

COMPARISON OF LAPAROSCOPIC VERSUS ROBOTIC SLEEVE GASTRECTOMY IN A RURAL HOSPITAL

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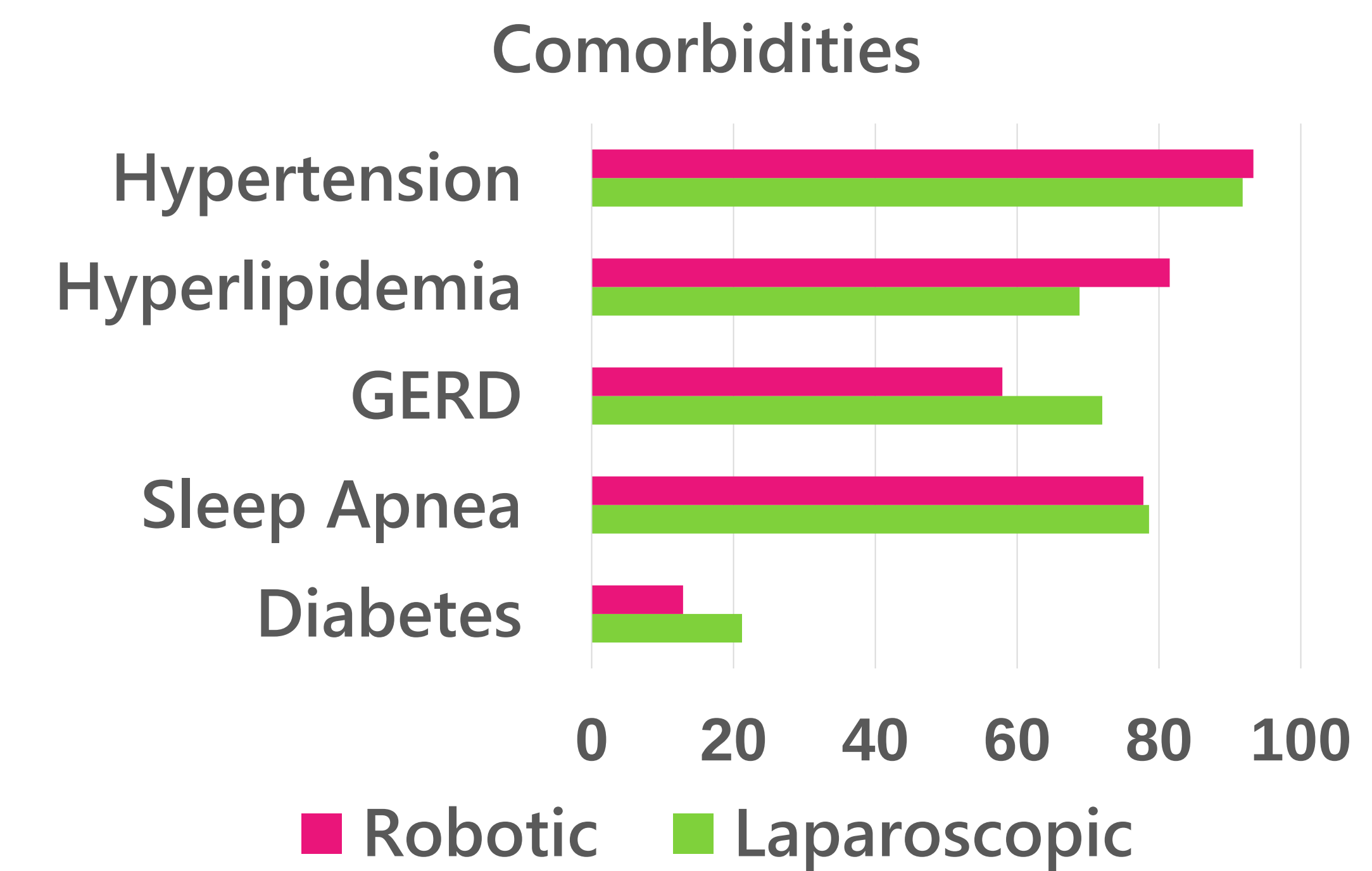
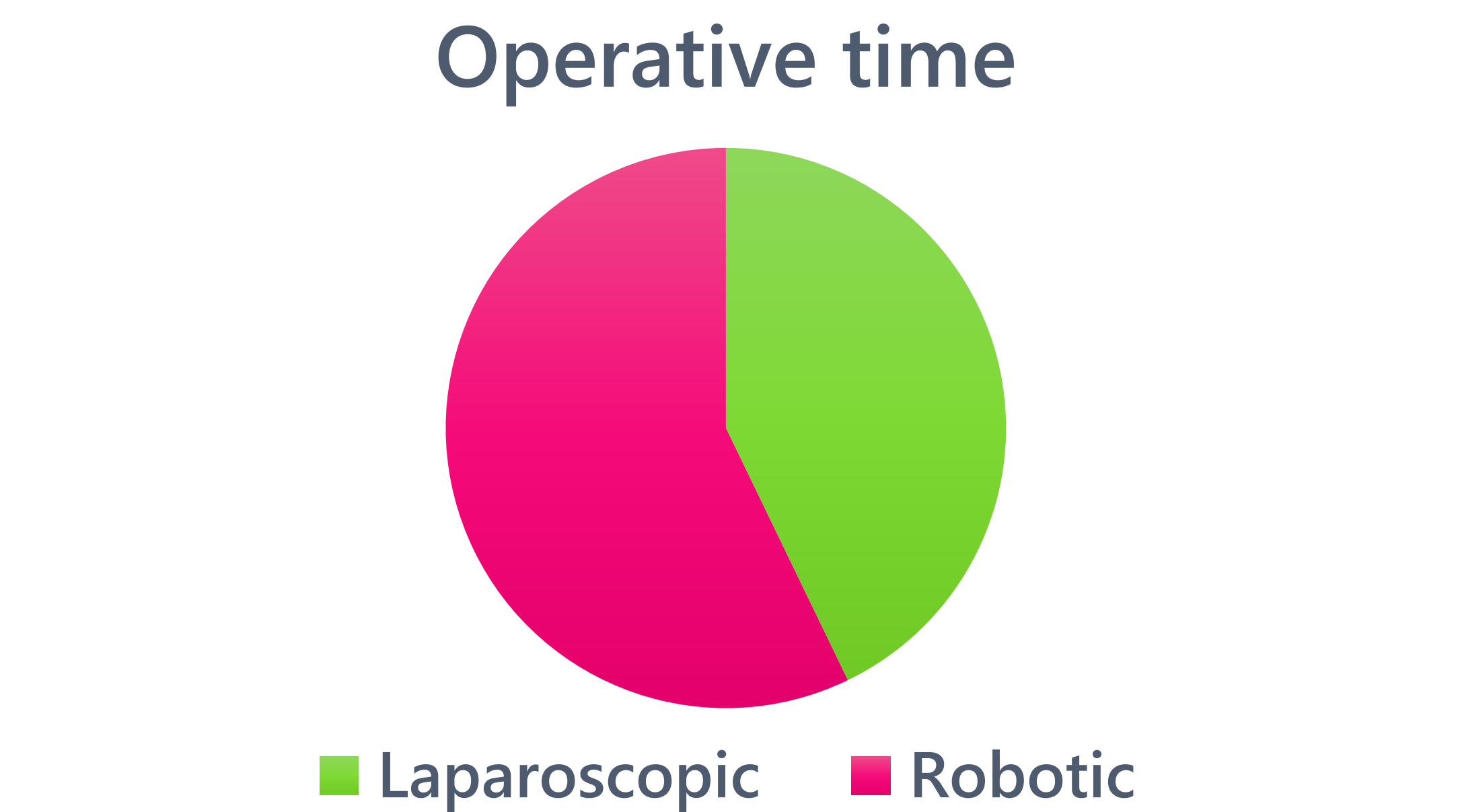
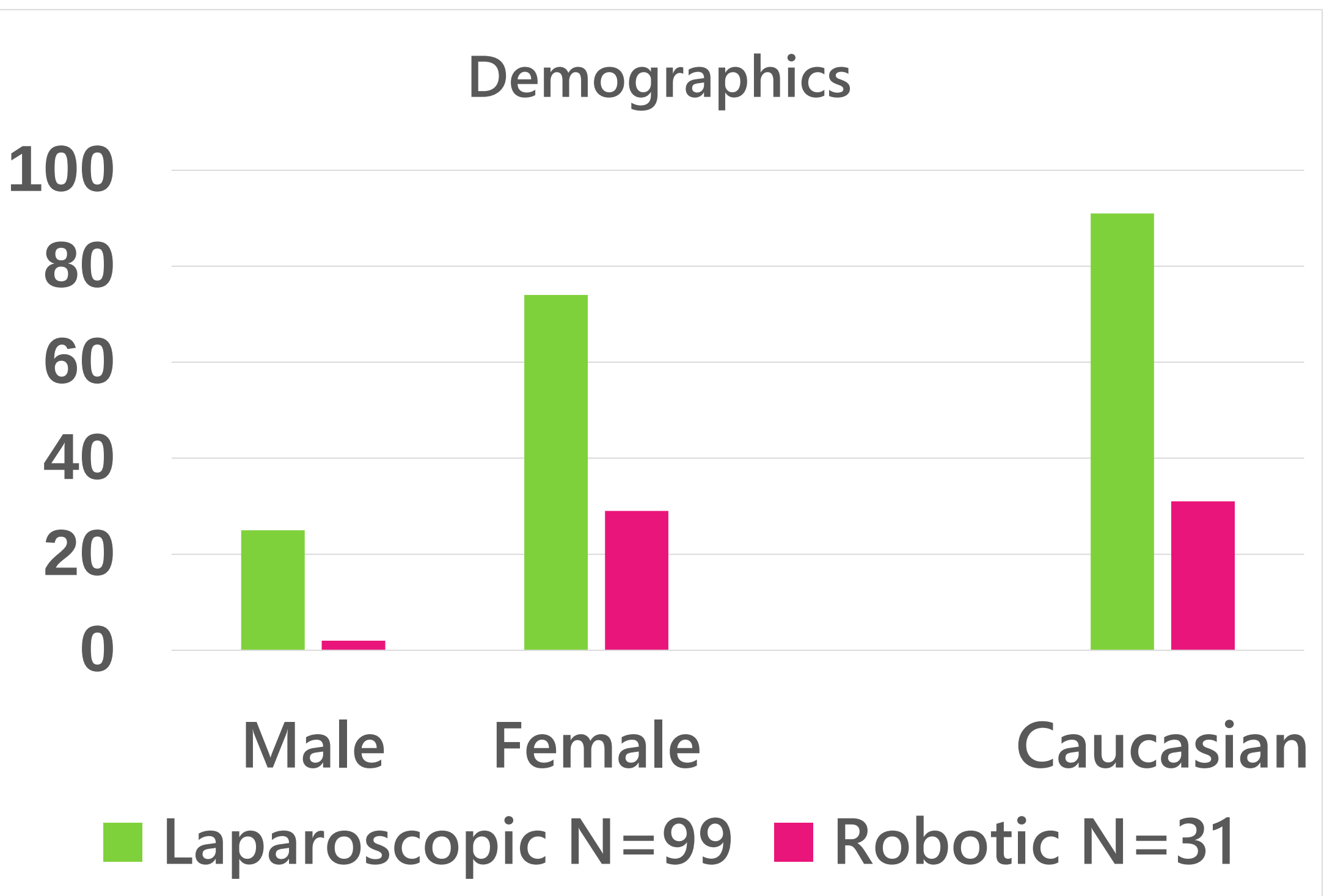
Introduction

- This is a study of outcomes of certain bariatric procedures in the rural patient population
- Study objective:**
 - Determine the best technique to perform a sleeve gastrectomy, laparoscopic versus robotic
- Goal:**
 - Help to guide allocation of hospital resources to promote procedures that lead to improved patient outcomes

Methodology

- Retrospective review
- Analysis endpoints were differences in:**
 - Co-morbidities
 - Operative time
 - Length of stay
 - Cost
 - Reduction in body mass index (BMI)
 - Readmissions and reoperations
- Data source**
 - Metabolic and Bariatric Surgery Accreditation and Quality Improvement Program (MBSAQIP) database
 - Patient chart review

Tables and Figures



Results

- A total of 130 cases were included
 - Laparoscopic = 99
 - Robotic = 31
- Mean operative time**
 - Laparoscopic = 93 minutes
 - Robotic = 124 minutes (p<0.001)
- Length of stay**
 - Laparoscopic = 1.5 days
 - Robotics = 1.6 days (p>0.05)
- Amount charged**
 - Laparoscopic = \$42,997
 - Robotic = \$40,250
- Reduction in BMI at 6 months**
 - Laparoscopic = 20.2%
 - Robotic = 23.3% (p=0.03)
- Readmission within 30 days**
 - Laparoscopic = 3.0%
 - Robotic = 3.2% (p>0.05)
- Reoperation within 30 days**
 - Laparoscopic = 1%
 - Robotic = 0 (p>0.05)

Endpoint	Laparoscopic	Robotic
Length of stay (days)	1.5	1.6
Cost (dollars)	\$42,997	\$40,250
BMI redcution (%)	20.2%	23.3%
Readmission (%)	3.0	3.2
Reoperation (%)	1.0	0

Discussion

- No significant difference in co-morbidities between the two groups
- Robotic sleeves took significantly longer than laparoscopic cases
- Length of stay was equivalent
- Charges for both cases were similar, although reimbursement to the hospital depended on the patient's insurance
- Reduction in BMI was significantly greater for robotics group
- No significant difference in readmissions and reoperations noted between the two groups

Conclusion

- The two groups differ in operative time and reduction in BMI, factors which influence patient outcomes

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