# The Utilization of Laparoscopic Sleeve Gastrectomy Is Rising in Patients With Preexisting GERD: An MBSAQIP Analysis

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## Background

Laparoscopic sleeve gastrectomy (LSG) is the most commonly performed bariatric procedure. However, the main drawback to LSG remains the higher incidence of postoperative de novo reflux, as well as the possible worsening of existing reflux, often prompting surgeons to recommend roux-en-Y gastric bypass (RYGB). In this study, we aim to analyze the relative rates of these procedures over time in patients with and without preexisting GERD.

## Methods

- The MBSAQIP public use file (PUF) was queried for years 2015 through 2018.
- Only primary bariatric surgeries were included in the analysis.
- Patients were separated into those with and without GERD, and relative proportions of LSG, RYGB, and other procedures were abstracted.

| Year | Total GERD | # sleeve | % sleeve | # bypass | % bypass | # other | % other |
|---|---|---|---|---|---|---|---|
| 2015 | 45167 | 26574 | 58.83% | 15350 | 33.98% | 3243 | 7.18% |
| 2016 | 49819 | 30604 | 61.43% | 15714 | 31.54% | 3501 | 7.03% |
| 2017 | 51751 | 32585 | 62.96% | 16196 | 31.30% | 2970 | 5.74% |
| 2018 | 51643 | 32145 | 62.24% | 16558 | 32.06% | 2940 | 5.69% |

| Year | Total Non-GERD | # sleeve | % sleeve | # bypass | % bypass | # other | % other |
|---|---|---|---|---|---|---|---|
| 2015 | 99349 | 66092 | 66.53% | 25787 | 25.96% | 7470 | 7.52% |
| 2016 | 86266 | 60639 | 70.29% | 19789 | 22.94% | 5838 | 6.77% |
| 2017 | 118014 | 85978 | 72.85% | 25490 | 21.60% | 6546 | 5.55% |
| 2018 | 121103 | 89701 | 74.07% | 25382 | 20.96% | 6020 | 4.97% |

## Results

- Total primary bariatric procedures rose from 144516 to 172745 (19.53% increase).
- Bariatric patients with preexisting GERD rose from 45167 to 51643 (14.34%) between 2015 and 2018.
- Proportion of LSG in **GERD patients** increased from 58.83% to 62.24%, while the proportion of RYGB decreased slightly from 33.98% to 32.06%.
- Among **non-GERD patients**, the proportion of LSG increased from 66.53% to 74.07%, while RYGB decreased from 25.96% to 20.96%.

## Conclusions

In patients with preexisting GERD, the relative rate of laparoscopic sleeve gastrectomy is increasing over time. Further studies are needed to elucidate the causes of this trend but may include patient preference, increased surgeon comfort with LSG in patients with GERD, or decreased technical comfort with RYGB.