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# Linking Food Insecure Patients With Community Supported Agriculture (CSA)

Daniel Orlins Trigg

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# **Linking Food Insecure Patients With Community Supported Agriculture (CSA)**

**By Daniel O. Trigg**

**March and April, 2016**

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# Food Insecurity

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**Def.** – The limited or uncertain availability of nutritionally adequate and safe foods or the ability to acquire acceptable foods in socially acceptable ways.

**Key features** –

- Reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake. This is often about not eating fruits and vegetables.
- A rural problem - rates of rural household food insecurity are higher than those for urban households.

**Problem:** How to best identify and help those with food insecurity in a busy primary care practice.

# Food Insecurity in Vermont

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***In 2014 -***

76% of Vermont households reported being food insecure

25% of the population (157,000 people) accessed the Vermont Food Bank or another meal service program, and this included –

- 26,010 seniors
- 33,900 children

***Food insecurity is widespread and common in Vermont.***

# The Cost of Food Insecurity – unhealthy families, obesity, and overweight children

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## Food Insecure Household Health

- 46% had at least one member with hypertension
- 23% had at least one member with diabetes

## The Cost of Obesity in Vermont

- Annual medical expenses in Vermont directly related to obesity come to \$141 million
- \$40 million of this was spent on Vermonters on Medicaid – the most likely to be food insecure. Note that a mere 8.6% of Vermonters are on Medicaid.

## Childhood Obesity Among the Poor in Vermont

- 30% of low-income children in the Women, Infants and Children (WIC) program are overweight
- Nationally, 18% of children are overweight

# Community Supported Agriculture (CSA) Shares within the UVMC Community

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## *CSA participation among 151 full-paying and subsidized members in a rural county in upstate New York –*

- CSA members ate more healthy foods – they reported increasing their overall intake of fruits and vegetables.
- CSA members ate a greater diversity of fruits and vegetables – all reported trying between one and eleven new vegetables
- CSA members continued to eat healthily after the summer harvest ended – many reported increases in the consumption of winter vegetables.

## *The Health Care Share Program at UVMC –*

- CSA shares are distributed to 100 patients
- Three UVMC primary care distribution sites
- 12 weeks, once-weekly distribution over the summer
- Recipes are provided with each share that are specific to the vegetables being distributed

# Community Perspectives

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**Michelle Wallace**, Vermont  
*Foodbank Director of Community  
Health And Fresh Food  
Initiatives:*

“Folks that are using the food shelves who are food insecure are probably eating less fruits and vegetables than other people within the same socioeconomic bracket who are food secure.”

**Heather Danis**, Burlington District Director for  
*the Vermont Department of Health:*

“While there is not a specific food insecurity screening question during our eligibility determination process (which happens during our WIC clinics), there is a nutrition assessment done to determine any medical or nutrition risk factors that make participants eligible to participate in the program. Nutrition education is family-centered but can include “healthy eating on a tight budget”, and participants are referred to other food assistance programs as necessary.”

# Intervention – distribute CSA shares to those who will benefit the most.

## Food Insecurity Screening (2-item screen)

- The clinician reads two statements that people could make about their food situation. The patient is asked to say whether each statement is **often true**, **sometimes true**, or **never true**. Selecting either of the first two responses for either statement indicates food insecurity:

## Statements –

- 1) “We worried whether our food would run out before we got money to buy more.”
- 2) “The food we bought just didn’t last and we didn’t have money to get more”

**Problem** – Clinicians are busy, yet need to screen patients for food insecurity to see who will benefit the most from Health Care Shares.

What percentage of the roughly 10,000 patients that use Colchester Family Practice have food insecurity?

Will providers prefer the 2-item food insecurity screening tool or data-based formulas that use patient characteristics to estimate the chances of the patient being food insecure?



# Methods

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**Literature review** – covered primary care based initiatives to screen for and directly address food insecurity as well as community-based initiatives that address food insecurity in the primary care setting.

**Community Outreach** – contacted the Vermont Foodbank, UVMC Nutrition Services, and Vermont Department of Health to discuss best practices for screening for food insecurity and community-based initiatives to address food insecurity.

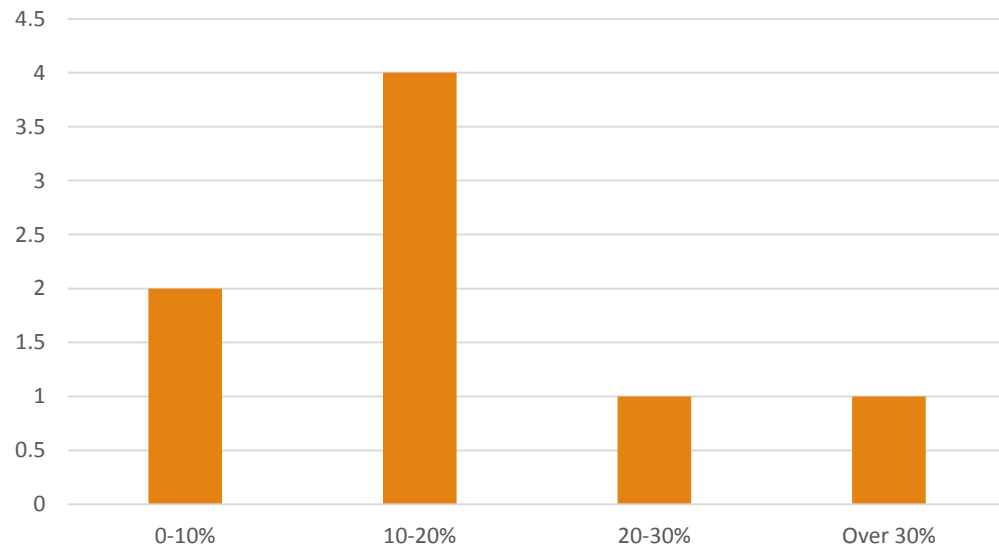
**Provider Survey** – assessed how likely providers are to screen for food insecurity, use the 2-item screen, and address food insecurity.

**Basic Statistics** – assessed the survey results.

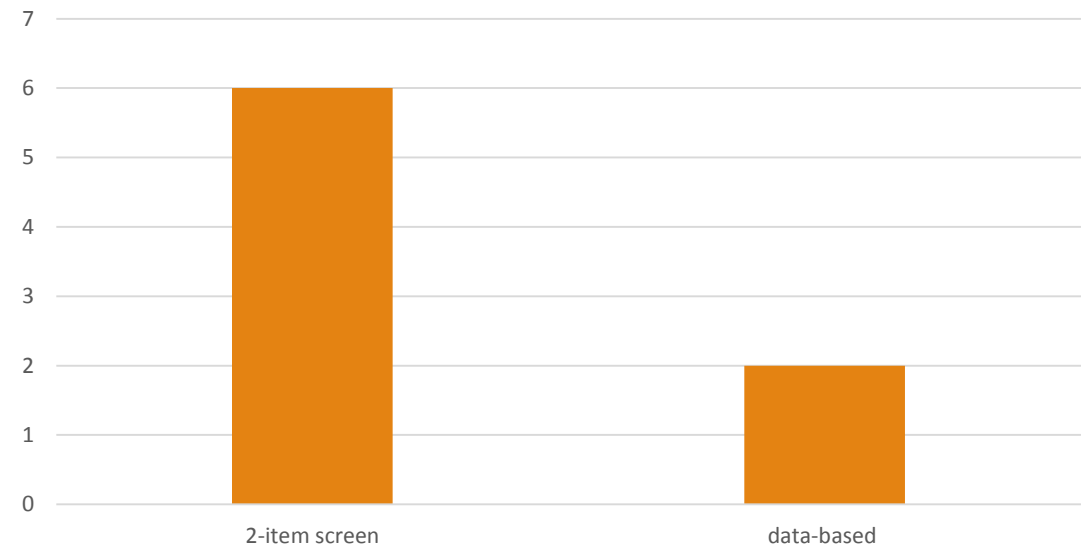
**Effectiveness and Limitations** – addressed the shortcomings of the 2-item screen.

# Results

Provider Estimates of Food Insecurity Among the Patients that Utilize Colchester Family Practice



Provider Preference: 2-Item Screen Versus Patient Data Based Metric to Screen for Food Insecurity



\*In 2014, 76% of Vermont households reported food insecurity.

# Evaluation of Effectiveness and Limitations

- The screen would only cover the patients signed up for food-insecurity interventions through Colchester Family Practice
- Some patients are non-native English speakers and might have difficulty understanding the screen.
- There is cultural stigma attached to food insecurity. Some patients may not want to admit that he or she is food insecure.
- A food insecure patient is not necessarily the patient most in need of the Health Care Shares program.
- Certain physicians may be unwilling to screen for food insecurity due to time constraints
- Metrics aside from the 2-item screen may be more effective at predicting food insecurity

# Future Projects

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***Plan:*** The 2-item screen could be compared to other metrics that predict food insecurity. Much of this data is found in Prism. This includes: patient insurance status, number of dependents, the presence of a chronic health condition in a child, and so forth.

In the future, a list of patients could be created that are most likely to be food insecure. This would funnel the most food insecure patients into community-based health initiatives such as the Health Care Shares Program.

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# Interview Consent Form

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Thank you for agreeing to be interviewed. This project is a requirement for the Family Medicine clerkship. It will be stored on the Dana Library ScholarWorks website. Your name will be attached to your interview and you may be cited directly or indirectly in subsequent unpublished or published work. The interviewer affirms that he/she has explained the nature and purpose of this project. The interviewee affirms that he/she has consented to this interview. Yes X / No.

If not consenting as above: please add the interviewee names here for the department of Family Medicine information only.

Name: Michelle Wallace, Heather Danis