



mHealth L.A.B.S.
LIFESTYLE AFTER BARIATRIC SURGERY

Preliminary EMR Chart Review of an Appalachian Bariatric Surgery Patient Population

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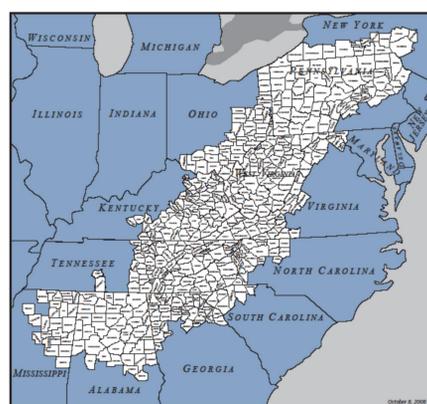
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Abstract

A large void in research is found among bariatric surgery patients in the Appalachia region of the United States. The population within the Appalachian region is widely known for poor health including obesity, diabetes, and even depression. Further, these health issues are also largely found among morbidly obese individual's whom are seeking bariatric surgery as a treatment. Due to these occurrences, work that encompasses all of these co-morbidities needs to be accomplished among this population, specifically in this Appalachian region. Research collaborations have been conceived among various researchers to form a multidisciplinary, team science collaboration to design a multi-faceted study that includes medicine, nutrition, public health, exercise physiology, psychology and surgery. This team of researchers developed an Electronic Medical Record (EMR) review of West Virginia University Medicine bariatric surgery patients charts from October 2013-December 2016. Furthermore, a follow-up survey will be sent to patients for repeat measures. Measures to be captured include health history questionnaire, nutritional questionnaire, psychological screening tools as well as lifestyle behaviors after surgery. A follow-up phone call will be performed by Registered Dietitians to obtain information about the patients' current diet through a multi-pass, 24-hour dietary recall. This 24-hour recall data will inform researchers of changes in dietary habits and to complete a Healthy Eating Index score on each participant for a population score. Preliminary data collection of these patients will inform nutritional, psychological and health behaviors and outcomes from before and after surgery and will be utilized in the formation of a prospective study.

Background

Health issues in the Appalachian region are more prominent than other areas of the United States. Issues such as diabetes, depression, and especially obesity. Specifically, morbid obesity plays a large role with influencing other comorbidities. Little work has been done in the Appalachian bariatric population. Due to the large realm of comorbidities that are associated with obesity, the Appalachian region is a prime area for research among this population.



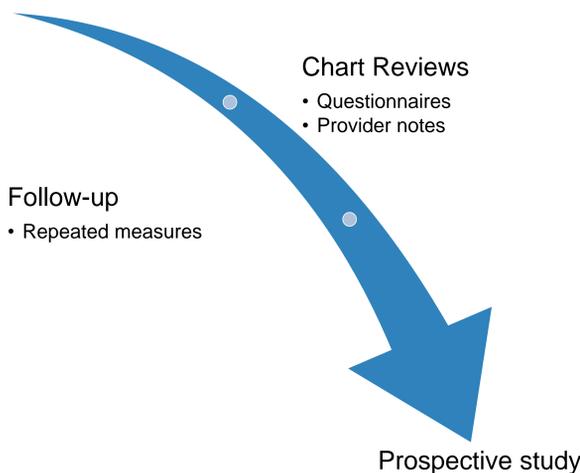
Objectives

- Research is lacking in the Appalachian region amongst bariatric surgery patients
- Preliminary EMR data will inform a future study on a lifestyle behavior change intervention among bariatric surgery patients in this Appalachian area

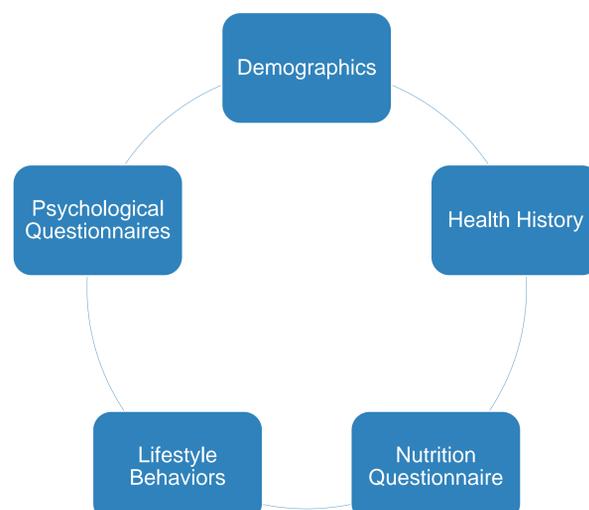
Methods

Researcher Meetings

- EMR training
- Medical student training

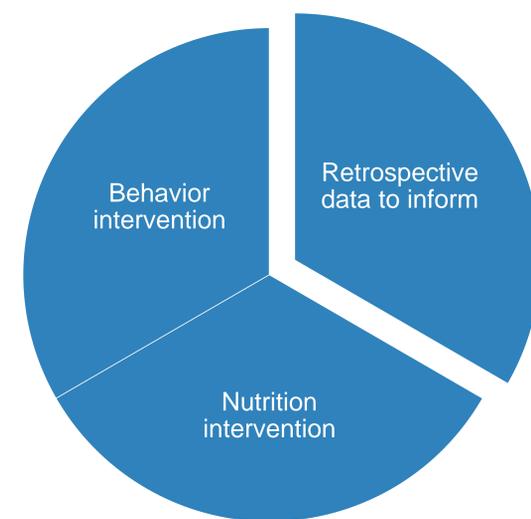


- Over 20 researchers and medical professionals at WVU are collaborating to complete a multi-disciplinary research intervention to determine nutritional behaviors, lifestyle behaviors, psychological determinants, and health history to define a population of individuals with health problems known to be worse than most of the surrounding United States
- Researchers were trained on data extraction from Electronic Medical Records
- All pertinent health information and behaviors entered into a patients medical chart will be entered into a secure survey for data analysis
- Patient population: N=673
 - Data points include:
 - Demographics, nutrition questionnaire, health history, psychological questionnaires (Beck's Anxiety Inventory, Beck's Depression Inventory, AUDIT-C, Gromally Binge Eating, Three Factor Eating, and Brief COPE), and lifestyle behaviors.
- Follow-up surveys will be sent to post-surgery patients willing to complete
 - 24-hour Dietary Recall completed via phone by Registered Dietitians
- Follow-up surveys will indicate behavioral changes from pre-surgery to post



Prospective Study

Data from the retrospective review of bariatric patients at WVU Hospital Bariatric Clinic will be utilized in analyses to inform a prospective study to be based around lifestyle and nutrition behaviors



Collaborations

Researchers from West Virginia University and WVU Hospitals WVU Medicine are in collaboration for the completion of this project.

Areas of disciplines include:

- Davis College of Agriculture, Natural Resources, and Design
- WVU School of Medicine Exercise Physiology
- WVU Hospital Bariatric Surgery Clinic
- WVU Medicine Chestnut Ridge Center



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