USING POLICY, SYSTEMS AND ENVIRONMENTAL IMPROVEMENTS TO PREVENT CHRONIC DISEASE AMONG THE FOOD INSECURE POPULATION IN SCHENECTADY COUNTY

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More Complex and Longer Timeframe

Better Health and Reduced Cost

Food Insecurity -> Obesity

Obesity -> Diabetes -> ESRD

ESRD -> Million Dollar Patients

Hospital Data

Public Health Data

Community Survey Data
Overview

• Early collaboration

• 2013 CHA priorities and outcomes

• 2016 CHA process and priorities

• Diabetes/Obesity Interventions

• Evaluation

• Next Steps
UMatter Survey

- A city-wide, neighborhood-level, boots-on-the-ground community health assessment

- Goal was to acquire neighborhood-level data and to use those to identify city needs and health disparities

- Collected over 2000 surveys from residents in the City of Schenectady over 3 month period
## Obesity

<table>
<thead>
<tr>
<th>BMI Classification</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight (BMI &lt; 18.5)</td>
<td>1.4 %</td>
</tr>
<tr>
<td>Normal (BMI: 18.5 – 24.9)</td>
<td>22.8 %</td>
</tr>
<tr>
<td>Overweight (BMI: 25.0 – 29.9)</td>
<td>30.9 %</td>
</tr>
<tr>
<td>Obese (BMI: 30 – 34.9)</td>
<td>22.0 %</td>
</tr>
<tr>
<td>Severe Obese (BMI ≥35)</td>
<td>23.0 %</td>
</tr>
</tbody>
</table>

BMI

N = 2013
Mean = 30.6
Food Insecurity and Obesity

**Prevalence of Severe Obesity (BMI ≥ 35) by Food Security:**

- Have not run out: 17.7%
- Only 1 or 2 months: 28.4%
- Some but not every month: 29.0%
- Almost every month: 37.9%
- Every month: 39.1%

In the last 12 months, how often have you run out of food before the end of the month?

Source: UMatter
Schenectady Coalition for a Healthy Community

- American Cancer Society of Northeastern New York
- Asthma Coalition of the Capital Region
- Bethesda House
- Bigelow Corners Partnership
- BOCES Capit
- Boys and Girls Clubs of Schenectady
- Capital District Center for Independence
- Capital District Child Care Coordinating Council
- Capital District Physicians Health Plan
- Capital District Tobacco Free Coalition
- Capital District Transportation Authority
- Catholic Charities
- City Mission of Schenectady
- City of Schenectady
- Community Fathers, Inc.
- Cornell Cooperative Extension of Schenectady County
- Ellis Medicine
- Fidelis Care
- Girls Inc.
- Guyanese American Association of Schenectady
- Habitat for Humanity of Schenectady County, Inc.
- Healthy Capital District Initiative
- Hometown Health Center
- League of Women Voters of Schenectady County
- Mohawk Ambulance Service
- MVP Health Care
- Northeast Parent and Child Society
- Optimum Health Chiropractic
- Parsons Child and Family Center
- Planned Parenthood
- Price Chopper
- Rainbow Access Initiative
- Rehabilitation Support Services, Inc.
- SAFE, Inc.
- Schenectady ARC
- Schenectady City School District
- Schenectady Community Action Program
- Schenectady County Community College
- Schenectady County Department of Social Services
- Schenectady County Department of Probation
- Schenectady County Human Rights
- Schenectady County Office of Community Services
- Schenectady County Public Health Services
- Schenectady County Senior and Long Term Care Services
- Schenectady Day Nursery
- Schenectady Free Health Clinic
- Schenectady Inner City Ministry
- Schenectady Municipal Housing Authority
- Schenectady Stand Up Guys
- Schenectady United Neighborhoods
- Seton Health Center for Smoking Cessation
- Sunnyview Rehabilitation Hospital
- The Albany Damien Center
- The Chamber of Schenectady County
- The Schenectady Foundation
- Union College
- Union Graduate College
- United Way
- University at Albany, School of Public Health
- Visiting Nurse Service of Schenectady and Saratoga Counties, Inc.
- YMCA of the Capital District
- YWCA
2013 Prevention Agenda Priorities

Prevent Chronic Disease
• Reduce obesity in children and adults
  • Create community environments that promote and support healthy food and beverage choices and physical activity

Promote Mental Health and Prevent Substance Abuse
• Strengthen Infrastructure across Systems
• Prevent Substance Abuse and other Mental Emotional Behavioral Disorders
  • Prevent and reduce occurrence of mental, emotional and behavioral disorders among youth and adults
2013 Outcomes

• Formed a food insecurity workgroup of the Coalition

• Worked with a community coach through RWJF and University of Wisconsin Population Health Institute
  • Community asset mapping
  • Survey of food insecure population

• Schenectady County Public Health Services received a Partnerships to Improve Community Health (PICH) grant from the CDC in 2014
  • Two primary objectives:
    • Increase the number of people with improved access to healthy food
    • Increase the number of people with improved opportunities for chronic disease prevention, risk reduction, or management with a focus on diabetes
2016-2018 CHIP/CSP Cycle: Data Review

• Worked with coalition to review data from regional Community Health Needs Assessment
  • The County’s adult obesity rate of 32.8% and childhood obesity rate of 18.0% were both higher than Rest of State (27.0% and 17.3%)
  • Schenectady’s diabetes mortality rate of 19.2/100,000 was significantly higher than Rest of State (15.6)
  • The County’s diabetes short-term complication hospitalization rate (8.5/10,000) was significantly higher than Rest of State (5.8) and increased 70% from 2009 to 2013
  • Hamilton Hill neighborhood had 6.9 times the diabetes ED rates and 3.2 times the diabetes hospitalization rates compared to Rest of State
2016-2018 CHIP/CSP Cycle

• Selected Focus Areas
  • Prevent Substance Abuse and other Mental, Emotional, and Behavioral Disease
  • Reduce Obesity and Diabetes in Children and Adults

“Dot-mocracy” exercise example
2016-2018 CHIP/CSP: Goals and Strategies

- Diabetes/Obesity
  - Create community environments that promote and support healthy food and beverage choices and physical activity.
    - Increase retail availability of affordable healthy foods, especially for those with limited access (including availability of healthy foods for emergency food providers)
  - Expand the role of health care and health service providers and insurers in obesity prevention
    - Offer Diabetes Prevention Programs (DPP) in the community
    - Offer Diabetes Self-Management Education (DSME) programs in the community
Partnerships

• Key to successful community initiatives
• Many partners work with food system in Schenectady County
  • Schenectady Food Providers
  • Regional Food Bank
  • Food Pantries for the Capital District
  • Cornell Cooperative Extension, Schenectady County
  • Schenectady County Public Health Services
  • Schenectady Inner City Ministry
  • Capital Roots
  • Schenectady Community Action Program
  • United Way of the Greater Capital Region
  • Ellis Medicine
Healthy Food Pantry Initiative

- Bridge Christian Church Pantry
- State Street Presbyterian Church Pantry
- Scotia-Glenville Pantry
- Schenectady Inner City Ministry (SICM)
- Harmony Fellowship
Evaluation of Healthy Food Pantry Initiative

- Interviews with pantry coordinator (paid and volunteer)

- Pre-intervention surveys with food pantry clients (n= 305) to measure availability and consumption of fruits and vegetables

Also measured health status

- 74% were overweight or obese
- 69% one or more chronic conditions
- Few meet the daily recommended servings of fruits and vegetables
Healthy Food Pantry

• Behavioral Economics

Choose this
Healthy Food Pantry cont.

Examples of interventions being implemented

- Promoting healthy food drives
- Onsite nutrition education
- Environmental signage to highlight healthy options
- Layout changes to highlight healthy options
- Food procurement policies
- Training for volunteers and paid staff about policies
Healthy Food Drives

- Promote healthy food donations
- Donation bags, posters, and shopping lists
- Spreads the message beyond the pantry
Nutrition Education

- Menu planning
- Nutrition for chronic disease
- Cooking demonstrations
Signage

• Draw attention
• My Plate food groups with nutrition message
Layout

- East to see - Visibility
- Easy to reach - Convenience
- Nice to look at - Appearance
Example: SICM

Before

After
Example: Bridge Pantry
Policy plans

Interventions

• Promoting healthy food drives
• Onsite nutrition education
• Environmental signage to highlight healthy options
• Layout changes to highlight healthy options
• Food Procurement guide
Early Impact

- Interventions have directly benefited the approximately 1,000 families served by these five pantries each month.

- Follow up client surveys in Spring 2017 to assess change in health status and availability and consumption of fruits and vegetables post-interventions (≈ 1 year).
Next Steps

• Policies will be implemented at each participating pantry incorporating the changes already established

• Follow up environmental scans and interviews with pantry staff and volunteers to measure fidelity to the interventions

• Training on policies and best practices

• Working with regional partners

• Expansion to other pantries through other grants