The Intersection of Food Insecurity and Health Care

Gillian Chase, Maxine Dudek, Chantal Ferguson, Marissa Mastrococla, Henry Pratt, Noah Rohrer, Jeffrey Salemi, Hung Vo, and Kathryn Brodowski, MD, MPH, Director of Public Health and Research at The Greater Boston Food Bank

What is Food Insecurity?

The USDA defines food insecurity as “a household-level economic and social condition of limited or uncertain access to adequate food.” According to the most recent data, 12.7% of U.S. households (which translates to 42.2 million people), 9.7% of Massachusetts households and 10.3% of households in Worcester county are food insecure, highlighting the importance of identifying and understanding this issue.

Food insecurity has been associated with various poor health outcomes including lower overall health status and poor management of chronic diseases, such as diabetes. Physicians report social needs are just as important to address as medical conditions, but only 1 in 5 feel confident or very confident in addressing their patient’s social needs. Only 12.7% of physicians ask about food sufficiency most of the time or always.

Our goal was to research the proportion of CHNAs that identified food insecurity.

Who is Food Insecure?

Food insecurity can affect people from all walks of life.

- More than half of the Feeding America client households report having at least one employed person at some point in the past year
- “Clarenta S. has four kids and just adopted 2 grandchildren after her daughter gave birth to a second child while high on heroin and cocaine. Her daughter gave birth at home and she had to hide drugs before calling an ambulance”
- “Ariel M. is a 56 year old paralysed in a motorcycle accident. He communicates through a computer and gets food from a mobile pantry”
- “PEG S. cares for her son and five other children because her daughter in law passed away”
- “Harold S. gets his food at a food pantry after his wife passed away after a long battle with cancer. He has two children and he spent all his money on her medical bills.”

Food Insecurity and Obesity Among Children and Adolescents

- Low-income children in the Massachusetts WIC program who reported having persistent food insecurity without hunger during infancy and early childhood was associated with a 23 percent greater odds of child obesity at two to five years of age in comparison to children from persistently food secure households (Metalinos-Katryna et al.)
- How Can This Happen?
  - Food deserts: low-income neighborhoods frequently lack full-service grocery stores forcing residents, especially those without access to a vehicle, to shop at local convenience stores for their food (Beaulac, J. et al.)
  - Those who eat less/healthier meals tend to overlook when food becomes available (Larson et al.)
  - High levels of stress and poor mental health due to financial and emotional pressures contribute to weight gain (Brummet M. et al.)
  - Low-income youth and adults are exposed to more marketing and advertising for obesity-promoting products than those from higher income families.

SNAP Gap

- Massachusetts FY 2012
- Household food insecurity
- 1,556,000 households
- 1,156,000 households
- 370,000 SNAP gaps
- 770,000 SNAP gaps

Impact of Food Insecurity on Health

Food insecurity has a major and lasting impact on the lifelong health of adults and children.

- Food insecure individuals 2x as likely to experience depression
- Severe food insecurity is associated with diabetes

Community Health Needs Assessments

Non-profit medical centers assess the health of their community to help identify top priorities and address them. Performing CHNAs every three years is mandated by the Affordable Care Act. Students evaluated the most recent CHNAs that were available from medical centers in GBFB’s service region.

Data collection:

- CHNAs should be publicly available and were collected from institutions via their websites.
- Yes: food insecurity, obesity, and lack of access to healthy foods were mentioned
- Interestingly, many smaller community health centers did not have independent CHNAs and were covered by their larger affiliate organization.

Community Health Needs Assessment (CHNA)

- The Affordable Care Act has created obligations for hospitals/healthcare centers filing as Non-profit medical centers that had CHNAs.
- How do I screen for food insecurity?
  - SNAP Gap
  - Food insecurity
  - SNAP
  - How to screen for food insecurity

Children’s HealthWatch Hunger Vital Sign™:

1. Within the past 12 months we worried whether our food would run out before we got money to buy more.
2. Within the past 12 months the food we bought just didn’t last and we didn’t have money to get more.

An answer of “often true” or “sometimes true” for EITHER question means the client screens positive.

How to Screen for Food Insecurity

2. Explore NEC Mobile Market – www.NECconcenter.org
3. Use Click ‘N Cook – www.cook.org

Food Assistance Programs

- Immediate Food Assistance
  - Find a food pantry in Worcester – www.foodbank.org
  - Find a food pantry in Eastern MA – getfood.org

- Healthy Habits
  1) Visit Cooking Matters – www.cookingmatters.org
  2) Explore NEC Mobile Market – www.NECconcenter.org
  3) Use Click ‘N Cook – www.cook.org

The Greater Boston Food Bank

Community Health Centers and Free Mobile Markets

Community Health Centers (CHCs) are health centers focused on providing primary care to a region regardless of ability to pay or insurance status. CHCs represent an excellent opportunity to screen for food insecurity because of the high overlap of those in need of a health safety net with those who are food insecure.

Mobile Markets offer a unique opportunity to bring healthy food to local hubs such as CHCs without the barriers of a brick and mortar pantry. New partnerships with Food Banks are emerging throughout the country. The Greater Boston Food Bank is currently piloting a 3-pronged program for health centers: free produce mobile market, Hunger Vital Sign™ screening, and connecting patients via a toolkit of resources.

Nutrition and Food Insecurity in Medical Education

In 2003, Nutrition was an independent three-month course at UMass with a separate course grade. It is currently a component of a three-week course which also integrates vascular disease and cancer. Nationwide, medical schools provide an average of 23.9 hours of nutrition education during their preclinical curricula.

Screening for food insecurity during interviews is not taught as a portion of the Doctoring and Clinical Skills course at UMass. We suggest incorporating “how-to” skills into both this course and the Determinants of Health course with a focus on screening for food insecurity, counseling food-insecure patients on nutrition, and connecting them to benefits and resources.

See attached slide for reference.