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

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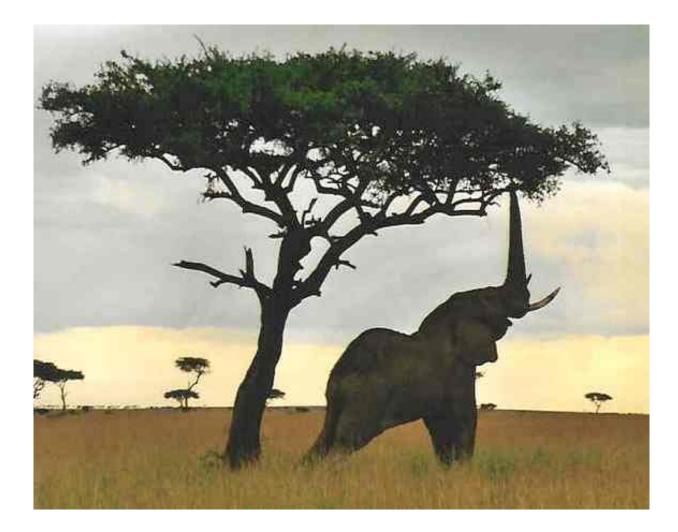
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### Hospital Data ESRD -> Million Dollar Patients

#### Public Health Data Obesity -> Diabetes -> ESRD

<u>Community Survey Data</u> Food Insecurity -> Obesity



**Better Health and Reduced Cost** 

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## 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





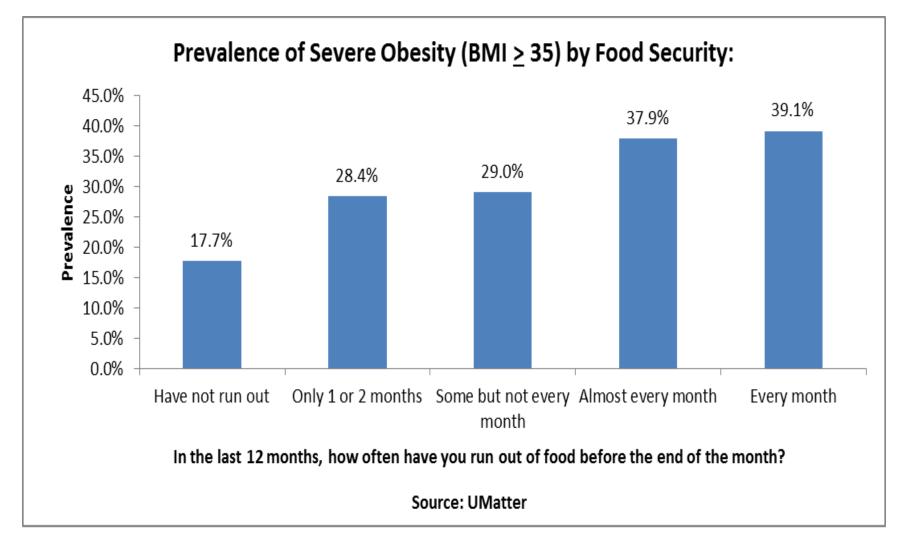


## Obesity

BMI Classification	Percent
Underweight (BMI < 18.5)	1.4 %
Normal (BMI: 18.5 – 24.9)	22.8 %
Overweight (BMI: 25.0 – 29.9)	30.9 %
Obese (BMI: 30 – 34.9)	22.0 %
Severe Obese (BMI ≥35)	23.0 %

BMI N = 2013 Mean = 30.6

## Food Insecurity and Obesity



## Schenectady Coalition for a Healthy Community

- American Cancer Society of Northeastern New York
- Asthma Coalition of the Capital Region
- Bethesda House
- Bigelow Corners Partnership
- BŎCES 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 Álbany 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

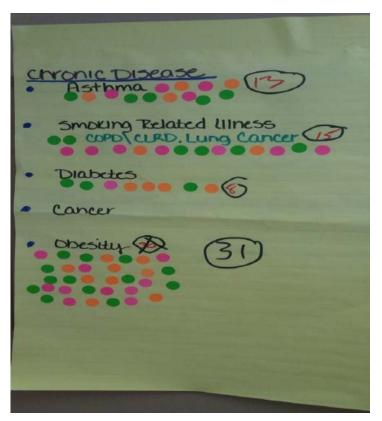
- Formed a food insecurity workgroup of the Coalition
- Worked with a community coach through RWJF and University of Wisconsin Population Health Institute
  - Community asset mapping
  - Survey of food insecure population
- Schenectady County Public Health Services received a Partnerships to Improve 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

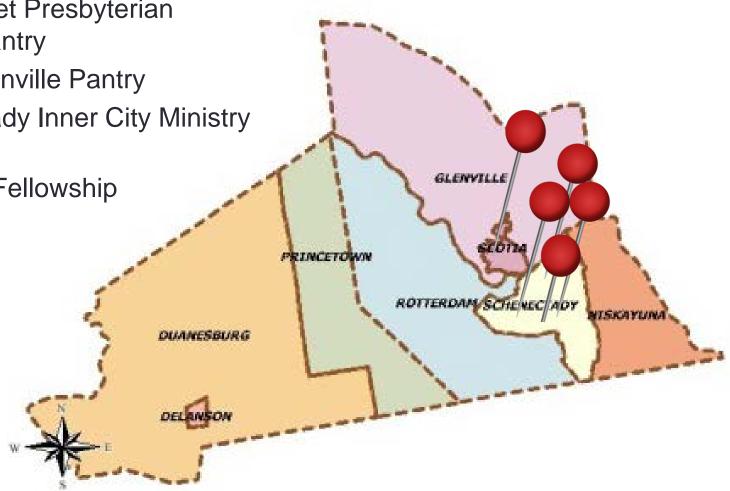
- Create community environments that promote and support healthy food and beverage choices and physical activity.
  - Increase retail availability of affordable healthy foods, especially for those with limited access (including availability of healthy foods for emergency food providers)
- Expand the 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 <u>availability</u> and <u>consumption</u> 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



## 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





#### FRUITS (No-Sugar Added)

- Fruit Cups
- 100% Fruit Juice
- Raisins/Dried Fruit
- Applesauce

#### VEGGIES (Low-sodium)

- Canned Peas, Corn, Carrots etc...
- 100% Tomato Juice Salsa

- GRAINS (Whole Grains) Whole-Wheat Pasta
  - Brown Rice

  - Whole-Grain Crackers Rolled Oats
- Quinoa

- PROTEIN (Lean Protein) Dried Beans
- Unsalted Nuts
- Peanut Butter
- Canned Chicken & Tuna (in water)

#### DAIRY (No-Fat or Low-Fat)

- Powdered Milk
   Shelf-Stable Rice & Soy Milk

#### OTHER

- Baby Food
  Baby Formula
- Tea/Coffee



## Nutrition Education

- Menu planning
- Nutrition for chronic disease
- Cooking demonstrations

# Signage



- Draw attention
- My Plate food groups with nutrition message





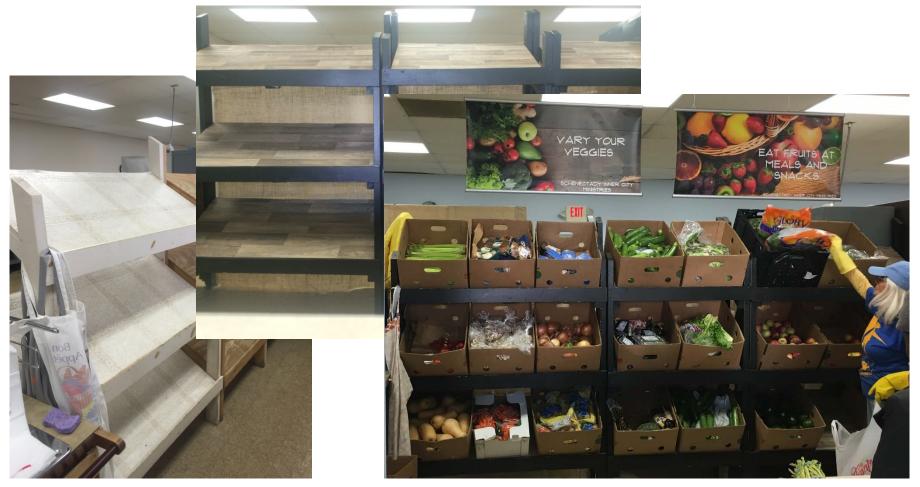


## Layout



- 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 <u>availability</u> and <u>consumption</u> 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