Bronx Health REACH Vegetable and Fruit Rx Program at 3 IFH’s FQHCs in the South Bronx:
Design, Implementation & Evaluation

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Vegetable and Fruit Prescription Symposium
November 2, 2017
Mission: to improve the quality and availability of family practice services in response to the needs of medically underserved populations.
To eliminate racial and ethnic disparities in health outcomes in the Bronx by creating a movement of individuals, agencies, organizations, and communities, working together, sharing resources, expertise, information and services.
Funding: CDC REACH Program
Timeline: March 2016 – May 2017
Location: 3 IFH FQHCs in the South Bronx—Mt. Hope, Stevenson and Walton
Target Audience: obese patients, Black/African American and Latino

Aims: increase consumption of vegetables and fruits and awareness of farmers markets and Health Bucks vouchers.

Program Components:
1. Provider-Issued VFRx
2. Community Health Worker
3. Community events
4. Evaluation

<table>
<thead>
<tr>
<th>SUPERMARKET</th>
<th>ADDRESS</th>
<th>ZIP CODE</th>
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</thead>
<tbody>
<tr>
<td>C Town Supermarket</td>
<td>1750 University Ave</td>
<td>10453</td>
</tr>
<tr>
<td>Omega Seafood &amp; Green Market</td>
<td>148 West Trenton Ave</td>
<td>10453</td>
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<tr>
<td>Caribe Deli and Grocery</td>
<td>120 West Trenton Ave</td>
<td>10453</td>
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**Vegetable and Fruit Prescription Program**

Just like a prescription for medicine, your provider would like you to "fill" this prescription by buying and eating more vegetables and fruits!

**How many vegetables and fruits should I eat every day?**
- 3-5 "servings" of vegetables and 2-4 "servings" of fruit every day.
- Examples of 1 serving of vegetables are: 12 baby carrots, 1 cup string beans, 1 large tomato or 2 cups of raw spinach.
- Examples of 1 serving of fruit are: 1 whole fruit (a banana, apple, orange), 8 strawberries or 32 grapes.
- TIP: When you eat a meal, you should fill half of the plate with vegetables and fruits.

**Are frozen and canned vegetables and fruits okay?**
- Frozen vegetables and fruits also count!
- Choose canned vegetables that say low sodium.
- Choose canned fruits that say they are in their own juice.

**Now what?**
Go to your local food store and buy some of your favorite vegetables and fruits!

This is not a coupon or discount. Prescription has no monetary value.
**WORKFLOW**

Vegetable and Fruit Rx Program (VFRx)

Alert created in EPIC to flag adult obese (18 yrs and older) patients with BMI > 30. A list is generated each day of target patients with appointment.

CHW participates in the morning huddle of health center staff to distribute the list of target VFRx patients with appointments for that day.

Provider issues an Rx to patient from EPIC EMR Vegetable and Fruit smartset and recommends the VFRx Program to patients.

Patient meets with CHW who obtains informed consent & conduct baseline survey. Provide patients with nutrition education materials and information about Health Bucks, and upcoming events.

CHW coordinates community events: food demonstrations and tours of farmers markets, supermarkets, and bodegas that sell fruits and vegetables.
The Community Health Worker

- Health Center: Provides nutrition education and promotes upcoming events to patients.
- Events: Conducts outreach and coordinates events.
- Evaluation: Conducts baseline and follow-up surveys and inputs responses.
## VFRx Events

<table>
<thead>
<tr>
<th>Event</th>
<th>When</th>
<th>Number of events held</th>
<th>Avg. Number of participants per event from each health center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supermarket Tours</td>
<td>Year-Round (monthly)</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>Food Demonstrations</td>
<td>1 x per month</td>
<td>20</td>
<td>30 participants (21 patients; 9 staff members)</td>
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<tr>
<td>Farmers Market Tours</td>
<td>July - November</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Fresh Food Box (July-September 2017)*</td>
<td>1 x per week</td>
<td>15</td>
<td>6</td>
</tr>
<tr>
<td>Bodega Tour</td>
<td></td>
<td>1</td>
<td>3</td>
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</table>
“This program made me think more about what I need to eat. It makes me more accountable because it is a prescription from my doctor which feels more necessary.” - VFRx Patient

“I love the program! I love getting calls. It keeps me in check.” - VFRx Patient
Overall Patient Enrollment in the 3 Participating Centers
VFRx Study Enrollment Period: March 2016 - May 2017 (n=654)

- Stevenson: 197
- Walton: 192
- Mt. Hope: 265

Number of Patients
**Program Implementation: Lessons Learned**

- Integrate program into existing workflow
- Expand the role of “providers”
- Cultivate staff champions
- Build clinical community linkages and aligning with other initiatives
  - Local farmers markets and supermarkets
  - NY Common Pantry
  - NYC Department of Health
  - Grow NYC Fresh Food Box program
CREATING A CULTURE OF WELLNESS AT OUR HEALTH CENTERS

• Nutrition Education Workshops
• Big Apple Crunch 2016
• Supermarket Tours
• Healthy Beverage Zone
• Water Infusion Demonstrations
• Food Demonstrations
**PROGRAM IMPLEMENTATION - NEXT STEPS**

**Sustainability**

- Integrating VFRx into other health center programs
- Nutrition education professional development trainings and activities
- Policy priorities
December 2015 – April 2016: 24 provider surveys collected
• Providers’ knowledge, attitudes, and behaviors on nutritional counselling and perceptions of patient attitudes and behaviors on proper nutrition

March 2016 – May 2017: 654 patients enrolled & completed baseline surveys
• Patients’ knowledge, attitudes and behaviors on vegetable and fruit consumption and access to vegetables and fruits.

June – August 2017: 328 follow up patient surveys completed
• Follow up surveys with patients 3 months from baseline to examine behavioral/attitude changes towards healthy eating and vegetable and fruit consumption
• 50% completed follow up surveys

September – November 2017: external mixed methods evaluation of pre/post patient data
BASELINE SURVEY FINDINGS

Providers (n=24)
- Chronic condition management (50%) vs. preventative strategy (38%)
- Barriers to nutrition counseling
  - Limited time to advise patients about proper nutrition (98%)
  - Lack of interest from patients (29%)
  - Need more information to be given to patients (25%)

Patients (n=654)
- Limited knowledge about available services and resources to assist in purchasing healthy foods
  - No Knowledge of farmers markets locations (40%)
  - No Knowledge of Health Bucks (54%)
  - No knowledge of SNAP/WIC acceptance at farmers markets (53%)
- Barriers to farmers markets
  - Locations (55%)
  - Time (22%)
EVALUATION: PRE/POST DATA ANALYSES

• Analyses of patient pre/post data (n=328) assesses 5 key variables:
  o The change in patient vegetable and fruit consumption
  o Knowledge of farmers markets in the Bronx
  o Visits to farmers markets to purchase fresh fruits and vegetables
  o Actual use of Health Bucks at farmers markets
  o Use of EBT/SNAP benefits at farmers markets

• Subgroup Analyses
  o Analyses of patients who received Health Bucks during farmers market season
EVALUATION: NEXT STEPS

• Qualitative evaluation
  o Exploring qualitative evaluation to include provider interviews and focus groups with VFRx patients

• Dissemination of findings
  o Peer reviewed journals
  o Professional conferences
  o Policymakers
  o Bronx Health REACH Coalition Members
  o Health center staff and other healthcare groups
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