Determinants of Treatment For Obesity

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Determinants of Treatment For Obesity

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Background
- The negative physical, social, and psychological effects of having obesity demand that its underdiagnosis be addressed.
- As of 2014, 37.9% of the adult population had a Body Mass Index (BMI) ≥30kg/m².
- A cross-sectional study found:
  - 48% of patients with BMI ≥ 30 kg/m² had electronic documentation of obesity.¹
- A large study of patients with obesity found:
  - 17.6% received weight reduction counseling
  - 25.2% received diet counseling
  - 20.5% received exercise counseling.²
- The initial assessment of a randomized controlled trial focused on the effect of obesity on the problem list found:
  - 36.2% of obese patients had obesity on the problem list
  - 5.1% of obese patients with obesity not on the problem list had obesity addressed by a physician.³

Primary Objective
To identify the patient factors that are associated with an obesity diagnosis.

Secondary Objectives
To identify the lab orders associated with an obesity diagnosis.
To identify patient factors, obesity diagnosis code usage, and obesity related lab orders associated with weight loss.

Methods
- Through retrospective chart review, a database of 96,019 patients with a BMI ≥30kg/m² was established. The following data was collected from each patient:
  - BMI ≥30kg/m²
  - Seen by a Lehigh Valley Physician Group Family or Internal Medicine between 6/1/16 – 5/31/18
  - Aged 16-45 between 6/1/16 – 5/31/18
  - No diagnoses between 6/1/16 – 5/31/18

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<th>Table 1: Patient Characteristics</th>
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<td><strong>Data Type</strong></td>
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<td>Vital signs</td>
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<td>Weight loss</td>
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Notable Results
- According to the Chi-squared analysis, the following patient characteristics are associated with the use of an obesity diagnosis code:
  1. Race and Ethnicity
  2. Sex
  3. Primary Language
  4. Smoking Status
  5. All specified comorbidities except impaired glucose tolerance
- Women are more likely to receive an obesity diagnosis than men.
- HA1c for diagnosis group was slightly lower than HA1c for non-diagnosis group. This is likely due to a higher testing rate for diagnosis group relative to the non-diagnosis group.
- Total cholesterol for diagnosis group was slightly lower than total cholesterol for non-diagnosis group despite similar testing rates between the two groups.
- Inclusion of obesity on problem list is a significant marker for obesity diagnosis. However, 14.6% of patients with obesity on the problem list do not have an obesity diagnosis.
- Internal medicine is responsible for more obesity diagnoses than family medicine.
- 0.42% of the total patient pool received a nutrition referral.
- Those with an obesity diagnosis saw a decrease in BMI, whereas those without an obesity diagnosis saw an increase in BMI.
- 55.7% of those who have Spanish as a primary language were diagnosed as obese compared to 45.2% of those who have English as a primary language.

Outcomes
- In the future, one might look at the relationship between a physician’s BMI and their diagnosis of obesity in patients.
- There is opportunity for improvement to decrease the number of patients who have obesity on the problem list without an obesity diagnosis.
- There is also opportunity for improvement to increase the percentage of patients that have obesity on the problem list given that studies show that it is more likely to be addressed.³

References