

University of Vermont

UVM ScholarWorks

Family Medicine Clerkship Student Projects

Family Medicine Community

2022

Barriers to Exercise: Fitness Made Simple

John A. Steinharter MS

Follow this and additional works at: <https://scholarworks.uvm.edu/fmclerk>



Part of the [Medical Education Commons](#), and the [Primary Care Commons](#)

Recommended Citation

Steinharter, John A. MS, "Barriers to Exercise: Fitness Made Simple" (2022). *Family Medicine Clerkship Student Projects*. 829.

<https://scholarworks.uvm.edu/fmclerk/829>

This Book is brought to you for free and open access by the Family Medicine Community at UVM ScholarWorks. It has been accepted for inclusion in Family Medicine Clerkship Student Projects by an authorized administrator of UVM ScholarWorks. For more information, please contact schwks@uvm.edu.

Barriers to Exercise: Fitness Made Simple

Family Medicine Clerkship Student Projects

Jack Steinharter; September 2022

Clinical Site: CVMC Berlin

Site mentor: Brian Rodriguez, MD



The University of Vermont
LARNER COLLEGE OF MEDICINE

Problem Identification & Description of Need

- Adult obesity and diabetes prevalence **increased** in Washington County in 2019¹
- The CDC Recommends 150 minutes of exercise and 2 days of strength training per week for all Adults (18+) including Adults with chronic conditions²
- 3 – 4 – 50 initiative in Vermont³
- Access to exercise was defined as a wellness initiative in the 2022 CVMC Community Health Needs Assessment¹

Public health cost & unique cost considerations in host community

- Rates of obesity and diabetes continue to increase in Washington County
 - 1 in 4 residents currently have obesity¹
- 20% of Washington County and Vermont adults reported never exercising in the past 30 days¹
- Factors affecting access to exercise in Washington County:
 - In the 2010 Census, Vermont was the second most rural state in the country, with 61.1% rural population, right behind Maine at 61.3%⁴
 - Vermont has a long and cold winter⁵
- Obesity costs the US health care system nearly **\$173 billion a year.**⁶

Community Perspective on Issue and Support for Project

- Physicians and patient's report that access to exercise opportunities in Washington County are significantly more difficult in the Winter⁷
- Physicians report appointment time constraints limit exercise education
- Community Health Team (CHT) employees report that an educational pamphlet addressing access to exercise opportunities would be immensely helpful
- Literature review of prior interventions on exercise opportunities at CVMC yielded minimal results, physicians and CHT both agree a pamphlet would be a direct solution

Intervention and Methodology

- A pamphlet was designed to address access to exercise opportunities in Washington County to be distributed to patients at CVMC
- Topics addressed in the pamphlet:
 - Access in the winter months
 - Access for patients with chronic/debilitating pain and disabilities
 - Group-based exercise
 - Data driven motivational components

Responses to the Intervention

- Pamphlet was created and well received by patient's, community improvement workers, CHT, and doctors
 - One patient who reviewed the pamphlet reported that they thought it was very helpful but declined from being directly quoted
 - "I have 42 fulltime years in Parks and Recreation and am not a Doctor, but this is great for the people of Washington county. I sometimes think that people are not aware of opportunities that lie within their own community that are many times low cost / no cost and within walking distance of their homes. Caring for our health has to be done holistically and there is something to be said for engaging in activities that support the mind and mental health as well as physically." – Stephanie Quaranta, Assistant Director Buildings & Community Services in Barre, VT
 - "This will be a wonderful addition to patient care here. I often spend countless hours with patient's trying to educate them on the local resources, this directly addresses that." – Kathryn Bean, RD, CDE, CWC (CHT at CVMC)
 - "Access to exercise, especially in the Winter months, is a huge issue. I believe that a patient handout addressing this would be helpful." – Arturo Guajardo, MD (Family Care Physician at CVMC)

Evaluation of the effectiveness and limitations

- Effectiveness:
 - Reduced burden on the patient to find resources for exercise
 - Reduced burden on the providers/CHT members to find resources for exercise
 - Low intensity exercise education/information for patients with equipment, transportation, or physical limitations (e.g. chronic pain, wheel chair confinement, etc.)
 - Access to water based activities for disabled participants
 - Group based activities
 - (Hopefully) Increased modification of lifestyle and increased progress of addressing chronic health outcomes
- Limitations
 - Transportation still poses the greatest obstacle that was address only by providing at home workouts
 - This is a one time handout that will be distributed and there will be no follow up or data collection to determine the actual effectiveness

Recommendations for future interventions/projects

- Address transportation issues for patients who wish to exercise outside of their residence
- The State Parks have had Doctor's give out a "prescription" that allows for a free day pass to a state park and we could do that too for Barre summer swimming pool. It introduces people to local resources.
- Distribute the pamphlet at the beginning of the clerkship rotation and consent patient's for follow up to determine if they find it useful
 - Contact the author of this project if you would like a copy of the pamphlet to carry this project on in the future

Citations

- ¹*Community Health Needs Assessment*. Central Vermont Medical Center, 21 Sept. 2022, <https://www.cvmc.org/about-cvmc/community/community-health-needs-assessment>.
- ²"Physical Activity Recommendations for Different Age Groups." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 29 July 2021, <https://www.cdc.gov/physicalactivity/basics/age-chart.html>.
- ³3-4-50: *Prevent Chronic Disease*. Vermont Department of Health, <https://www.healthvermont.gov/3-4-50>.
- ⁴"Story Map Series." *Mtgis*, US Gov Census Data, <https://mtgis-portal.geo.census.gov/arcgis/apps/MapSeries/index.html?appid=49cd4bc9c8eb444ab51218c1d5001ef6>.
- ⁵"Vermont Climate." *The University of Vermont*, CLIMATOGRAPHY OF THE UNITED STATES No. 60., https://www.uvm.edu/~vtstclim/climate_vermont.html.
- ⁶"Health and Economic Costs of Chronic Diseases." *Centers for Disease Control and Prevention*, Centers for Disease Control and Prevention, 8 Sept. 2022, <https://www.cdc.gov/chronicdisease/about/costs/index.htm#:~:text=Obesity%20costs%20the%20US%20health%20care%20system%20nearly%20%24173%20billion%20a%20year>.
- ⁷Taylor, Joshua Bruce, "Barriers to Exercise: Patients with Diabetes in Washington County" (2020). *Family Medicine Clerkship Student Projects*. 564. <https://scholarworks.uvm.edu/fmclerk/564>



Interview Consent Form

- *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.*
- Consented
 - Name: Kathryn Bean, RD, CDE, CWC
 - Name: Arturo Guajardo, MD
 - Name: Stephanie Quaranta



The University of Vermont

LARNER COLLEGE OF MEDICINE