

2015

# Obesity Intervention and Prevention

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## Recommended Citation

Colgan, Bridget Ann, "Obesity Intervention and Prevention" (2015). *Family Medicine Clerkship Student Projects*. 76.  
<https://scholarworks.uvm.edu/fmclerk/76>

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# Obesity Intervention and Prevention

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MAY-JUNE 2015

BERLIN, VT

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# Prevalence of Obesity with Comorbid Disease at Berlin Family Practice<sup>1</sup>

- ▶ Obesity has become an increasingly prevalent health concern throughout the United States and this is evident in the patient population at Berlin Family Practice.
- ▶ 41% of patients seen in the past 2 years by a Berlin Family Practice Physician have a BMI greater than or equal to 30, classifying them as obese.<sup>1</sup>
- ▶ Obesity leads to many associated disorders and reduction in overall health and wellness. The health risks associated with obesity include hypertension, diabetes, heart disease, high cholesterol, and stroke, among others.<sup>2</sup>
- ▶ Of the obese patients seen at Berlin Family Practice in the past two years, 46% had a diagnosis of HTN, 20% diabetes, 17% heart disease, 6% an LDL level > 190, and 2% had a history of stroke.<sup>1</sup>

## Prevalence of Obesity in the Surrounding Region of Berlin, Vermont

- ▶ In the Metropolitan region of Barre, Vermont, which includes the town of Berlin, the population is 35.4% overweight, 21.8% obese, and 16.1% no physical activity.<sup>3</sup>
- ▶ In Washington County, the obesity rate is 21.5%<sup>4</sup>
- ▶ In the state of Vermont, reported dietary behaviors reveal 61.1% of adults do not consume fruit at the recommended level of 2 or more times per day; 69.7% of adults do not consume vegetables at the recommended level of 3 or more times per day.<sup>5</sup>

## Total Annual Cost of Obesity for the State of Vermont, Employers, and Private Citizens (in 2010 dollars)<sup>6</sup>

Factors attributable to the Cost of Obesity	Total Costs (in Millions)
Medicare	\$43.3
Medicaid (Vermont's share)	\$12.8
Private Insurance	\$31.4
Absenteeism & Presenteeism	\$188
Short Term Disability	\$27.9
Disability Pension Insurance	\$5.5
Premature Mortality	\$294.9
Life Insurance	\$9.7
Gasoline Expenditure	\$1.7
<b>Estimated Total Costs</b>	<b>\$615.20</b>

# Berlin Community's Perspective on Obesity and the Necessity of Patient Centered Interventions

- ▶ [Name Withheld], RDN, CDE
  - ▶ Obesity is related to so many chronic diseases, it has taken so long for it to be recognized as a disease in itself.
  - ▶ There is a huge prevalence in the community. We as providers all recognize and see that. It is definitely on our radar.
  - ▶ We've been treating obesity for decades and now there are medications coming out to treat obesity. It is not the magic bullet. The behavior issues must be addressed.
  - ▶ The patient has to be invested, patient input into making changes is essential to effectiveness. Emphasize being *realistic about goal setting* and specifying, "What are you going to do to make that change?"
  - ▶ Goals must be specific and measurable:
    - ▶ What are you going to do?
    - ▶ When are you going to do it?
    - ▶ How much are you going to do?
    - ▶ How often?

# Berlin Community's Perspective on Obesity and the Necessity of Patient Centered Interventions

- ▶ [Name Withheld], MD
  - ▶ Obesity is such a prevalent problem, it is important to have tools to help patients overcome lifestyle problems that are affecting their health, especially tools that engage and involve the patient, an approach that is more effective than a dictum from the doctor.
- ▶ [Name Withheld], Manager, Physical Activity and Nutrition Program, Vermont Department of Health
  - ▶ Obesity issues are very complex for patients and therefore for physicians and other medical providers. There is a lot of research going on around many of the issues surrounding obesity (genetics, mental health, nutrition/physical activity, motivation, etc.) but no definite answers at this point.
  - ▶ We do know motivational interviewing is very important to determine readiness on the patient's part to try to make changes. We also know these conversations should happen with ALL patients, regardless of weight, so that healthy weight patients have the opportunity to discuss any concerns and be praised for doing the right things to maintain a healthy weight.

# Intervention and Methodology

- ▶ VT Department of Health in collaboration with the Vermont AHEC Network and University of Vermont College of Medicine developed a Toolkit for Promoting Healthier Weight in Adult Primary Care in 2007, including a Weight and Health Profile worksheet. Since 2007, there have been no updates to the toolkit or profile and there has not been an opportunity for the Department of Health to receive feedback from providers on the effectiveness of this resource.
- ▶ Practitioners at Berlin Family Practice are open to the use of such a tool and believe in the value of actively involving the patient in goal setting and behavior change. The greatest barrier in implementing the use of the Weight and Health Profile is incorporating it into the workflow of a patient visit. The goal of this project, therefore, was to survey practitioners at Berlin Family Practice and gain feedback on what updates can be made to the profile including format (electronic/paper /mobile app/other interactive electronic version), how it can be used, how much it can be used, and what else practitioners would like to see included.
- ▶ In addition to surveying practitioners and discussing implementation of the profile at Berlin Family Practice, the profile was administered to selected patients with a BMI  $\geq 30$  on a trial basis during their office visit. During the visit, the patient and medical student discussed goals for physical activity, nutrition, and weight loss in association with treatment of any comorbid conditions. Following administration and discussion of the Weight and Health profile, patients completed a survey to assess the perceived benefit of and potential changes that could be made to the profile from the patient's perspective.



# Proposals for Incorporating the Weight and Health Profile Into Patient Visits

- ▶ Two separate proposals for incorporating the Weight and Health Profile into workflow at Berlin Family Practice were presented for physicians to discuss and come to a consensus on before implementing the use of the profile regularly into patient visits.
- ▶ Proposal 1: The Weight and Health profile will be administered by CCA's to all patients with a BMI  $\geq 30$ . CCA's will complete height, weight, and BMI with the patient. The physician will then complete the remainder of the worksheet with the patient, including health conditions and risk factors, readiness, and goals for physical activity, nutrition, and weight loss. The patient will present the original to the front desk upon checking out and a copy will be retained in their patient record for review at the next visit, the patient will take the original home.
- ▶ Proposal 2: The Weight and Health Profile will be kept in the file drawer in each exam room. Physicians will determine for which patients administering the Weight and Health Profile will be beneficial and will administer the profile to those patients during the visit. As in option 1, the patient will present the original to the front desk upon checking out and a copy will be retained in their patient record for review at the next visit, the patient will take the original home.

# Survey Results from Berlin Providers

- ▶ 100% of providers felt the Weight and Health Profile would be beneficial towards inciting change in patients to live healthier lifestyles.
- ▶ Physicians would prefer a CCA administer the Weight and Health profile and the physician would review and discuss it with the patient during the visit.
- ▶ Physicians' preferred format for the Weight and Health profile is an electronic template to be made available through the electronic medical record system, PRISM.
- ▶ Physicians would consider incorporating the Weight and Health profile automatically to all patients who have a BMI  $\geq 30$

# Survey Results from Berlin Patients

- ▶ In surveying patients from Berlin Family practice, 100% of patients felt the Weight and Health profile would be beneficial towards inciting change in themselves to live a healthier lifestyle including healthier eating, weight loss, and increased activity.
- ▶ Patients believed a physician discussing the Weight and Health Profile with them would be helpful in achieving lifestyle changes and improvements in health.
- ▶ Patients stated they would appreciate the physician incorporating the tool into their visits. One patient stated they would want it to be administered depending on the reason for the visit; they would not want their current weight to always be the focus of every visit.
- ▶ Patients either felt physicians should personally determine for which patients the Weight and Health Profile would be beneficial, or that it be presented as an option for the patient to decide if they would like it incorporated into the visit.

# Evaluation of Effectiveness

- ▶ In order to evaluate the effectiveness of the Weight and Health Profile, physicians at Berlin Family Practice will implement this tool into their practice for a designated trial period. Following the trial period, practitioners will have another opportunity to submit feedback regarding requested updates and changes to the Weight and Health Profile.
- ▶ Patient feedback will continue to be obtained through a follow-up survey at their next visit to evaluate if they felt the toolkit helped them achieve their goals and what additional changes they would recommend.
- ▶ In addition, quantitative data of reduction in patients' BMI and markers of comorbid diseases (e.g., blood pressure, blood sugars, cholesterol) can be used to evaluate whether or not the use of the Weight and Health Profile is contributing to improvement in patients' health and wellness.

# Limitations

- ▶ Limitations of this project include:
- ▶ The amount of time providers have during patient visits to incorporate the Weight and Health Profile. There is limited time at each visit; however, reducing obesity rates can be time saving in the future by preventing further health complications related to obesity.
- ▶ From the brief period of time the Weight and Health Profile has been administered, it is difficult to determine its effectiveness. Further implementation and evaluation is required to determine how helpful this tool is for discussing nutrition and exercise goals with patients.
- ▶ Administrative approval is needed for CCA's to distribute the profile automatically to patients based on BMI criteria. Berlin Family Practice is willing to present the Weight and Health Profile to administration after the trial period if it appears to be a useful tool for patients.
- ▶ Limited funding and staff at the VT Department of Health to create an updated version of the Weight and Health Profile. Although the VT Department of Health wants to update the profile, at this time there is not funding or staff in place. Having feedback from physicians on its effectiveness and the need for such a tool will hopefully gather support for increased funding and staff resources.

# Recommendations for Future Interventions/Projects

- ▶ Following the trial period of implementing the Weight and Health Profile at Berlin Family Practice, re-evaluate its effectiveness. This can be done by obtaining data of changes in patients' BMI, blood pressure, cholesterol, blood sugar, etc., as well as surveying both patients and physicians for their feedback and input.
- ▶ Students from the University of Vermont can work with Vermont Department of Health to update the toolkit and create an electronic version.
- ▶ The Additional Resources page of the toolkit can be customized to individual practices and regions of Vermont to provide patients with the most helpful local resources available.

# References

1. Jeffords Institute for Quality and Operational Effectiveness obtained data from Berlin Family Practice electronic records based on BMI  $\geq 30$  and diagnosis codes for hypertension, diabetes, stroke, heart disease, and LDL  $> 190$ . Data obtained with the assistance of Deirdre LaFrance and Mike Nix.
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