# PREOPERATIVE USE OF MBSAQIP RISK CALCULATOR AND ITS IMPACT ON METABOLIC AND BARIATRIC SURGICAL OUTCOME

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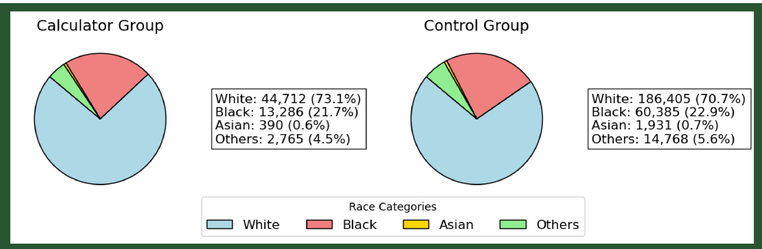
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## Introduction

- Bariatric surgery is the most effective treatment for obesity when lifestyle changes fail.
- Underutilization due to concerns about risks, insurance coverage, and lifestyle changes.
- MBSAQIP risk calculator developed to predict surgical risks using patient data.
- This study evaluates its impact on postoperative risks (30-day adverse events & readmission rates).

## Methods

- **Data Source:** MBSAQIP database (2021–2022)
- **Population:** 324,624 bariatric surgery patients
- **Groups:**
  - **Used MBSAQIP Calculator:** 61,153 patients
  - **Did Not Use Calculator:** 263,489 patients
- **Analysis:**
  - Compared demographics, clinical factors, and postoperative outcomes
  - Univariate & multivariate regression to assess 30-day readmission risk




Figures 1 and 2 reveal the demographic distribution of the patients who utilized the MBSAQIP calculator vs those who did not. The percentages remained relatively equal with no statistically significant differences in race groups.

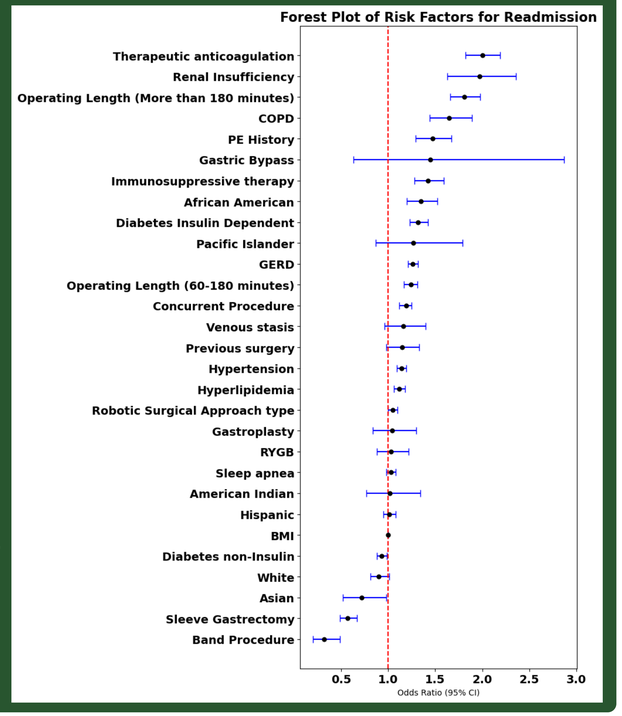
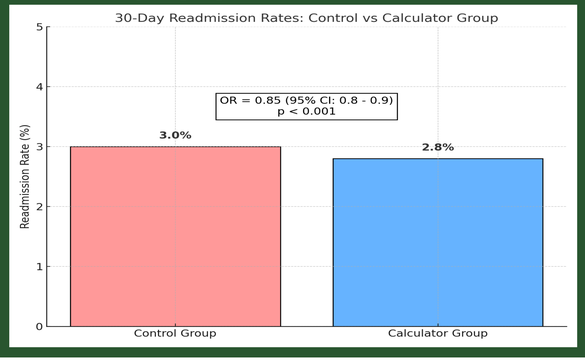



Figure 2 demonstrates a forest plot showing statistically significant differences within 30-day readmissions patients by comorbidities and race. Statistically significant factors included: African American race, diabetes insulin-dependent, Immunosuppressive therapy, concurrent procedures, long operating lengths, COPD, PE history, GERD, hypertension, hyperlipidemia, therapeutic anticoagulation, band procedure, sleeve gastrectomy, and renal insufficiency.

## Results

- **Demographic & Clinical Differences:**
  Significant variations in age, race, diabetes, COPD, OSA, GERD, surgical history, and procedure type.
- **Adverse Events:**
  No significant difference (2.8% in both groups, p=0.56).




## Conclusion:

- MBSAQIP risk calculator **reduces 30-day readmission rates**.
- Enables **better patient selection & risk stratification** for tailored pre/post-op care.
- Future research should validate findings in diverse populations & explore additional interventions.