Patient Comorbidity Complexity and Surgeon Reimbursement in Primary Total Shoulder Arthroplasty: A Risk Payment Analysis of Medicare Patients

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INTRODUCTION: Surgeons are increasingly treating more medically complex patients, however, reimbursement models under Medicare may not account for the complexity of patient care. The purpose of this study was to evaluate whether surgeon reimbursement for Total Shoulder Arthroplasty (TSA) under Medicare Part B in 2022 varied according to the comorbidity risk profile of patients.

METHODS: The 2022 Medicare Physician and Other Supplier Public Use File was queried to identify all TSA procedures. Demographic data, comorbidity profiles, Hierarchical Condition Category (HCC) risk scores, and surgeon reimbursement were collected. Patients with HCC scores ≥1.25 (one standard deviation above the mean) were classified as the High-Risk Cohort (HRC), while those with scores <1.25 comprised the Low-Risk Cohort (LRC).

RESULTS: A total of 48,132 TSA procedures were performed on 47,229 patients by 1,776 surgeons. The average Medicare reimbursement for TSA was $1,130.15. Surgeons treating patients in the HRC received a mean reimbursement of $1,118.37 compared to $1,131.65 for the LRC—a non-significant difference of $13.28 (p = 0.245). Patients in the HRC had significantly higher rates of medical comorbidities (p < 0.001), including dementia, smoking, and substance misuse (all p < 0.001).

DISCUSSION AND CONCLUSION: Medicare reimbursement for TSA did not differ significantly based on patient comorbidity burden. Surgeons caring for more complex, high-risk patients were reimbursed at similar or slightly lower rates than those treating lower-risk individuals. This suggests a lack of risk adjustment in current reimbursement models and highlights the need for payment structures that more equitably reflect patient complexity.