

GE-NMF PRIMARY CARE LEADERSHIP PROGRAM



An Adult Plan for a Healthy Weight: A Clinic Based Intervention for Patient Weight Loss

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Introduction

- Misperception
 - Recognition
- Patient intervention



Background

- In June 2013, the American Medical Association voted to label obesity as a “**disease**”¹
- According to the Centers for Disease Control and Prevention, over **33% of adults** and over **15% of children** are obese in the United States²
- “Global Epidemic”
 - Of the 7 billion people living on Earth, there are currently **1.7 billion adults** over the age of 20 who are **overweight**.
 - Of these individuals, **500 million are considered obese**

1. AMA Adopts New Policies on Second Day of Voting at Annual Meeting." *American Medical Association*. N.p., 18 June 2013. Web. 06 Aug. 2013. <<http://www.ama-assn.org/>>.
2. "Adult Obesity Facts." *Centers for Disease Control and Prevention*. Centers for Disease Control and Prevention, 13 Aug. 2012. Web. 06 Aug. 2013. <<http://www.cdc.gov/>>.
3. "Obesity and Overweight: Key Facts." *WHO*. N.p., 13 Mar. 2013. Web. 06 Aug. 2013. <<http://www.who.int/en/>>.

So why do we care about Obesity?

- Increase in **mortality**.
- Increase risk of developing:
 - hypertension
 - dyslipidemia
 - gastrointestinal disease
 - diabetes mellitus
 - cardiovascular disease
 - sleep apnea
 - cancer
 - many others....
- In the United States, it is estimated that over **\$190 billion** was spend on obesity related health care in 2005₄
- The cost of healthcare for an individual with obesity can cost anywhere from **\$1429 to \$2, 741** above the average cost per person per year₄₋₅

4. Cawley J, Meyerhoefer C. The medical care costs of obesity: an instrumental variables approach. *J Health Econ*. 2012; 31:219-30.

5. Finkelstein EA, Trogon JG, Cohen JW, Dietz W. Annual medical spending attributable to obesity: payer- and service-specific estimates. *Health Aff (Millwood)*. 2009; 28:w822-31



Methodology

- Patient Selection
 - BMI of 30 or above
 - Selected from:
 - Matthew Walker Internal Medicine and Family Medicine Clinic
 - United Health Services Health Screening at Parkwood and McFerrin Community Centers
- Completion of “An Adult Plan for a Healthy Weight”
 - **Collaboration** between student and patient
 - Healthy goal weights
 - Reasonable nutritional and physical activity goals
- Follow-up
 - Via phone or in clinic if returning for other reasons
 - **Weekly** until end of 5th week of externship

Adult Plan for a Healthy Weight

Name: _____ Date: _____

Current Weight: _____ Current BMI: _____ Contact Number: _____

What is BMI: Body Mass Index (BMI) is a measure of body fat, and is based on your weight and height. This is an estimate of your risk for certain diseases

| | | | | |
|---------------------------|-----------------------------|-------------------------|------------------|--------------------------------|
| Below 18.5 Underweight | 18.5-24.9 Healthy Weight | 25.0-29.9 Overweight | 30-39.9 Obese | 40 and Above Morbidly Obese |
|---------------------------|-----------------------------|-------------------------|------------------|--------------------------------|

My Goal Weight: _____, I will work to reach my goal by: ___/___/___ (date).

A **5-10% decrease** in weight can have many positive effects on my health. Achieving weight loss and increasing my physical activity could help me manage certain health problems:

- High Cholesterol
- Heart Disease
- Depression
- High Blood Pressure
- Diabetes
- Asthma/COPD
- Sleep Apnea
- Arthritis
- Other: _____



My Nutrition Goals:

- Choose whole grain foods: brown rice, oatmeal, bran cereal, whole grain breads and pastas
- Choose lean protein: beans, fish, chicken, turkey, eggs, pork and nuts
- Eat fresh, frozen or canned fruits and vegetables. Aim for 5-9 servings a day
- Use the Plate Method: fill $\frac{1}{2}$ plate with fruits and vegetables, $\frac{1}{4}$ with whole grain, $\frac{1}{4}$ with lean protein
- Choose low-fat or nonfat dairy: low-fat milk, low-fat yogurt and low-fat cottage cheese
- Limit the use of added fats. Such as salad dressing, mayonnaise, margarine, butter and oil.
- Keep track of my daily intake using a food journal
- Plan meals ahead of time, including meals at home and at work
- Avoid eating fast food
- Eat more meals at home, instead of eating out. If I do eat out, I will bring home half the entrée
- Other: _____

My Physical Activity Goals:

- Walk, bike or take bus whenever possible, especially trips that are less than a mile
- Strengthen my muscles, lift weights, practice yoga or use my body weight for resistance
- Join a recreation center or gym
- Enjoy nature and outdoor activities with friends and family
- Find a workout partner to hold me responsible for my physical activity goals
- Take the stairs whenever possible
- Use a pedometer to track my steps. Goal to walk 8,000-10,000 steps a day.
- Take daily walks
- Other: _____

Online Resources:

Nutrition

- www.cdc.gov/healthyweight/healthy_eating
- www.choosemyplate.gov
- www.fruitsandveggiesmorematters.org
- www.health.gov/dietaryguidelines

Physical Activity

- www.cdc.gov/healthyweight/physical_activity
- www.naturefind.com
- www.choosemyplate.gov/physical-activity
- www.presidentschallenge.org



Results-Patient Population

- **15 patients** filled out the “An Adult Plan for a Healthy Weight” form
 - 12 patients from MWCHC internal medicine/family medicine clinic
 - 3 patients from United Health Services Health Screenings at McFerrin and Parkwood Community Centers.
- The average BMI of the patients was **41.53**
 - the highest BMI: 53
 - the lowest BMI being 31
- The most common health problems patients reported were **hypertension** and **diabetes**
- The two most commonly selected physical activity goals:
 - “find a workout partner to hold me responsible for my physical activity goals”
 - “take daily walks.”
- The two most commonly selected nutritional goals were:
 - “eat fresh, frozen or canned fruits or vegetables, aim for 5-9 servings a day”
 - “eat more meals at home, instead of eating out, if I do eat out, I will bring home half the entrée.”



Results-Follow up

- Seven patients were recruited during the third week of the externship and had the potential to be followed up weekly for two weeks. I was unable to contact two of the seven patients, so **only five patients were followed up for two weeks.**
- Eight patients were recruited during the fourth week of the externship and had the potential to be followed up with for one week. I was unable to contact one of the eight patients, so **seven patients were followed up with for one week**
- Thus, **twelve patients were able to be followed up with, 5 for two weeks and 7 for one week after.** All patients were followed up via telephone

One Week Follow up

| Question | Yes | No |
|---|-----|----|
| Are they keeping track of their weight at home, and if so what is their current weight? The average weight loss of the patients who answered yes: 0 pounds | 3 | 9 |
| Have they been able to meet their physical activity/nutritional goals? | 5 | 7 |
| Do they have support at home for their physical activity/nutritional goals? | 11 | 1 |
| Do they feel ready to add any goals? | 0 | 12 |
| Do they feel that follow up with the clinic is helping them meet their goals? | 12 | 0 |
| Have they used the online resources, and if so have they found them helpful? | 3 | 9 |



Two Week Follow up

| Question | Yes | No |
|--|-----|----|
| Are they keeping track of their weight at home, and if so what is their current weight? The weight loss of the patient who answered yes: 2 pounds | 1 | 4 |
| Have they been able to meet their physical activity/nutritional goals? | 2 | 3 |
| Do they have support at home for their physical activity/nutritional goals? | 4 | 1 |
| Do they feel ready to add any goals? | 1 | 4 |
| Do they feel that follow up with the clinic is helping them meet their goals? | 5 | 0 |
| Have they used the online resources, and if so have they found them helpful? | 1 | 4 |



Discussion

- **Less than half of the patients elected to set goal weights.**
 - “it was just a goal for them to fail at” or “they didn’t like the pressure.” Others stated that they did not have the means to weigh themselves at home and “didn’t see the point.”
- **Hypertension** and **diabetes** were the most common health problems listed by the patients
 - This is not surprising given the fact that these diseases are among the most common associated with obesity.
- Of the twelve patients I was able to follow up with at one week:
 - **100% of them felt that follow up with the clinic was helping them meet their goals.**
 - A majority of the patients, **91%**, claimed they had support at home and **41%** were able to meet their goals.
- Of the five patients followed up with at two weeks:
 - **100% felt that follow up was beneficial to maintaining their goals.**
 - 40% were able to meet their goals and 80% reported support at home. One patient reported the online resources as helpful, and 100% felt that follow up was beneficial to maintaining their goals.
- **All the patients in the study felt that knowing they were going to be followed up with helped them maintain their nutritional and physical activity goals.** As the project was limited to short term follow up, it cannot be determined whether or not the form can actually result in significant weight loss for these patients. However, it does have the potential to initiate and support lifestyle changes in patients.



Recommendations

Although this project was not designed for the specific needs of MWCHC, it is a resource they could use for patients who are overweight or obese. The form is inexpensive and not incredibly time consuming, allowing for a blueprint that a provider can follow and personalize for their patient. Patients could easily be followed up in the office, instead of wasting man power with phone calls. With the limited financial resources of any community health center, “An Adult Plan for a Healthy Weight” offers a cost effective way for any clinic to address obesity.



Conclusion

- This generation is faced with the challenge of combating the rising population of those who are either overweight or obese and preventing the numerous chronic diseases that accompany it. Clinic-based interventions have been shown to be effective, though very time consuming.
- “An Adult Plan for a Healthy Weight” is just one of many possible interventions providers can use to address their patients weight issues. Benefits to using the form include **low cost, individualize for a patient’s particular needs** and **time efficiency**.



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