

2017

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Linehan, Callie, "Improving our response to positive food insecurity screening at Colchester Family Practice" (2017). *Family Medicine Clerkship Student Projects*. 312.
<https://scholarworks.uvm.edu/fmclerk/312>

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Improving our response to positive food insecurity screening at Colchester Family Practice

Callie Linehan, MS3

October 2017

Mentors: Dr. Marga Sproul, Dr. Alicia Jacobs, and Dr. Anya Koutras

Food insecurity and healthcare

“Simply put, people who have access to decent housing, job opportunities, healthy food and other basic resources are much healthier than those who do not.” - UVMHC President and COO, Eileen Whalen, MHA, RN (UVM Medical Center, 2016)

- ▶ In the 2016 Community Health Needs Assessment for the University of Vermont Medical Center, access to healthy food was identified as the 7th largest need in Chittenden and Grand Isle counties.
- ▶ Studies have demonstrated that food insecurity and hunger, especially in childhood, lead to poorer health outcomes.
- ▶ Access to healthy food will also be instrumental in achieving health equity; food insecurity disproportionately impacts households that: include children, are black or Hispanic, are rural, are immigrants, or are headed by single women. (FRAC)

Food insecurity and healthcare

Food insecurity in households with children leads to poorer health outcomes, including:

- ▶ Worse overall health and more hospitalizations
- ▶ Developmental delays, dysregulated behavior, emotional distress
- ▶ Lower academic achievement in math and reading
- ▶ Nutrient deficiencies, like iron deficiency, and associated health problems
- ▶ Higher stress, anxiety, and depression (including maternal depression, which is linked to poorer outcomes in kids)
- ▶ Disease later in life, including diabetes, hyperlipidemia, and cardiovascular disease

Content from FRAC Toolkit based upon AAP Policy Statement, *Promoting Food Security for All Children*

The cost of food insecurity

“Given that 60% of a person’s health status is related to socioeconomic factors and physical environment and only 20% is based on clinical care, we cannot achieve our goals of improving health and controlling costs without focusing on these areas,’ said Eileen Whalen, MHA, RN, president and chief operating officer of the UVM Medical Center.” (UVM Medical Center, 2016)

- ▶ Poorer health outcomes, increased hospitalization, and significant, chronic diseases later in life all add cost to our healthcare system.
- ▶ Additionally, the loss of worker productivity, educational attainment, and investments in national emergency food programs all add to the true economic burden of food insecurity.
- ▶ In the late 2000s, the total annual cost of food insecurity was over \$90 billion.
 - ▶ While the percentage of adults who are food insecure in Vermont now is similar to the national percentage in 2007, when this was the cost, the number of children who are food insecure in Vermont is 4% higher, at 14%. The problem and costs for food insecurity are still pressing issues here in Vermont, and in fact, the costs likely exceed \$90 billion nationally now.

(Chilton and Rose, 2009; and HungerFreeVT.org)

Community Perspectives

- ▶ “When the message of WIC is reinforced by the doctor, it helps so much.” Madeline Buckley, Public Health Nutritionist, Vermont Department of Health
 - ▶ Madeline shared that the WIC caseload has been decreasing nationally, and that it is likely not because food insecurity is decreasing, but because fewer eligible people are accessing services. People who are on Medicaid or Dr. Dynosaur are automatically eligible to receive benefits, and WIC is actively trying to recruit more participants to improve access to healthy food and nutrition information in the community. She shared that having healthcare providers “prescribe” WIC makes a difference in patients seeking out those services.
- ▶ “I think the most significant barriers are two - one is shame and embarrassment that they need such help, and then where and how to find the help they need.” Marcia Devino, President, Colchester Community Food Shelf
 - ▶ All community members I spoke to, including Ms. Devino and Deb Deschamps, mentioned that both stigma and knowing where to turn play a role in utilization of local food resources, including the food shelf, and free and reduced lunch programs. Healthcare providers have the opportunity to ask about food insecurity, reduce the stigma by talking about this common problem, and to provide accurate local information.

Methods and interventions

For this project, I built on the work that Dr. Anya Koutras is spearheading at Colchester Family Practice. She is working on the implementation of an EMR tool for screening patients for food insecurity using the validated, AAP-recommended 2-question Hunger Vital Sign. My project is to raise awareness among providers, and identify resources and next steps providers can take to help patients who screen positive for food insecurity, especially families with children. My project has included the following methods and interventions:

- ▶ Assessed provider familiarity with food insecurity screening and resources with a brief, 5-question provider survey using a Likert scale, then posted a printed infographic from the AAP for staff areas to increase knowledge and awareness around food insecurity screening.
- ▶ Interviews and partnership with community members
 - ▶ Madeline Buckley at WIC - discussed having providers “prescribe” WIC, receiving WIC materials for our office, providing materials to patients on Medicaid/Dr. Dynosaur who are automatically eligible, and possibility of hosting her to update providers on WIC resources for patients as we launch this new screening tool. Additionally received from her a list of up-to-date local food resources that I shared with providers as a resource for patients, and collaborated on what would be needed for providers to effectively refer patients to WIC, including the possibility of adding a question to the screening tool about whether we have their permission to share their name with local food agencies.
 - ▶ Marcia Devino at Colchester Community Food Shelf - offered to supply a donation container for foods at the office and discussed the Summer Lunch Program.
 - ▶ Deb Deschamps, District Nurse Supervisor for Colchester School District - discussed adding food insecurity screening to the annual school registration and associated referral to resources/provision of information, providing list of local food resources to parents at open houses, and advocating for a bus line between Fort Ethan Allen and the food shelf to mitigate transportation barriers (I submitted a recommendation electronically to Green Mountain Transit).
- ▶ Medical record review for Dr. Koutras’ research for food insecurity screening in October

Methods and interventions, continued

- ▶ Creation of a laminated card for exam rooms to remind providers to screen for food insecurity.
- ▶ Creation of a trifold brochure with a few of the most salient local food resources for patients in our office, to be published through UVMCC (draft complete, in process with media relations dept). Includes contact information and websites to learn more; this was created as a resource for providers to hand to patients who screen positive for food insecurity using the new tool.
- ▶ Recommendations:
 - ▶ Inclusion of an additional question for patients who screen positive to ask whether we have permission to share their name and contact information with local food agencies
 - ▶ Making the Food Resource List (produced and updated by the Vermont Dept. of Health) accessible to providers, either electronically or in exam rooms, so that it can be provided easily to patients
 - ▶ Contacted Green Mountain Transit to recommend the addition of a bus line between Fort Ethan Allen and the Colchester Community Food Shelf to overcome transportation barrier

Responses from providers

I surveyed providers to find out how comfortable they are with the new food insecurity screening tool and more. They were asked to circle one answer using a Likert scale (Strongly Agree -> Strongly Disagree, 6 choices). Response rate was 75%, N=8 (MDs, PAs, NPs). Here are the questions and their responses:

- ▶ **I know the questions to ask to screen for food insecurity (the Hunger Vital Sign).**
 - ▶ On average, providers Slightly Disagree - they don't know these questions well yet.
- ▶ **I know 4 or more common ways that food insecurity can present in kids.**
 - ▶ On average, providers Slightly Disagree - they aren't as familiar with presentations of food insecurity.
- ▶ **I know what local resources to recommend to families with food insecurity.**
 - ▶ On average, providers Agree - they know many resources to recommend.
- ▶ **I know what common barriers are for families accessing local food resources.**
 - ▶ On average, providers Slightly Agree - they know about barriers, and may have more to learn.
- ▶ **I would like to learn more about local resources for families to get more food, or learn more about the resources we already recommend.**
 - ▶ On average, providers Agree - they would like to learn more!

Evaluation of effectiveness and limitations

Evaluation

- ▶ My project will be evaluated through Dr. Koutras' ongoing research on the implementation of the Hunger Vital Sign screening tool. During the initial month of October, no providers sampled had yet screened for food insecurity during routine Health Supervision Visits. Hopefully, in the future, we will see an upward trend not only in the use of the screening tool, but also through documentation will be able to see what resources the provider recommended to the patient, and what resources they provided (brochures, handouts, etc).
- ▶ Additionally, it would be possible for a future student to re-administer the provider survey I used to assess whether providers' comfort and knowledge related to food insecurity screening and resources has increased.

Limitations of this project include:

- ▶ Collection of primarily qualitative information; limited quantitative data
- ▶ Lack of patient perspective
- ▶ Brochure resource in current form targeted to immediate locale, though some state-wide relevance
- ▶ Food resource list subject to change, and I did not secure a pipeline for providers to receive all updated versions; someone would need to contact the Vermont Dept. of Health, Burlington office to receive this and disseminate to providers

Recommendations for future interventions

- ▶ Future students could:
 - ▶ Produce the food resource document in a format, consistent with UVMMC marketing, to drop into patient visit summaries (i.e. like we have recommendations for stretches for back pain, etc).
 - ▶ Work with schools on communication around meals for students - i.e. if there is a school closure due to weather, strike, etc, and the school can offer food, how can students/parents be notified effectively? Perhaps a OneCall alert system message.
 - ▶ Work to address transportation issues for patients, perhaps by creating an infographic about options in a particular area from cabs to SSTA services to buses, and by continuing to advocate to improve those options.
 - ▶ Identify gaps in provider knowledge and do a presentation to answer questions and improve our skills for delivering resources/interventions to patients.

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