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# Vermont Food Insecurity: Implementing screening tools and interventional assistance at Thomas Chittenden Health Center

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# Vermont Food Insecurity:

Implementing screening tools and interventional assistance at Thomas Chittenden Health Center



Quinn Self

June 2017

Mentor: Amy Denis, FNP



# Food Insecurity is a problem in Vermont

From HungerFreeVT.org:

**69,724** Vermonters live in food insecure households (11.3%)

**17,091** Vermont children Live in food insecure households (13.8%)

**157,450** Vermonters Qualify for Nutrition Assistance Programs (27%), but only **78,878** Vermonters receive 3SquaresVT benefits.

**>30%** of families who identified as food insecure indicated that they had to choose between paying for food and paying for medicine or medical care (Mabli, Cohen, Potter & Zhao, 2010).

Healthcare providers are often disconnected from community resources and adequate referral and care coordination help connect families with much needed, readily available and free community resources (Garg & Dworkin, 2011).

Consequences of food insecurity on the pediatric population

Anemia

Fatigue

Decreased bone density

Failure to thrive

Increased number of hospitalizations

Longer recovery times

Obesity

Depression

Suicidal ideation

Behavioral dysregulation in school

Emotional stress

Anxiety

Cognitive delays

Hyperlipidemia

Cardiovascular disease

Diabetes

(Gitterman et al. 2015)

# Public Health in Chittenden County

- **11.4%** of individuals living in Chittenden County live below the federal poverty level. (US Census Bureau 2015 American Community Survey)
- **12.5%** of the population in Chittenden County, Vermont live with food insecurity (Schattman et al., 2015).
- **34%** of adults living in Chittenden County consume the recommended amount of fruits and **23%** consume the recommended amount of vegetables (VT Dept. of Health)
- **10%** of high schoolers and **19%** of adults living in Chittenden County are obese (VT Dept. of Health).
- **88%** of adults living in Chittenden County have a regular primary care provider (VT Dept. of Health).
- **98%** of children living in Chittenden County have health care coverage (VT Dept. of Health)

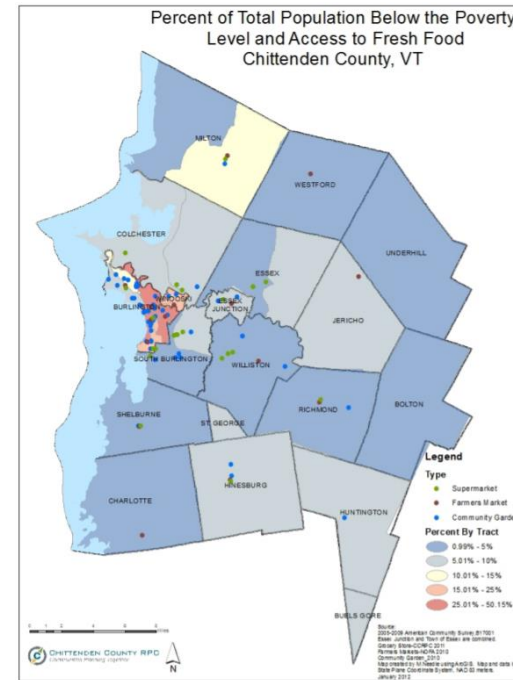
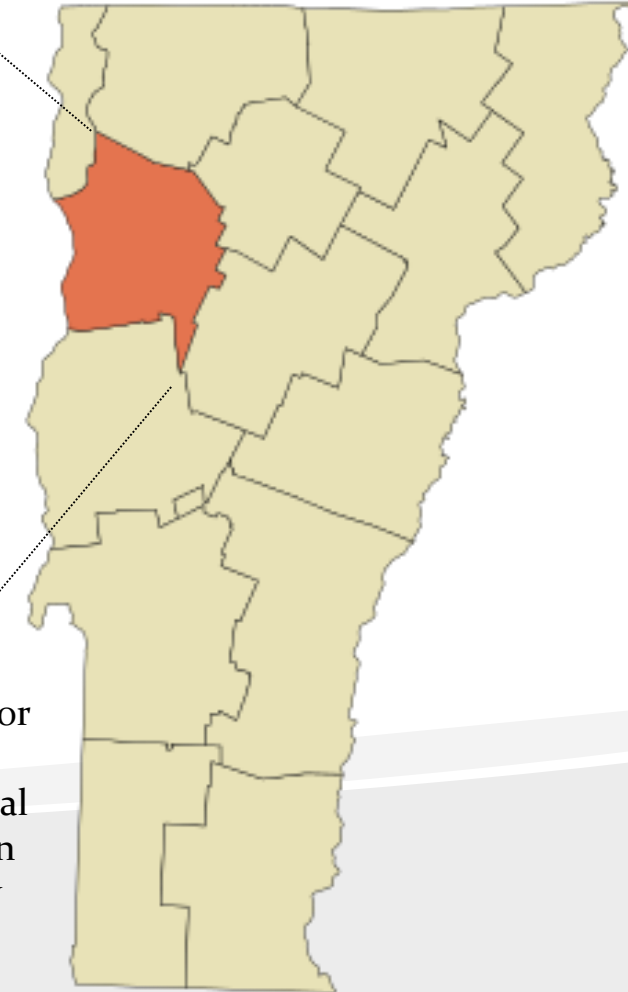


Image from: [www.wikipedia.org](http://www.wikipedia.org)



Chittenden County has “food deserts” or areas that require significant travel to reach food. This especially impacts rural communities. From: FINAL Chittenden County Public Health and Community Design Analysis (2012)



# Community Perspectives

Lindsey Fitzgerald, RN Care Coordinator,  
Thomas Chittenden Health Center

- Patients with food insecurity frequently have other social and health care needs such as unemployment and educational barriers.
- A lot of them don't have computer access to looking up information is difficult for them to do on their own.
- The application for 3SquaresVT is lengthy, complicated and often requires additional paperwork.
- Most providers don't know the resources available for helping their patients with food insecurity.
- Food Shelves are a convenient resource for many people, but they often lack nutritious foods like fresh vegetables.
- Food insecurity is stigmatized and it can take people time to decide that they would like help.

Katy Davis, Nutrition & Community  
Education Manager, Hunger Free VT

- There has recently been a big push to focus on social determinants like food insecurity.
- The Affordable Care Act has had a positive impacts on addressing food insecurity.
- Hunger Free Vermont is in the process of creating an algorithm for primary care practices to screen and treat food insecurity.
- UVMHC is piloting a social determinant screen in their pediatric unit for inpatients.
- We have seen success with implementing a 2 question screen into the nurses note.
- A big challenge is follow up and referrals.
- We need to identify where the resource gaps are for follow up at treatment.
- Federal assistance programs don't cover everyone in need especially those who just miss the income cutoff for assistance programs.



# Interventions

## Summary of needs

- Many Chittenden County residents live under the federal poverty level.
- Even more live with food insecurity.
- Many adults don't consume enough fruits and vegetables and many children and adults are obese.
- There are many preventable public health impacts correlated with food insecurity including obesity
- Most residents in Chittenden County regularly interact with health care providers making these providers an excellent resource to identify and address food insecurity.
- Currently, health care providers infrequently screen for food insecurity and lack knowledge of local resources for people with food insecurity

## Interventions

- Use validated screening questions on a poster in the offices waiting room to encourage patients to discuss food insecurity with their providers.
- Create an informational pamphlet that health care providers can reference, and provide to patients.

### Pamphlet includes:

- Screening questions and definition of food insecurity
- Impacts of food insecurity on health
- Names and contact information for local food shelves
- Names and contact information for local assistance resources

# Outcomes

Food insecurity can happen to ANYONE at ANYTIME

The USDA defines food insecurity as limited access to adequate food due to lack of money or other resources

This can affect people everyday OR some days.

If you say **OFTEN** or **SOMETIMES** to the following statements, you have experienced food insecurity.

In the past year, we worried whether our food would run out before we got money to buy more.

In the past year, the food that we bought just didn't last and we didn't have money to get more.

Statements adapted from USDA Household Food Security Survey

**Community Resources**

**3 Squares VT**  
(800)-479-6151  
**Women, Infants and Children's program**  
(800)-649-4357  
**Meals on Wheels**  
(877)-379-2600  
**The Vermont Foodbank**  
(800)-585-2265  
**Vermont school lunch programs**  
(802) 479-1030  
**Hunger Free Vermont**  
(802) 865-0255  
**Vermont Community Garden Network**  
(802) 861-4769  
**Choose My Plate**  
[www.choosemyplate.gov](http://www.choosemyplate.gov)

**1:10 Vermonters**

Don't have regular access to nutritious food

Statistics from HungerFreeVermont.org

**Impacts on Health**

Anemia  
Fatigue  
Decreased Bone Density  
Failure to Thrive  
Increased number of hospitalizations  
Longer recovery times  
Obesity  
Depression  
Suicidal Ideation  
Behavioral Dysregulation in school  
Emotional Stress  
Anxiety  
Shame  
Cognitive Delays  
Hyperlipidemia  
Cardiovascular disease  
Diabetes

**Who can I talk to?**

Talk to your Primary Care Provider

Your PCP can talk to you about the health impacts of food insecurity and can connect you with other resources like Registered Dietitians, Care Coordinators, and Social Workers

Call: 2-1-1 Information Hotline

**Where can I go?**

**ANEW Place**  
(802) 862-9879  
**Burlington Salvation Army**  
(802) 864-6991 x105  
**Chittenden food shell**  
(802) 456-7939  
**Charlotte Food Shell**  
(802) 425-3252  
**Colchester Community Food Shell**  
(802) 879-2444  
**COIS Daystation**  
(802) 854-7422  
**Essex, Jericho, Underhill Ecumenical Food Shell**  
(802) 899-3932  
**Heavenly Food Pantry**  
(802) 878-6745  
**Hinesburg Community Center**  
(802) 482-4946  
**Richmond Food Shell and Thrift Store Inc.**  
(802) 578-4283  
**Shelburne Food Shell Inc.**  
(802) 662-3313  
**Spectrum Youth and Family Services**  
(802) 864-7423  
**Williston Community Food Shell**  
(802) 735-6303

Information from [www.vtfoodbank.org](http://www.vtfoodbank.org)

**1 in 10 Vermonters say YES**

In the past year, we worried whether our food would run out before we got money to buy more.

In the past year, the food that we bought just didn't last and we didn't have money to get more.

If you said **SOMETIMES** or **OFTEN** to either, talk with your health care provider today!

According to HungerFreeVT.org 11.3% of Vermonters live with food insecurity  
Statements adapted from USDA Household Food Security Survey

Trifold information pamphlet that will be accessible in the waiting rooms and through care providers.

Care providers showed positive responses to the information in the pamphlet and felt that it would help them connect patients to local resources.

Screening questions validated by Hager et al. 97% sensitivity and 83% specificity (2010)

Screening poster for the waiting rooms to encourage patients to bring up food insecurity during their visit



# Evaluations and limitations

## Evaluation

- Evaluation of the effectiveness of these interventions can be measured anecdotally by the number of pamphlets that are taken by patients and handed out by clinicians.
- More specific evaluation can be accomplished by reviewing the EHR.

Monitoring three codes related to food insecurity.

- ICD-10 code z65.9: problem relating to unspecified psychosocial circumstance
- ICD-10 code z59.4: lack of adequate food and safe drinking water
- CPT code 99240: Implementation and interpretation of health risk screening instrument

Tracking the number of referrals made to registered dietician and care coordinator

## Anticipated Limitations

- These materials are all written and may not be accessible to all patients who are experiencing food insecurity.
- Food insecurity co-occurs with and is caused by other socioeconomic and health care challenges that are not addressed by these interventions.
- Food insecurity is stigmatized and patients may not feel comfortable bringing their concerns up with a care provider.





# Recommendations for future projects

- This intervention focuses on getting patients to bring up food insecurity with providers. More robust screening needs providers to ask every patient about food insecurity. I have enquired about adding tools to the EHR, which can be done after providers agree that it is a meaningful tool. Future projects should be able to use this project as the groundwork to implement screening questions into the EHR.
- Additionally, this intervention will hopefully make providers more consciences of food insecurity. These interventions provide some resources to providers, but aren't geared around educating them. Future projects could focus on provider education to make follow-up and referral more effective for patients.
- Food insecurity is only one of many social determinants that are not currently screened for routinely. A future project could investigate the utility of more thorough questionnaires to evaluate other socioeconomic difficulties that may be affecting these patients.
  - UVMHC Pediatrics is working on implementing a social determinants screening tool and identifying goals for follow up and referral. Contact their department to see what works for them and how this could be applied to outpatient care.
- Food assistance programs like 3 squares VT are underutilized and have challenging and lengthy applications. A future project could work on generating a document to help walk patients through the application process.
- UVMHC, Colchester Family Practice and CVMC have a partnership with the Vermont Youth Conservation Corps to prescribe CSA shares. A future project could involve reaching out to these groups to see how other primary care offices could get involved.



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# Interview Consent

## INTERVIEW CONSENT FO

Vermont Food Insecurity: Implementing screening tools and interventional assistance at Thomas Chittenden Health Center  
 Quinn Self  
 June 7, 2017

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

Name:                   Katy Davis                  

Name:                   Lindsey Fitzgerald                  

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

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

If you received informed consent, please upload this page as a separate document entitled: “Name of Project/Interview Consent Form”.

If an informed consent was not received, please do not upload this page to ScholarWorks. However, you should include this consent page when submitting your PowerPoint to the Family Medicine Department.