

CLINICAL OUTCOMES AFTER LAPAROSCOPIC ADJUSTABLE GASTRIC BAND (LAGB) VARY ACCORDING TO HEALTH INSURANCE CARRIER: SELF-PAY VS PRIVATE INSURANCE VS MEDICAID VS MEDICARE IN 58,317 BOLD DATABASE PATIENTS Aviva Wallace, Emma Walker, Gus Slotman, Inspira Health Network, Vineland Medical Center

INTRODUCTION: Post-operative weight loss and resolution of obesity co-morbidities after LAGB are thoroughly understood. Previous reports have identified significant differences in weight and weight-related medical problems among morbidly obese subscribers to Medicaid, Medicare, Private insurance, and Self-Pay. Nevertheless, it is unknown whether or not outcomes after bariatric surgery vary by health insurance carrier. Knowing differential responses to bariatric operations according to health insurance status may aid in optimizing bariatric surgical outcomes. The objective of this study was to identify health insurance-related variations in weight loss and resolution of obesity co-morbidities after LAGB.

METHODS AND PROCEDURES: Data from 58,317 LAGB patients in the Surgical Review Corporation’s BOLD database was analyzed retrospectively in four groups: Medicaid (n=1,089), Medicare (n=6,455), Private insurance (n=47,114), and Self-Pay (n=3,659). Weight, weight loss, BMI, and prevalence of obesity co-morbidities in each group were tabulated at 2, 6, 12, 18, 24 and 36 months post-operatively. Statistical analysis was performed with General Linear Models that included baseline and post-operative data and were modified for binomial distribution of dichotomous variables. Pair-wise comparisons of results for Medicaid, Medicare, Private insurance, and Self-Pay versus each other were made at each interval.

Results:

Table 1. Weight loss, BMI, and obesity co-morbidities at 18 or 24 months following LAGB.

	Months	Self-pay	Private	Medicaid	Medicare	p value
Weight loss (kg)	18	27.3 +/-15.5	24 +/-14	24.1 +/-15.3	22.4 +/-13.4	p<0.0001
BMI	18	34.2 +/-7.2	36.3 +/-7.8	38.2 +/-7.7	37.7 +/-7.7	p<0.0001
Obstructive sleep apnea (%)	18	15.43	26.65	35.33	40.1	0.0001<p<0.05
Cholelithiasis (%)	18	11.57	18.22	26.95	25.18	p<0.0001
Hyperlipidemia (%)	24	20.21	29.22	33.33	45.66	0.0001<p<0.05
Diabetes (%)	18	11.67	17.9	28.14	37.18	0.001<p<0.05
Asthma (%)	18	9.2	11.7	26.35	18.22	p<0.01
GERD (%)	18	21.22	24.56	34.73	33.66	p<0.0001
Hypertension (%)	18	34.12	41.38	41.92	63.91	p<0.0001
Back pain (%)	24	21.67	29.29	40.65	46.77	0.0001<p<0.05
Lower extremity edema (%)	18	9.79	14.54	20.36	29.1	0.0001<p<0.05
Musculoskeletal pain (%)	18	21.36	26.65	34.73	45.84	0.0001<p<0.05

CONCLUSION: Responses to LAGB vary by insurance carrier-defined populations. Among Self-Pay patients, weight loss, reduced BMI, and resolution of obstructive sleep apnea, cholelithiasis, and hyperlipidemia were superior to those observed with Private insurance, Medicaid, and Medicare. Outcomes with Private insurance were less dramatic than Self-Pay but generally superior to those observed among Medicare and Medicaid patients. Conversely, among Medicare patients, weight loss was significantly less, BMI was greater, and resolution of the above co-morbidities plus diabetes, asthma, GERD, hypertension, back pain, lower extremity edema, and musculoskeletal pain was significantly reduced compared with the other insurance types. Medicaid patients demonstrated the highest post-LAGB BMIs. Additionally, for these patients resolution of obesity co-morbidities was intermediate between Private insurance and Medicare patients. Poor Medicare outcomes after LAGB suggest entrenched medical problems following years of morbid obesity. Knowledge of these health insurance-related variations may facilitate surgical decision-making and optimize management of morbidly obese patients.