal</td>
<td>20% met goal</td>
</tr>
<tr>
<td>LDL (stable or decrease)</td>
<td>60% met goal</td>
<td>20% met goal</td>
</tr>
<tr>
<td>Cholesterol (stable or decrease)</td>
<td>70% met goal</td>
<td>40% met goal</td>
</tr>
<tr>
<td>Blood pressure (stable or decrease – for those with elevated blood pressure)</td>
<td>25% met goal</td>
<td>40% met goal</td>
</tr>
</tbody>
</table>
Program outcomes – quality of life

<table>
<thead>
<tr>
<th>Quality of life measures</th>
<th>Regular grocery delivery recipients</th>
<th>Occasional grocery delivery recipients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Report greater level of food security</td>
<td>100% of respondents</td>
<td>25% of respondents</td>
</tr>
<tr>
<td>Report improvement in quality of foods consumed</td>
<td>63% of respondents</td>
<td>10% of respondents</td>
</tr>
<tr>
<td>Report making better food choices</td>
<td>100% of respondents</td>
<td>25% of respondents</td>
</tr>
</tbody>
</table>
Client feedback

• “I have been able to try more recipes/prepare meals that I would not have in the past as I can add the ingredients to my Peapod list.”

• “I tried foods that I thought I hated.”

• “It really helps. I’m never hungry any longer.”

• “Mom showed me a coupon for Frosted Flakes and asked if I had any use for it. Dad said, I don’t think Maureen would appreciate us eating Frosted Flakes!”
Client feedback - continued

• “Going to the grocery store to shop is too stressful when I’m not feeling well.”

• “I eat more vegetables and learned how to use fresh seasonings.”

• “I can honestly say that this program has changed my life for the better. I’m able to purchase quality food, healthy options and fresh fruits and veggies. I’m able to try new options and food choices.”

• “I think healthy eating is essential; and stretching a food budget to make healthy food choices an art.”
Client feedback - additional

• “I am able to show my kids that I used to be able to cook good foods.”

• “I feel like it’s my birthday when the food arrives. So many bags!”

• “The dinner menu suggestions have been great especially when I’m able to receive the food to try to eat healthier.”

• “I’m able to eat with my family since I have more fresh foods, [I used to be] embarrassed to eat when they visit.”
Lessons learned

• Changing eating habits is difficult and complex
• Eating is about much more than physical hunger and food availability
• Maintaining healthy eating habits requires ongoing education and support
• When working with clients who have experienced food insecurity, expect that provision of food may initially result in worsening of health markers
• Regardless of experience with food insecurity, many people have never learned to shop for or prepare healthy food
• Setting up a grocery delivery program, placing and tracking orders, resolving problems and managing billing takes way more staff time than you might think
• Not all grocery delivery services use refrigerated trucks so it is important to ask
• Food recall may be influenced by nutrition education received so reports may become less accurate over time
While HIV is managed with anti-retroviral therapies, the co-morbidities that many people living with HIV experience (diabetes, obesity, hypertension, hyperlipidemia, etc.) can often be managed by diet, exercise and other lifestyle changes.

Despite the challenges, incorporating nutritional assessments, education and provision of food into a Ryan White program can improve clients health, quality of life and level of satisfaction with the program.
Haitian proverb

Giving medicine without food is like washing your hands and drying them in the dirt.
For more information:

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contact via Katelin Thomas (above)
MNHC – HIV Services

• Mission Neighborhood Health Center, FQHC established 1967 in San Francisco

• Clínica Esperanza, HIV Services opened in 1989
  • Sub-recipient of Ryan White Part A and Part C
  • Integrated model of care:
    • Primary care
    • Nursing
    • Case Management
    • ADAP/insurance enrollment
    • Nutrition
    • Health Education
    • Medication adherence
MNHC – HIV Services - Demographics

Our patients 400 unduplicated patients a year

- 87% Male; 7% Women; 6% Transgender
- 80% Below 138% of the Federal Poverty Level
- 24% unstably housed
- 75% Latino
- 74% Gay
In 2017, the HIV Services program at MNHC achieved:

- 100% linkage to care for all new patients
- 91% retention in HIV medical care, as compared to 57% in San Francisco in 2016 and 40% Nationally in 2014
- 92% viral load suppression rate, as compared to 68% in San Francisco 2016 and 30% Nationally in 2014
Nutrition Services

As part of the interdisciplinary team and in alignment with the PCP

• Initial evaluation to all new patients
• Follow up as needed
  • Food safety
  • Mindful eating
  • Nutrition and exercise counseling
  • Food benefits navigation
  • Monitor and support of individuals with chronic conditions
Vouchers, context

Provided by San Francisco Department of Public Health – HIV Health Services Branch (Ryan White Recipient)

- Safeway (groceries)
- Burger King
- McDonalds
- Bus tokens
- Subway (new)
- Farmers market tokens (new)
Food Vouchers

Guidelines

• HIV Positive
• Engaged in care
• Low income individuals
• Temporary assistance to access food
• Distributed by CM, Dietitian, Nurse, or Health Educator

Challenges

• Managing distribution
  • Equity (real or perceived)
  • Splitting
  • Clients selling cards
  • Trust relationship
• No meaningful engagement in care
  • Carrot and stick
Food Vouchers 2.0

Clinical Quality Management Program PDSA (Plan, Do, Study, Act) project: Shopping Trips with the Registered Dietitian

• Launched January 2016
• Meal planning – 20 minutes with RD prior to initial shopping
• Maximum 6 patients per trip
• Patients are signed up for discount card
• $40.00 maximum allowed per patient per trip
• GOAL: educate and engage clients in nutrition and health services
• PDSA iterative process allowed for improvements
Participants

• Total of 37 UDC have participated up to 5 times each

Comorbidities

• 19% Diabetes Mellitus Type II
• 38% Depression
• 25% Hypertension
• 22% Hyperlipidemia
• 13% Gastroesophageal Reflux Disease
• 9% Anemia
• 6% Chronic Renal Disease
Outcomes

2018 patient satisfaction survey results

• 38% (5/13) improvement in understanding food labels
• 77% (10/13) better at comparing food prices
• 77% identifying higher quality foods
• 77% improving my diet
• “What a drag to go grocery shopping with a health food nut”
• “Food purchased to strengthen my system”
Lessons learned

• Successful strategy: Proven to increase engagement in nutritional services; patients learn shopping tips
• Logistics: Developing relationships with store managers helps
• Staffing: At least two staff for optimal support to patients (RD and outreach worker)
• Managing patients with multiple needs: Higher acuity patients benefit from 1:1 trips
• BONUS: patients enjoy meeting one another, creating bonds, sharing cooking tips and recipes, social activity
Moving Forward

Challenges

• Small number of participants due to:
  • HIV stigma
  • DM stigma
  • Logistics (time)

• Safeway is not the cheapest!

Opportunities

• NEW: Farmers Market tokens
  • Different day/location
  • Fresh produce
  • Buying cooked meals

• We want to engage pre-diabetics
Food Is Medicine
Practice
Research
Policy

Alissa Wassung,
Director of Policy & Planning
Practice
Our Mission in Action:
Food is Medicine | Food is Love

- 1.8 million meals
- 7,000 clients, their children and senior caregivers
- 200+ diagnoses
- 13,000 volunteers
- Serving the NY Metro region
Medically Tailored Meal Intervention

Clients are referred by medical personnel/health plans

Nutrition assessments are conducted by our team of Registered Dietitian Nutritionists (RDNs)

Meals are individually-tailored for specific medical circumstances and cooked from scratch in our kitchen in lower Manhattan

Meals are home-delivered in our refrigerated vans

Clients enjoy healthy, great tasting meals, and the support of our staff and community

Ongoing nutrition education and counseling
All are low sodium

Meal

Modifications

- High Fiber/Low Cholesterol
- (Heart Disease)
- Renal
- (Kidney Disease)
- Low Sugar
- (Diabetic)
- Vegetarian
- Acid/Bland
- (Digestive)
- Soft
- Minced
- Pureed
- (Cancer/Dementia)
- No Shellfish/No Nuts etc.
- (Allergies)

FOOD IS MEDICINE

Medically-tailored meals for those with serious illness or disability who cannot shop or cook for themselves

Medically-tailored food for those with acute or chronic illness

Medically-tailored food for those at risk for acute or chronic illness

Healthy food for those who are malnourished or food insecure
Client Demographics

**Gender:** 67% male; 32% female; 1% transgender

**Federal Poverty Level:** 90% live at or below

**Comorbidities**

**Age**

- 0-12: 12%
- 13-19: 19%
- 20-29: 20%
- 30-39: 34%
- 40-49: 42%
- 50-59: 32%
- 60-69: 32%
- 70+: 11%

**Diversity**

- Hispanic, 27%
- Black/African-American, 51%
- White/Caucasian, 18%
- Asian/Pacific Islander, <1%
- Native American, <1%
- Unknown/Unreported, 3%

**Gender**

- 67% male
- 32% female
- 1% transgender

**Federal Poverty Level**

- 90% live at or below
Practice Goal

Improve the health and well-being of people living with severe and chronic illness and lower health care costs by providing the highest quality medically tailored meal intervention (individually tailored meals with medical nutrition therapy).

MTM are a low-cost/high-impact intervention.

- Better health outcomes
- Lower cost of care
- Improved patient satisfaction
Client Engagement

- Outreach in the hardest to reach communities
- Client and Community Advisory Board
- Client Satisfaction Survey
- Client Advocacy: Speak to issues and concerns presented by clients
- Engagement in Care:
  - Support clients in gaining access to medical and social service supports
  - 180+ affiliation agreements to connect to other services
Research
Research Goal

Demonstrate the efficacy of the medically tailored meal intervention and create the evidence-base for systems change
Need for FNS is Almost Universal

Need for Food PLWH Nutrition Services, Service Use, and Food Insecurity among PLWH in NYC and Tri-County

- Need for food/nutrition services
- Using food program services
- Receiving foodstamps
- Current food insecurity

Percentage of PLWH interviewed 2008-2010

NYC
TriCo
Effective FNS Improve Health Outcomes

More Likely:
- Medication adherence
- Viral suppression
- Better health functioning

Less Likely:
- Miss appointments
- Have ER visits
- Inpatient/nursing home stay

Next Step: Cost/Benefit Analysis
Project Open Hand Studies

UCSF CHeFS Pilot 2017

- HIV medication adherence 50%
- Hospitalizations 63%
- Depression 22%

Palar, Napoles, Weiser, (2017) J Urban Health

CHeFS RCT 2018

- Hospitalizations (odds) 89%
- Depression (odds) 68%
- Engagement 82%
- Dosage 45%

Funded by Kaiser Community Benefits, PIs Palar & Weiser
The Ryan White FNS Category

Core Services
75%
- Outpatient and Ambulatory Medical Care
- ADAP
- Oral Health Services
- Early Intervention Services
- Home Health Care
- Mental Health Services
- Medical Case Management
- Substance Abuse Treatment – Outpatient
- Medical Nutrition Therapy

Support Services
25%
- Food Bank/Home Delivered Meals/
  Vouchers/Congregate
- Housing Services
- Legal Services
- Medical Transportation Services
- Psychosocial Support Services

MTM can be both a Core Medical and a Support Service
Gap in Coverage of FNS for PWH

RYAN WHITE FNS PROGRAM: major gaps and waiting lists

NO COVERAGE OF MTM/MTFNS: Medicaid/Medicare/Hunger Programs

RESULT

State by state by state etc.

INNOVATION
Policy Goal

Systems change to ensure that the medically tailored meal intervention is part of the continuum of care, that it is broadly accessible to those who need it, and of the highest quality.
Local Policy:

Ryan White Programs in NYC

- HIV Health & Human Services Planning Council of New York
  - Changed Food and Nutrition Services Category Directive in response to consumer feedback about quality of food they receive
  - Improves nutritional guidelines by requiring Heart Healthy FNS as determined by the Food is Medicine Coalition nutrition standards
- Serve as voice with funders for reducing barriers to care, including decreasing paperwork, numbers of required labs, etc.
State Policy:

NY State
Federal Policy
Federal Policy

MTMs are not available in every community or for all who need them.

The most effective way to bring life-saving meals to the sickest in our communities is by changing federal policy.

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<tr>
<th>ESTABLISH</th>
<th>ESTABLISH</th>
<th>PROMOTE</th>
<th>PROTECT</th>
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<tbody>
<tr>
<td>Coverage for MTMs in Medicaid</td>
<td>Coverage for MTMs in Medicare</td>
<td>Research on MTMs</td>
<td>Investments in Ryan White</td>
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</table>
Accomplishments

• Ryan White change to allow MTM as a core medical service
• Two Congressional Briefings
• Food Is Medicine Working Group – House Hunger Caucus
• Proposed MTM pilot in the Farm Bill
• Appropriations bill report language
• FIMC agencies participate in 21 health care innovation projects and receive reimbursement for Medicaid, Medicare and Duals populations
• 11 research studies in process
Ending the Epidemic

Community Input

• Medically tailored meals as the standard of care

• Funding Food and Nutrition Services: Expand federal resources to provide access to medically-informed food that sustains treatment and prevention goals and promotes health for PWH

• Food and Nutrition Research and Data: Support HIV/AIDS research, especially related to food and nutrition services and their role as a cost-effective means of HIV prevention, treatment, and care

• Training and Technical Assistance: Invest in dedicated capacity building and technical assistance (TA) on food and nutrition services
National Symposium Agenda 2018

- National Policy Briefing and the State of the Field of Food is Medicine
- National HIV Policy and Practice Briefing
- Medicare Contracting – New Opportunities
- Research Strategy Session
- Hill Visits
Get Involved

Join the **Food Is Medicine Coalition** Listserv

Join the **Structural Interventions Working Group (SIWG)** of the Federal AIDS Policy Partnership (FAPP)

**Contact Information:**
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Obtaining CME/CE Credit

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http://ryanwhite.cds.pesgce.com