INTRODUCTION

- Obesity is a chronic disease that causes or worsens cardiovascular conditions, diabetes, and cancer, leading to preventable, premature death.
- Obesity continues to trend upwards in the U.S.
- There is a lack of patient follow through and adherence with counseling on diet and exercise alone.
- The 5As (Assess, Advise, Agree, Assist, and Arrange) model provides a structured plan of care that
  - Evaluates patient readiness to lose weight
  - Considers comorbidities that may interfere with weight loss
  - Includes a multidisciplinary team approach that supports patients to achieve their goals

BACKGROUND & SIGNIFICANCE

- Obesity has been linked to multiple chronic diseases
- It is an epidemic of global proportions that causes death to millions of adults, adolescents, and children
- It has been attributed to a reduced rate in mortality improvement and decreased life expectancy
- It negatively impacts national healthcare expenditures and indirect and social costs
- The 5As offer a standardized, team-based approach to manage obesity in the primary care setting

METHODOLOGY

STUDY DESIGN: Quasi-experimental study design where in a chart review before and after a 30-minute in-service about the 5As model for obesity management
- 30 EMRs pre/post

SETTING: A small primary care practice in suburban Central New Jersey
- Patients are primarily African-American and Hispanic

STUDY POPULATION:
- Age 18-65 years old
- BMI ≥25 kg/m²

MEASURES & ANALYSIS:
- Descriptive Statistics
  - Patient demographics
  - Elevated BMI scores pre/post intervention
- Non-parametric Statistics (Wilcoxon Rank Sum Test)
  - Difference in the mean number of steps in the 5As model that were documented pre/post-intervention
- Bivariate Statistics
  - Relationship between the documentation of overweight or obesity diagnosis and intervention on weight management

RESULTS

DESCRIPTIVE STATISTICS

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>18 (60%)</td>
<td>23 (77%)</td>
</tr>
<tr>
<td>Male</td>
<td>12 (40%)</td>
<td>7 (23%)</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black or African American</td>
<td>16 (53%)</td>
<td>18 (60%)</td>
</tr>
<tr>
<td>White or Caucasian</td>
<td>3 (10%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3 (10%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Asian</td>
<td>2 (6%)</td>
<td>4 (13%)</td>
</tr>
<tr>
<td>Other</td>
<td>3 (10%)</td>
<td>4 (13%)</td>
</tr>
<tr>
<td>BMI Classification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>15 (37%)</td>
<td>11 (37%)</td>
</tr>
<tr>
<td>Obese</td>
<td>19 (53%)</td>
<td>19 (53%)</td>
</tr>
<tr>
<td>Overweight/Obesity Diagnosis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Documented</td>
<td>16 (43%)</td>
<td>19 (53%)</td>
</tr>
<tr>
<td>Undocumented</td>
<td>14 (47%)</td>
<td>11 (37%)</td>
</tr>
</tbody>
</table>

NON-PARAMETRIC STATISTICS

- A Wilcoxon Signed-Rank test was conducted to examine the difference in the number of steps in the 5As model that were documented pre/post-intervention
  - Pre-intervention: mean 5As steps documented = 1.4
  - Post-intervention: mean score = 2.3.
- Conclusion: mean post-intervention scores were statistically significantly higher than pre-intervention scores Z = 1.46, p = .034

BIVARIATE STATISTICS

- Bivariate statistical analysis was used to determine the relationship between the documentation of overweight/obesity diagnosis and weight management intervention
- Post-intervention data suggests that there was a positive correlation between the two variables, r = 0.488, n = 30, p < 0.006
- Conclusion: an increase in documentation of obesity/overweight diagnosis is correlated with increased weight management intervention

DISCUSSION

- Provider-focused implementation of the 5As model is effective obesity management in the primary care setting
- There was an increase in BMI screening, overweight/obesity diagnosis, weight counseling and specialist referrals
- This study is consistent with results in previously reported studies
- Documentation of overweight or obesity diagnosis according to patients’ BMI scores prompts healthcare providers to discuss weight management with their patients leading to timely interventions and referrals

IMPLICATIONS

IMPLICATIONS FOR PRACTICE

- Healthcare providers should utilize the 5As model to strategically treat overweight and obese patients in the primary care setting
- All patients should be weighed each visit to monitor their BMI score
- An overweight or obesity diagnosis should be documented accordingly

IMPLICATIONS FOR POLICY

- Legislative action should require healthcare providers to deliver appropriate and timely interventions to overweight and obese patients as soon as they are identified through their BMI score

IMPLICATIONS FOR QUALITY/SAFETY

- Primary care practices should adopt the 5As model into their patient triage procedure prior to being seen by a licensed provider
- The triage staff member can initiate assessment of BMI and comorbidities that may interfere with weight loss by obtaining height and weight and reviewing past medical history
- If a patient has been identified as overweight or obese, he/she will be flagged to alert the provider to perform the necessary interventions according to the 5As model

IMPLICATIONS FOR EDUCATION

- Studies on the efficacy of the 5As model for obesity management in primary care are still lacking
- Its compatibility with the primary care workflow, effect on weight or BMI scores over time, effect on patients with multiple comorbidities, and influence on healthcare costs need to be evaluated through further research

REFERENCE

- Benenson, DNP, FNP, Bagchi, PhD, DNP, APN, Revels, S., Kumar, S., & Ben Preston, S. H., Vierboom, Y. C., & Stokes, A. (2018). The role of obesity in exceptionally slow US mortality improvement. Pro...