# Quality Improvement Project:

Implementing a Screening Tool to Assess Diet and Physical Activity of Patients in a Clinic Dania Manigat, DNP, FNP-C

### PROBLEM STATEMENT

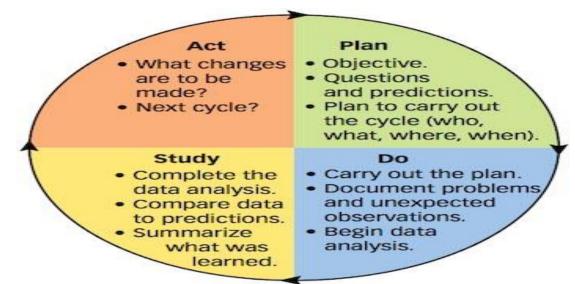
- Hypertension is a major issue in the United States with almost half a million deaths included hypertension as a primary or contributing cause<sup>1</sup>
- Less than 1 percent of the population adhered to the Dietary Approaches to Stop Hypertension (DASH) diet<sup>2</sup>
- Only 20 percent of people using DASH diet meet half of the recommended nutrient levels<sup>2</sup>

### PROJECT PURPOSE

- Approximately 90 percent of the patients at the target clinic have hypertension and 70 percent did not have their blood pressure under control
- Purpose: To decrease blood pressure and weight in hypertensive patients seen at the clinic
- Aim: For patients to have blood pressure at goal as recommended by the American Heart Association guideline in about 70 percent of the hypertensive patients in the clinic
- Clinical Question: In adults with hypertension, will the use of the Rapid Eating Assessment for Participants (REAP-S) and exercise and DASH diet plan decrease patients' blood pressure and decrease patients' weight by five percent in a three-month period?

### MODEL/NURSING THEORY

This Quality Improvement (QI) project practice the model Plan-Do-Study-Act (PDSA) cycle<sup>3</sup>



• The Self-Care Deficit Theory developed by Dorothea E. Orem served as the nursing model<sup>4</sup>

### METHODS

### Subjects

A convenience sample of 39 adult patients

#### **Inclusion Criteria:**

- Any race
- Any gender
- Age of 18 to 60 years
- Overweight
- Diagnosis of hypertension (>140/90)

#### **Exclusion Criteria:**

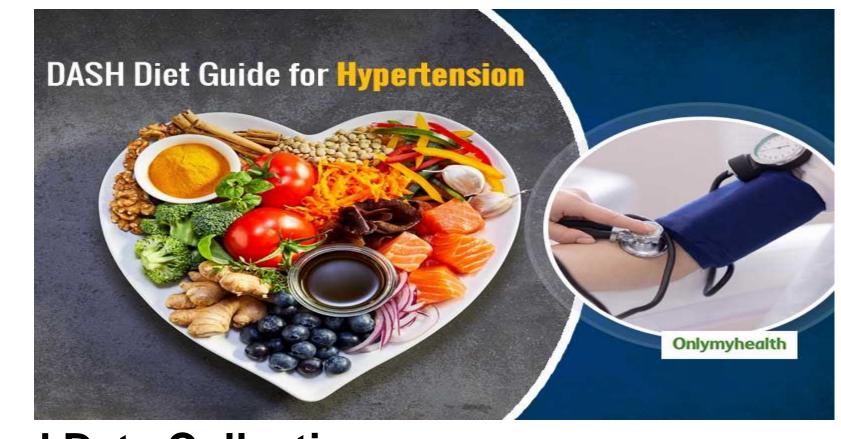
- Less than 18 years old or greater than 60 years old
- Patients with terminal disease, dementia, and pregnant patients
- Patients who have blood pressure greater than 200/100

#### Setting

Outpatient primary care clinic in the Tampa Bay area staffed with three medical assistants (MA), an office manager, and two providers

#### Instruments/Tools

- Manual blood pressure monitor
- REAP-S



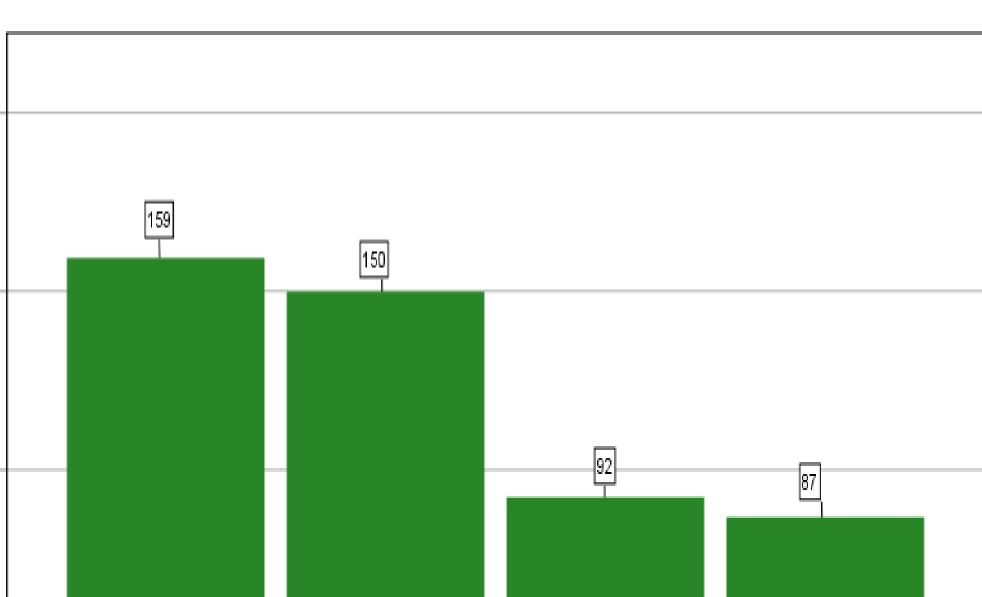
#### **Intervention and Data Collection**

- Data was collected during two time periods for comparison.
- Week 1 and 2 initial visit
  - 49 patients completed the REAP-S and baseline blood pressure measurement
  - Education about DASH diet and exercise provided
  - Patients given DASH diet and exercise brochure
- Week 10 and 11 follow up visit
  - 39 patients came back for follow up
  - REAP-S questionnaire completed, and blood pressure measured to assess progression.
- Project was completed over a period of months

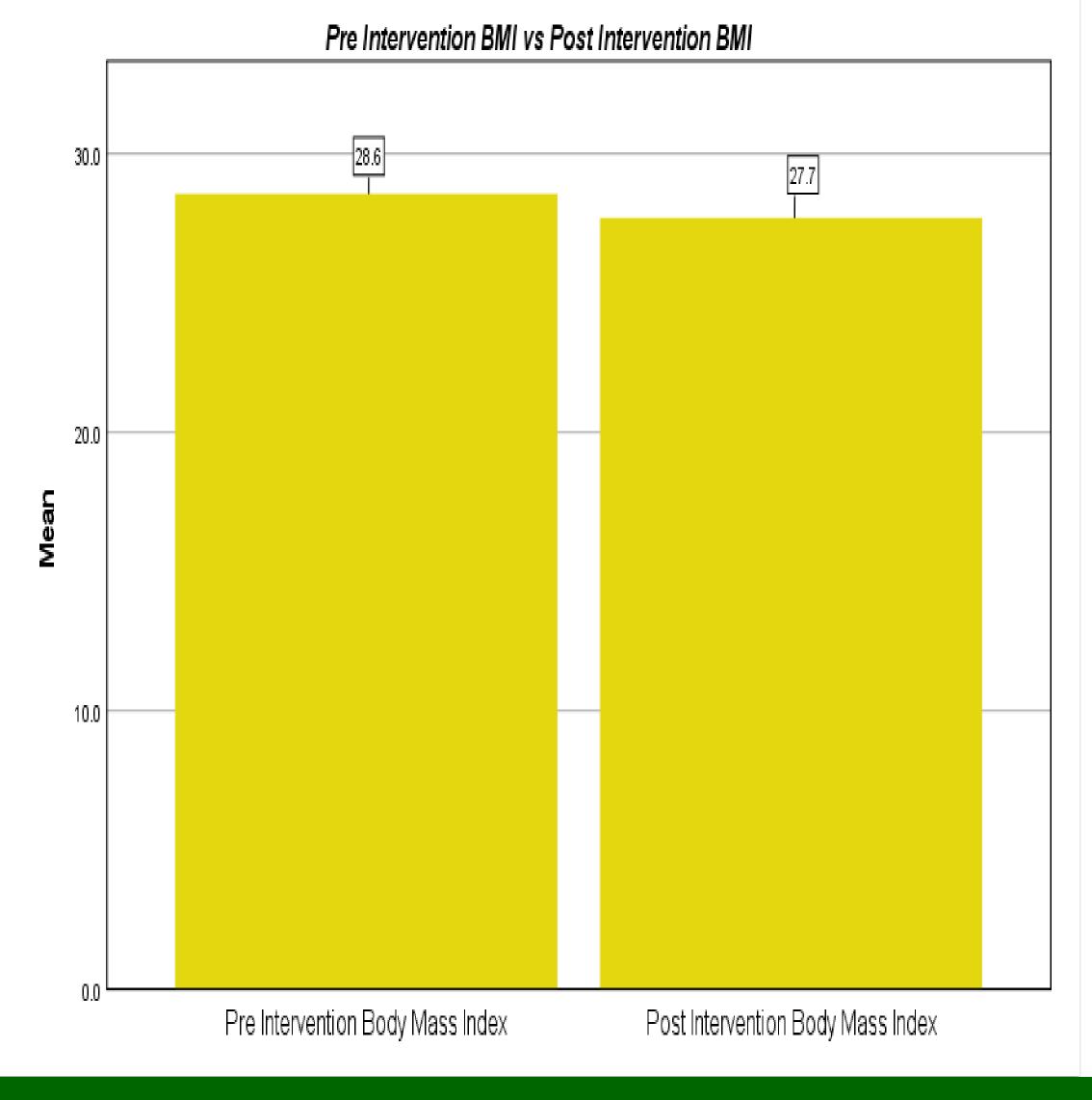
#### Data Analysis

Paired T test

### RESULTS



Data Comparison for Pre and Post Intervention for Blood Pressure



### DISCUSSION

- This project demonstrated that there was a statistically significant improvements in BMI and BP
- The REAP-S was an important tool that was not previously utilized by patients in the clinic
- Post intervention showed favorable outcomes with an increase of adherence to DASH diet and decrease BP and BMI
- Both providers expressed concerns of additional triage time warranted to complete the screening; however, findings from implementation indicate that no additional triage time needed

## IMPLICATIONS FOR ADVANCE PRACTICE NURSING

- Implementing the REAP-S in the clinic promotes closer follow-up for patients with blood pressure and BMI
- Use of a team-based approach is associated with improved blood pressure control

### SUSTAINABILITY

- No additional budget is needed to implement
- Protocol can be easily incorporated in clinic
- REAP-S takes about five minutes to complete<sup>5</sup>

### REFERENCES



An Implementation of Rapid Eating Assessment for Participants (REAP-S) results in decrease blood pressure and body mass index. SOUTH FLORIDA