

2015

Healthier Living: Diabetes Management

Brandon Childs
University of Vermont

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



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

Recommended Citation

Childs, Brandon, "Healthier Living: Diabetes Management" (2015). *Family Medicine Clerkship Student Projects*. 46.
<https://scholarworks.uvm.edu/fmclerk/46>

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

- Vermont
 - More than 55,000 Vermonters suffer from diabetes.
 - 6th leading cause of death in the state.
- South Burlington
 - Currently 705 patients in the practice with a diagnosis of diabetes.
 - More than 100 of these patients are living with uncontrolled diabetes (elevated HbA1c > 8%) and have not yet obtained the necessary education to manage their chronic disease.
 - Physicians must manage all patients diabetes goals and expectations in 15-30 minute appointments alone.
 - Physicians may refer patients to the Community Health Team for further diabetes education.

Community Needs



- **Community Health Team** and the Healthier Living Workshops- UVMCC
 - The CHT is a multi-disciplinary team consisting of a nurse, health educator, community resource social worker, behavioral health social worker, and a certified dietician.
 - The CHT helps patients with nutrition education, diabetes education, exercise advise, medication management, connecting to community and financial resources, tobacco cessation and Healthier Living Workshops.
- Problems/need
 - Patients are frequently directed to the CHT by physicians but referrals to the Healthier Living Workshops are rarely used. This may be because it is the last option available on the referral form and many providers may not understand what it is all about.
 - The CHT meets with patients one-on-one to teach and counsel them about their disease, but they also infrequently refer patients to the Healthier Living Workshops.

Problem

- US- Total estimated economic cost of diabetes in 2012- **\$245 Billion dollars.**
 - 41% increase since 2007.
- People with diagnosed diabetes incur on average about **\$13,700 dollars** a year in medical expenditures.

- Vermont- Total cost of diabetes exceeds **\$347 Million dollars** per year.



Public Health Cost- Diabetes

- **[Name Withheld], MD-** South Burlington Family Practice
 - “The Healthier Living Workshop is a service by the community health team that is seriously underused. There have only been about 10 participants from this practice in these workshops over the last several years.”
 - “Teaching patients diabetes management one-on-one is very costly to the health care system and we should be teaching more in groups.”
 - Many physicians do not refer patients to the healthy living workshops simply because it is not readily found within PRISM.
- **[Name Withheld]-** Community Health Improvement, University of Vermont Health Network
 - The Community Health Team and the Healthy Living Workshops are severely underutilized throughout the primary care system.
 - “You may choose a time and a place, and the community health team will be there to teach the diabetes management workshop.”
- **Patient** living with diabetes-
 - “This sounds like a great resource for patients to have. I would love to participate in a program like this as I could always use new ideas and concepts to better manage my condition.”
- **[Name Withheld]-** PRISM Ambulatory Manager
 - “PRISM has the capability to send personalized letters to specific patients on the diabetes registry through a bulk communication program. This program can be created and then easily adapted to other practice locations within the University of Vermont Medical Center.”

Community Perspective & Support for the Project

- Chronic Disease Self-Management Program (CDSMP)
 - Work shop developed by Stanford University in 1990's
 - Designed to enhance regular treatment and disease-specific education such as Better Breathers, cardiac rehabilitation, or diabetes instruction.
- Results
 - Patients demonstrated significant improvements in exercise, cognitive symptom management, communication, self-reported general health, health distress, fatigue, disability, and social/role activities limitations.
 - Depression, symptoms of hypoglycemia, communication with physicians, patient activation, self-efficacy, healthy eating, and reading food labels were all improved during the study period.
 - CDSMP has been shown to be an appropriate program for lowering HbA1c among those with HbA1c above 7% and for improving health status for people with diabetes, regardless of their A1c.
- Workshop Details
 - Once a week for 2 ½ hours
 - Total of 6 weeks
 - Patients learn practical tools to manage their own health and to improve their quality of life while living with diabetes.

Methodology





- Identification
 - Potential participants in the Healthy Living Workshop for diabetes management from the South Burlington Family Practice Diabetes Registry.
 - Registry contains names and data of patients with a current diabetes diagnosis.
- Personalized invitation
 - Send invitation by mail to attend the workshop to all patients on registry with $HbA1c \geq 8\%$.
- Workshop
 - Minimum of 10 patients needed for one class.
 - Class is capped at 20 patients.
- Protocol
 - Create for future use and also for other primary care practices within the University of Vermont Health Network to model if successful participation is achieved.
 - This will be done with the help of the PRISM technology team.

Intervention

- Patient Communication
 - A total of 130+ personalized letters and fliers explaining the workshop details were sent out to patients on the diabetes registry.
- Attendance
 - [Name Withheld] is currently managing the response to letters and will organize a time that will work for all patients who are interested in attending.
- Future Protocol
 - Details sent to [Name Withheld] at PRISM who is currently assigning a team to develop this protocol for second round of letters and for future use.

Results

Effectiveness

- Resources-
 - Minimal use of time and paper resources by clinic staff.
- Outcome-
 - Not enough time to fully assess response and outcomes to letters sent.
- Difficulty-
 - Very simple task to accomplish once letter and flier were completed.
 - Future- Will be much easier with completed PRISM protocol to send out personalized letters to clinic patients.

Limitations

- Time-
 - Did not allow enough time to follow up with participation in the workshop
 - Difficult to complete this project in short amount of time due to the back and forth communication needed between several parties.
- Technology-
 - Limited by current PRISM upgrade time limit, and was forced to send letters out directly from the practice.
- Letters-
 - May not have sent out enough letters in first round in order to fill one class.

1. Follow up with outcomes of this project (response to letter and attendance at the workshop).
2. Expand project to entire diabetes registry in the practice.
3. Utilize simple protocol creation in PRISM for next round of letters.
4. Invite other primary care practices in the area and in Vermont to adapt this method.
5. Branch out the protocol to include other disease education courses such as hypertension, etc...
6. Providers could personally review their patient list in order to decide who may be more likely to accept an invitation to participate.

Recommendations for Future Interventions

- The Cost of Diabetes. Retrieved January 12, 2015, from <http://www.diabetes.org/advocacy/news-events/cost-of-diabetes.html>
- Vermont Causes of Death by Age and Gender. Retrieved January 12, 2015, from <http://www.worldlifeexpectancy.com/vermont-cause-of-death-by-age-and-gender>
- Diabetes Prevention and Control. Retrieved January 12, 2015, from <http://healthvermont.gov/prevent/diabetes/diabetes.aspx>
- Vermont Burden of Chronic Diseases. Retrieved January 12, 2015, from <http://www.cdc.gov/chronicdisease/states/pdf/vermont.pdf>
- Prevalence of Diabetes in Vermont. Retrieved January 12, 2015, from <http://www.apma.org/files/FileDownloads/Vermont.pdf>
- Chronic Disease Self-Management Program(Better Choices, Better Health® Workshop). Retrieved January 12, 2015, from <http://patienteducation.stanford.edu/programs/cdsmp.html>
- Lorig, K., Ritter, P. L., Villa, F. J., & Armas, J. (2009). Community-Based Peer-Led Diabetes Self-management A Randomized Trial. *The Diabetes Educator*, 35(4), 641-651.
- Lorig, K., Ritter, P. L., Ory, M. G., & Whitelaw, N. (2013). Effectiveness of a Generic Chronic Disease Self-Management Program for People With Type 2 Diabetes A Translation Study. *The Diabetes Educator*, 39(5), 655-663.
- Community Health Team. Retrieved January 15, 2015, from <https://www.uvmhealth.org/medcenter/Pages/Departments-and-Programs/Community-Health-Team.aspx>

References