

# Variation in Pre-Operative Clinical Characteristics by Health Insurance Among Women Undergoing Sleeve Gastrectomy

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**BACKGROUND:** Clinical variation among women with obesity categorized by health insurance has not yet been examined. The objective of this study was to identify pre-operative clinical characteristics by health insurance status among obese females undergoing sleeve gastrectomy.

**METHODS:** Pre-operative data on 6,246 females undergoing sleeve gastrectomy was obtained from the Surgical Review Corporation's BOLD database and evaluated in four cohorts: Medicare (n=126), Medicaid (n=330), Private (n=4,424), Self-Pay (n=1,366). Variables included demographics and thirty-three medical/behavioral conditions. Statistics: ANOVA, Chi-squared equation.

**RESULTS:** Medicare/Medicaid/Private/Self-Pay age (56+-13/40+-5/45+-11/44+-12) and BMI (52+-12/50+-10/46+-8/44+-12) varied (p<0.0001). Medicare: Highest hypertension (69%), angina, CHF, DVT/PE, ischemic heart disease, pulmonary hypertension, sleep apnea (52%), obesity hypoventilation, hernia, panniculitis, cholelithiasis, stress incontinence, diabetes (55%), gout, dyslipidemia, menstrual irregularity, leg edema, back/musculoskeletal pain, fibromyalgia, disabled, psychological impairment, and unemployed (67%) (p<0.0001), GERD (p<0.001), mental health diagnosis (MHD, p<0.01); Lowest alcohol (p<0.0001), smoking (p<0.001), substance abuse and PCOS (p<0.05). Medicaid: Highest asthma, liver disease, smoking (p<0.0001) substance abuse (p<0.05); lowest none. Private: highest PCOS (p<0.05), second alcohol; lowest psychologic impairment (p<0.0001), MHD (p<0.01). Self-Pay: Highest alcohol; lowest cardiopulmonary (n=9), abdominal/hepatobiliary (n=6), somatic (n=3), diabetes, gout, dyslipidemia, menstrual irregularity, fibromyalgia, p<0.001).

**CONCLUSIONS:** Clinically, pre-operative female sleeve gastrectomy patients vary by insurance. Medicare females were oldest, heaviest, affected most by 24 obesity co-morbidities, but smoked, drank, and used drugs least. Medicaid were youngest with highest asthma, liver disease, and tobacco/substance abuse. Private/Self-Pay women had fewer co-morbidities in spite of doubled alcohol use versus Medicare/Medicaid. This advance knowledge may facilitate operation choice and improve outcomes.