



Navigating a New Landscape: A Longitudinal Analysis of the MBSAQIP Database in the GLP-1 Era

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Background



- Obesity prevalence increasing
- Introduction of GLP-1 RA medications has substantially altered treatment of obesity



- Metabolic & bariatric surgery (MBS) effective but remains underutilized
- Rising popularity of GLP-1 RA therapy for weight loss



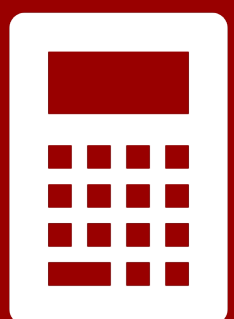
- Limited data examining how the patient population undergoing MBS has changed
- Decreasing preoperative BMI?

Research questions: *How have patient characteristics of those undergoing MBS changed following the widespread adoption of GLP-1 RA medications for weight loss? How has this impacted surgical outcomes?*

Methods

Data:

- ACS-MBSAQIP 2015-2023
- Sleeve gastrectomy, Roux-en-Y gastric bypass, revision/conversion procedures



Demographics:

- Age, sex, race, ethnicity
- BMI, ASA score, comorbidities

Outcomes:

- Postoperative length of stay (LOS)
- 30-day readmissions, rate of death or serious morbidity (DSM)

Analysis:

- Stratify by procedure and year
- Descriptive statistics for demographics
- Continuous outcomes -> multivariable linear regression

Results

Figure 1. Average Annual Body Mass Index by Procedure

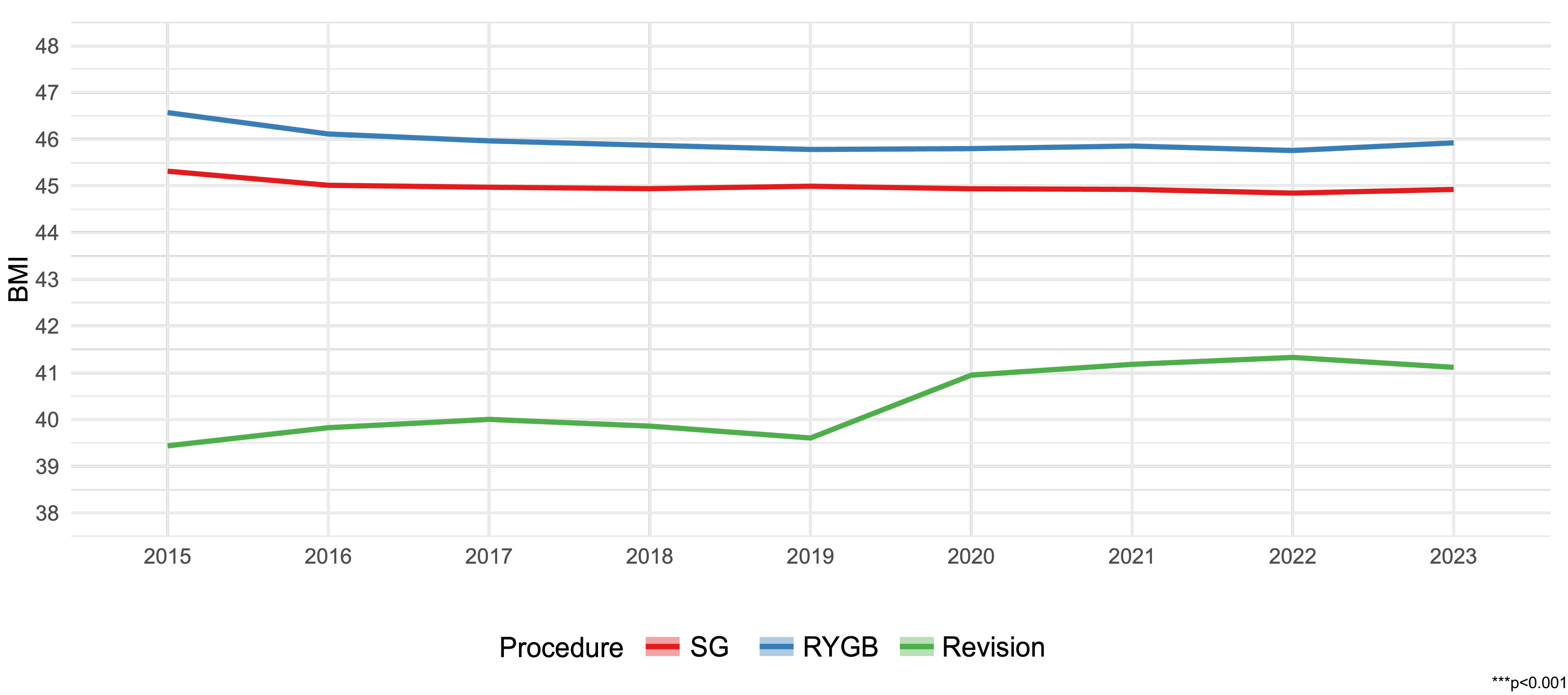


Figure 3. Rate of Death or Serious Morbidity by Procedure (2015 vs 2023)

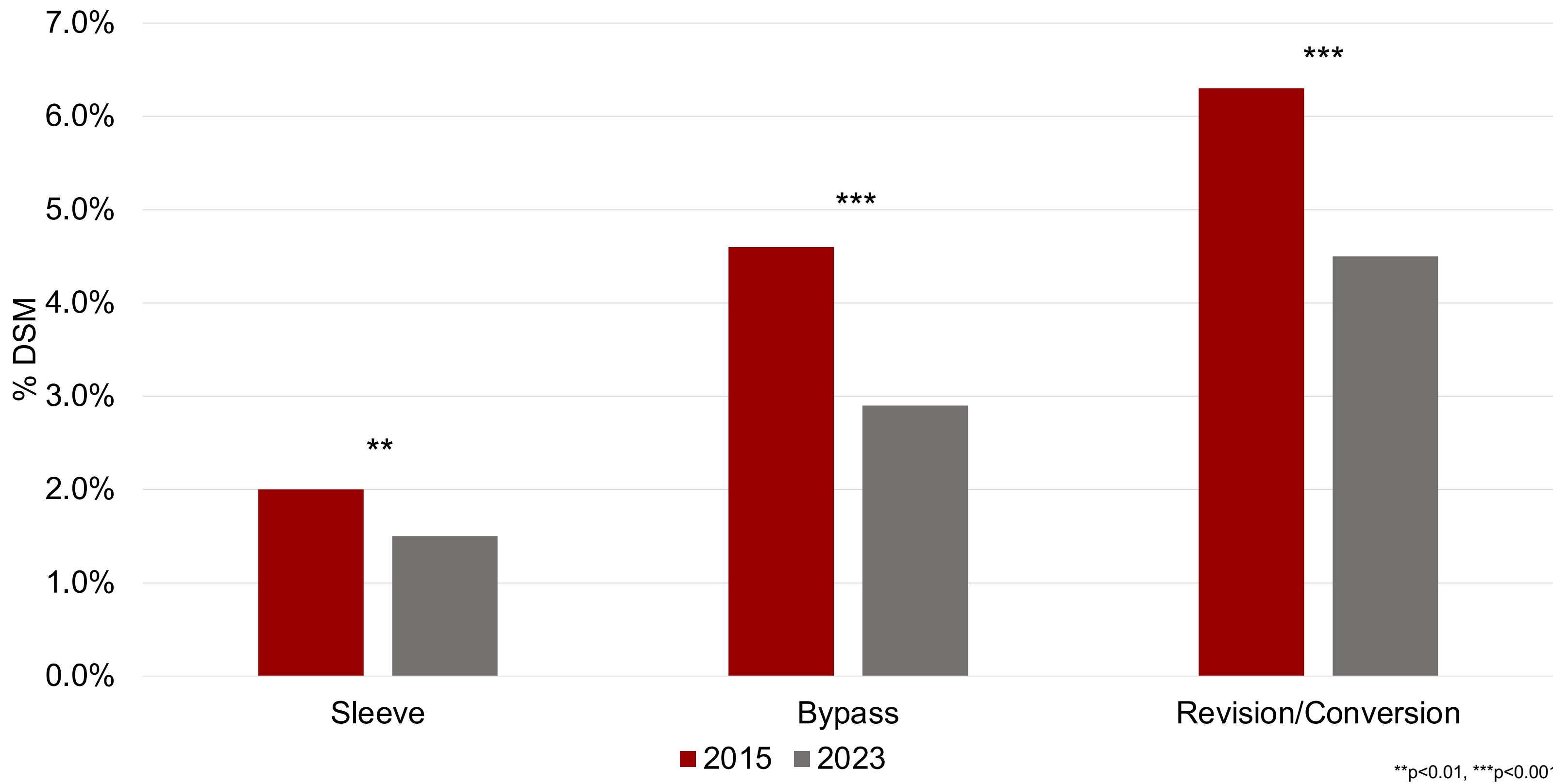
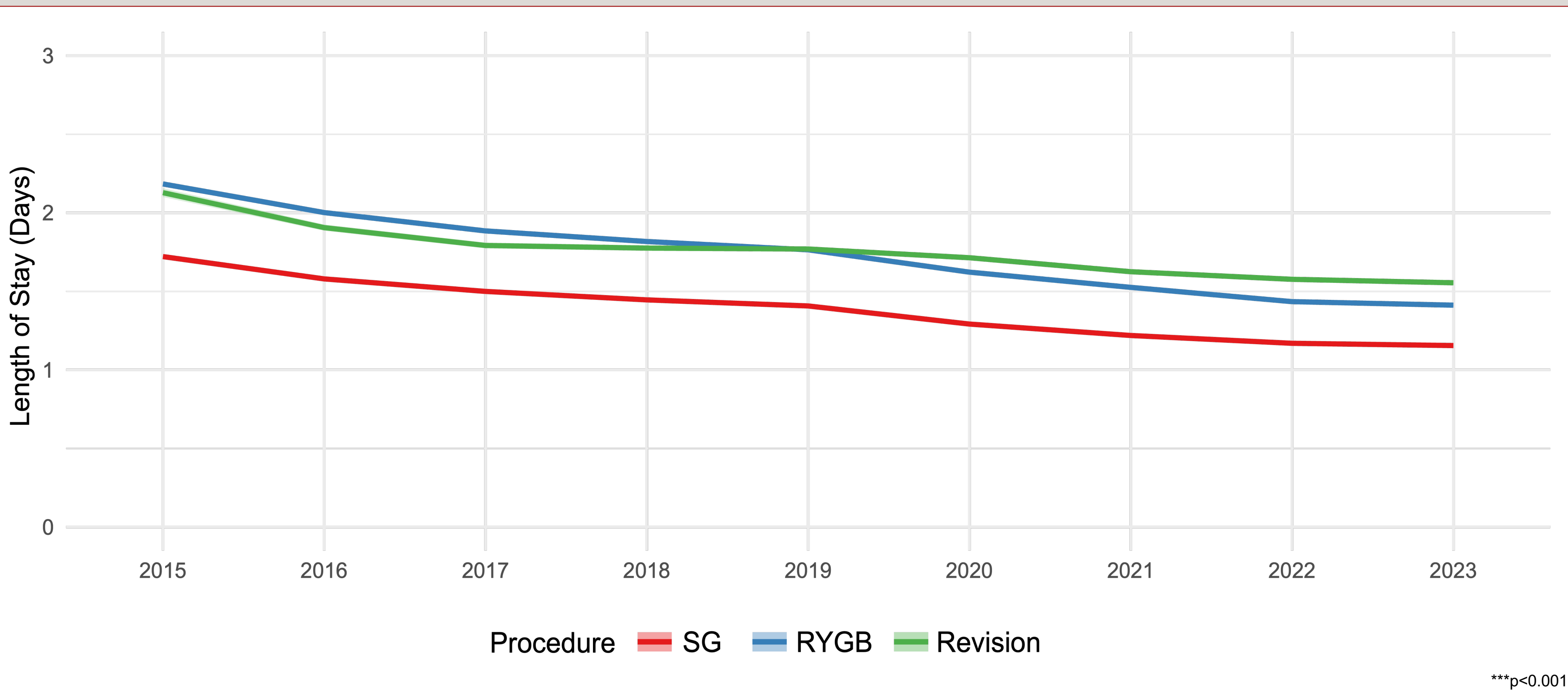


Figure 2. Average Postoperative Hospital Length of Stay by Procedure



Conclusions



Annual BMI similar for primary MBS, increased for revisional cases → reflective of shifting patient selection, treatment of weight regain with GLP-1s



Postoperative LOS decreased → more efficient perioperative management, improved safety



DSM decreased for both primary and revisional MBS → improved safety despite changing patient population, BMI, comorbidity burden