Healthy Living in Washington County Berlin Family Practice COLLEEN MCCARTHY

BRIAN RODRIGUEZ, MD



AHEC Focus Areas: Social Determinants of Health & Medical Practice Transformation

Food insecurity is associated with numerous adverse social and health outcomes and is increasingly considered a critical public health issue (1)

- Nearly 1/3 of Vermonter's experienced food insecurity since the pandemic (2)
- Counties with the highest rates of food insecurity are disproportionally rural (1)
- Washington County has a food insecurity rate of 9.3%, which is greater than the state average (1)
- = 1/3 of food insecure Vermonters reported not eating enough servings of fresh fruits and vegetables (2)
- The majority of food insecure Vermonters are not accessing food assistance programs (2)
- It has been shown that greater per capita direct farm sales lowers mortality, rates of obesity and diabetes in rural communities (3)

Chronic Disease

- Approximately 8.8% of Vermonters have diagnosed Diabetes & 33.6% have pre-diabetes (4)
- Washington County has higher rates of death related to heart disease, diabetes, and stroke than the state averages (5)
- 27% of adults in Washington County are classified as obese, which is higher than the state average (6,7)
- Diabetes and Heart Disease/Stroke are 2 of the 4 diseases that make up 50% of Vermont deaths (8)
- Three behaviors contribute to severity of chronic disease: lack of physical activity, poor nutrition, and tobacco use (11)
- It is well-established that increasing physical activity provides many health benefits and lowers morbidity of chronic disease, however rates of physical activity are lower in rural communities compared to urban communities (9,10)

Need: A cohesive and accessible resource, which provides information on assistance programs for fresh foods, opportunities to stay active, and wellness workshops would make it easier for community members to be aware of opportunities to improve their health and lower disease burden







Non-market (Sharing, bartering) Salvaging (Gleaning, dumpster diving

Public Health Costs & Considerations

Chronic Disease

- > 57% of all deaths in Vermont are related to chronic disease (11)
- > 520 million dollars are spent annually on diagnosed diabetes in Vermont (4)
- > An estimated 2.72 billion dollars was spent on chronic diseases in VT (11)

Food Assistance Programs

- In the last year an estimated 1,750 individuals accessed farm share programs in VT (12)
- In the last year 9,000 transactions were made with Crop Cash assistance (12)
- According to NOFA-VT administrators there is a gap between need & utilization of these benefits (12)
- > Barriers Include:
 - 37% of food insecure do not meet the income guidelines to qualify for benefits (1)
 - Transportation issues especially with increased cost of gas prices (12)
 - Continued concerns for expense of foods & CSA up front payment
 - Time limitations for CSA pick up & farmers market events



Data Source: Center for Disease Control and Prevention Chronic Disease Cost Calculator



Data Source: 2014 Vermont Vital Statistics. Provisional



Community Perspective

Johanna Doren is a Local Food Access Coordinator who specializes in Food Insecurity & Food Systems at NOFA-VT. The goal of this organization is to increase community access to fresh local foods while supporting local farmers. She reports several barriers for community members to both access and utilize benefits such as Farm Share, Crop Cash, and Senior Farm Share:

- Financial Limitations: Up-front payments for CSAs can be prohibitive; however, there are payment plans available. Additionally, for some benefits such as Crop Cash you must first qualify for SNAP benefits, which can limit who can access these programs Transportation: To local farmer's markets, farm stands, and CSA pick up locations can be a challenging barrier for clients
- Time Constraints: Narrow windows for CSA pick ups and farmer's markets may make access challenging for clients with jobs & responsibilities
- Number of Resources: There are many resources available that are fairly similar but have different eligibility criteria and are found in many locations. The shear number of resources and information out there can be overwhelming for clients

Additionally, she believes most clients find this information through community action agencies, area aging agencies, and through their own outreach efforts. It was her belief that not many health care providers know of these services and make referrals for clients. It would be beneficial for health care providers to be aware of these programs and work together to decrease the gap between those in need and those who know how to access and use these benefits

Community Perspective

KATE BEAN IS REGISTERED DIETICIAN WITH CVMC WHO SPECIALIZES IN CLINICAL NUTRITION.

Q: Do you have any knowledge or insight into the prevalence of food insecurity within your patient population?

A: "Patients may have a lack of ability to know how to prepare meals which limits their options. They may have mobility issues, lack of support and limited kitchen options. They may be living in hotels. Food prices have soared and more and more folks are bringing up this concern and how it's "too expensive to eat healthy."

Q: Do you think most eligible patient's are aware of resources such as Crop Cash, 3SquaresVT/SNAP, Senior Farm Share etc? why or why not

A: "Probably not enough. Folks that are already involved with some sort of agency would be made aware but a person on their own is likely unaware."

AMANDA BLANCHARD IS A CERTIFIED INTEGRATIVE NUTRITION HEALTH COACH WHO WORKS WITH CLIENTS ALL OVER THE COUNTRY

Q: Have you found any specific challenges or barriers when addressing client's health concerns?

A: "... There is so much skepticism about what's trendy and what's actually healthy, that we so often don't know what to believe and don't have the time or interest or patience to do our own diligent research to figure out what is healthy for our own individual body and needs. So I think there has been an issue with accessibility to credible information as well as a lot of spread of disinformation.

Q: There is an initiative in VT to create Farmacy Programs, which allows providers to write prescriptions for fresh foods as a form of medicine. Have you heard of this program and how do you feel about this initiative?

A: "I have not but I feel SO GOOD about it. I love the idea of this program so much because not only do I *believe* food is medicine, I KNOW food is medicine. And the standard American diet contains so much processed food that often leads to a lack of proper nutrition and therefore vitamin/mineral deficiencies, etc. Prescribing fresh foods to get people introduced to them and start to feel the powerful positive effects of them on their bodies would be so impactful, and such a healthier, sustainable way to prevent illness rather than just treat it. "

Intervention & Methodology

Intervention:

Create an easy and accessible resource that provides a wealth of information about available local programs and opportunities to help community members understand what is available for them to make healthier choices

Methodology:

- >Identify various Washington County specific resources and assistance programs that:
 - 1. Provide community access to fresh foods & community gardens
 - 2. Provide opportunities to access free or inexpensive means to increase physical activity
 - 3. Provide educational opportunities for health, wellness, and adult skill development

Create a website and synthesize this information into one accessible online resource

- Distribute flyers with website information in the family practice's waiting rooms, exam rooms, and health care provider stations
- Distribute NOFA-VT flyers to CVMC & UVMC colleagues
- Educate providers about the available resources & the website
- Send survey about usefulness of website to providers within Berlin Family Practice & ourside providers
- Provide opportunity for community members to provide feedback and ask questions through the website

Response

According to the survey sent to providers at Berlin Family Practice there is an overwhelming positive response to the website. Though the sample size is very small and not all health care providers have responded to the survey, which puts limitations on the data

- 100% of respondents answered they were likely or very likely to share this resource with their patients
- 100% of respondents stated they found the website useful
- 100% of respondents stated there were resources on the website that they had not heard of prior
- Of health care workers surveyed that practice outside of CVMC 100% said they would find a similar tool useful for their area

Response from mentors on the website have been positive

- They believe the website provides useful information and synthesizes many resources into one place
- Areas improvement include having a website developer work with the resources and integrate it into the CVMC website
- There has been no feedback from other community members or patients at this time

Evaluation of Effectiveness & Limitations

1. Provider response has been positive thus far, with most finding the resource informative, useful, and effective for referring their patients to.

2. Providers outside of Berlin Family Practice that were surveyed all responded that they would find a similar resource helpful

3. It is still too early to assess the effectiveness within the community

- There has been no feedback reported or questions raised directly through the website
- I was unable to discuss the website directly with the patients of Berlin Family Practice to gauge their response to the resource
- Too early to collect data on the utilization of programs highlighted on the website

Recommendations for Future Projects

Website

Work with CVMC & the UVM Health Network to create similar sites for each county. It would be helpful if these sites were directly connected and available on UVM Family Practices' websites

To evaluate effectiveness of this tool

- Assess number of applications, number of clients, and utilization for each program & class before and after the implementation of this tool
- Speak directly with community and patients about the tool and make improvements as needed

Provider Education

> Have community access program coordinators speak with health care providers about programs available, so they can better inform their patients of these options and make recommendations

Farmacy Project

➤ There is an incredible project occuring in various parts of the state that allows health care providers to write fresh produce prescriptions to individuals and families. The program provides local food, nutrition education, and cooking classes as "medicine." It would be great to begin to implement this project in Washington County

References

1. Feeding America. (2021). Overall (all ages) hunger & poverty in Washington County, Vermont: Map the meal gap. Overall (all ages) Hunger & Poverty in the United States. Retrieved August 1, 2022, from https://map.feedingamerica.org/county/2020/overall/vermont/county/washington

2. Niles, M. T., Josephson , A. L., Bertmann , F., Belarmino, E. H., & Neff, R. (2020). COVID-19 and Food Insecurity Impacts: A Follow Up Vermont Study. NFACT.

3. Ahern, M., Brown, C., & Dukas, S. (2011). A national study of the association between food environments and county-level health outcomes. *The Journal of Rural Health*, 27(4), 367–379. https://doi.org/10.1111/j.1748-0361.2011.00378.x

4. *The burden of diabetes in Vermont*. American Diabetes Association . (2021, October). Retrieved August 1, 2022, from https://diabetes.org/sites/default/files/2021-11/ADV_2021_State_Fact_sheets_Vermont_rev.pdf

5. Vermont County Profiles for Medical and Health Sciences Students/Residents. AHEC, Larner College of Medicine at The University of Vermont. (n.d.). Retrieved August 1, 2022, from https://www.med.uvm.edu/ahec/home

6. Centers for Disease Control and Prevention. (2022, June 3). Vermont State Nutrition, Physical activity, Obesity Profile. Centers for Disease Control and Prevention. Retrieved August 1, 2022, from https://www.cdc.gov/nccdphp/dnpao/index.html

7. Washington County, Vermont Rankings . County Health Rankings & Roadmaps. (n.d.). Retrieved August 1, 2022, from https://www.countyhealthrankings.org/app/vermont/2022/rankings/washington/county/outcomes/overall/snapshot

8. Diabetes data. Vermont Department of Health. (2019, August 7). Retrieved July 22, 2022, from https://www.healthvermont.gov/health-statistics-vital-records/surveillance-reporting-topic/diabetes

9. Brownson, R. C., Housemann, R. A., Brown, D. R., Jackson-Thompson, J., King, A. C., Malone, B. R., & Sallis, J. F. (2000, April 1). *Promoting physical activity in rural communities*. American Journal of Preventive Medicine. Retrieved August 2, 2022, from https://www.ajpmonline.org/article/S0749-3797(99)00165-8/fulltext

10. Gilbert, A. S., Duncan, D. D., Beck, A. M., Eyler, A. A., & Brownson, R. C. (2019, June 23). A qualitative study identifying barriers and facilitators of physical activity in rural communities. Journal of Environmental and Public Health. Retrieved August 2, 2022, from https://www.hindawi.com/journals/jeph/2019/7298692/#results

11. Chronic Disease in Vermon. Vermont Department of Health. (2016, August 1). Retrieved August 9, 2022, from https://www.healthvermont.gov

12. Doren, J. (2022, August 3). NOFA-VT. personal.

13. Farmacy project. Vermont Farmers Food Center. (n.d.). Retrieved August 15, 2022, from https://www.vermontfarmersfoodcenter.org/farmacy_project

14. American Heart Association recommendations for physical activity in adults and kids. www.heart.org. (2022, July 28). Retrieved August 1, 2022, from https://www.heart.org/en/healthy-living/fitness/fitness-basics/aha-recs-for-physical-activity-in-adults

Consent forms

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/they has explained the nature and purpose of this project. The interviewee affirms that he/she/they has consented to this interview.

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/they has explained the nature and purpose of this project. The interviewee affirms that he/she/they has consented to this interview.

Yes ____x___

Name (printed): Amanda Blanchard

Signature:

Yes ____x__/

Name (printed): ___Johanna Doren______

Signature: Johanna Doren

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/they has explained the nature and purpose of this project. The interviewee affirms that he/she/they has consented to this interview.

Yes X_/

Name (printed):	Kate Bean_	 Signature:	hopefully my email stamp
counts as my signature			