INTRODUCTION: ORYGB primarily treats difficult patients. Every clinical insight helps. Objective: to identify ORYGB outcomes variation by health insurance status.

METHODS: Data from 4,225 Surgical Review Corporation BOLD database patients who underwent ORYGB was analyzed retrospectively in four groups: Medicaid (n=371), Medicare (n=437), Private insurance (n=3348) and Self-Pay (n=69). Statistics: General Linear Models included baseline and post-operative data, modified for binomial distribution of dichotomous variables.

RESULTS: Age: Medicaid 41±11, Medicare 53±11, Private 40±11, Self-Pay 40±12 (p<0.001). Through 24 months, for Medicaid, Medicare, Private and Self-Pay, respectively, (%) abdominal hernia (19.57, 10, 10.96, 11.11, p<0.05), abdominal panniculitis (19.57, 18, 10.26, 44.4, p<0.01), cholelithiasis (34.78, 38, 20.05, 11.11, p<0.05), GERD (41.3, 34, 24.94, 33.33, p<0.05), dyslipidemia (43.48, 36, 24, 22.2, p<0.05), and tobacco use (13, 4, 5.36, 0, p<0.05) varied significantly. Hypertension (44, 60.4, 40.23, 24, p<0.05), back pain (57.63, 54.36, 41.23, 20, p<0.05), leg edema (30.51, 32.21, 17.31, 16, p<0.05), musculoskeletal pain (38.14, 47.65, 31.54, 32, p<0.001), impaired functional status (11.86, 18.79, 4.15, 0, p<0.05) and asthma (27.12, 27.52, 13.54, 8, p<0.05) varied through 12 months, as did depression through 18 months (45.45, 46, 27.65, 0, p<0.05). BMI (40±9,40±9, 37±9,40±9, p<0.05), Obstructive sleep apnea (53.68, 50.38, 38.29, 35.71, p<0.01), obesity hypoventilation syndrome (3.68, 4.23, 1.71, 0, p<0.05), stress urinary incontinence (20, 22.31, 14.76, 4.76, p<0.05), gout (4.21, 5.77, 3.43, 2.38, p<0.05), and psychological impairment (36.84, 24.23, 15.29, 7.14, p<0.01) differed up to 6 months. Alcohol use increased in Self-Pay at 18 months (12.73, 9.52, 12.53, 25, p<0.05). CHF, diabetes, and liver disease did not vary. Highest/lowest co-morbidity rates were 8/0, 9/0, 0/5, and 3/17, respectively.

CONCLUSIONS: ORYGB outcomes vary by health insurance. Abdominal complications differ to 24 months. Cardio-pulmonary, somatic, and psychological variations resolved after 12 months. Self-Pay fared best and Medicare/Medicaid worst. This advance knowledge may help ORYGB management.