

# Impact of Payer Type on PROM Threshold Achievement Following Arthroscopic Rotator Cuff Repair

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**INTRODUCTION:** Orthopedic surgery quality of care assessment and reimbursement have been increasingly tied to achieving thresholds of patient-reported outcome measures (PROMs). This study sought to determine the relationship between payer type and PROM thresholds for arthroscopic rotator cuff repair (aRCR). We hypothesized that payer type would have minimal impact on PROM thresholds preoperatively and at one year follow-up.

**METHODS:** A retrospective query was conducted on all patients who underwent aRCR between June 2022 and May 2024 at a single site with a minimum follow-up of one year. Patient information, including age, sex, and payer were collected, as well as patient-reported outcome measures (PROMs), specifically preoperative and one-year American Shoulder and Elbow Surgeons (ASES) Scores. Payers were classified into three cohorts: Commercial, Medicaid, and Medicare. Self-pay and other plans such as Tricare were excluded. The ASES minimal clinically important difference (MCID), substantial clinical benefit (SCB), and patient acceptable symptom state (PASS) anchor-based thresholds were sourced from previous aRCR research and were 21.0, 26.0, and 78.0, respectively. The ASES score was compared to the PASS, and the ASES score change ( $\Delta$ ASES). For categorical variables, a  $\chi^2$  test was conducted; for continuous variables of which there were three groups, a one-way analysis of variance (ANOVA) was performed. Both tests were assessed as statistically significant if  $P < .05$ .

**RESULTS:** A total of 524 patients with an average age of  $61.15 \pm 9.82$  and 219 (41.8%) females were included in analysis. Payer utilization was as follows: 306 Commercial, 11 Medicaid, and 207 Medicare. The MCID achievement rates of Commercial, Medicaid, and Medicare were 73.5, 72.7, and 73.9%, respectively ( $P=.9928$ ; Figure 1). The SCB achievement rates of Commercial, Medicaid, and Medicare were 64.7, 63.6, and 65.2%, respectively ( $P=.9891$ ). The PASS achievement rates of Commercial, Medicaid, and Medicare were 74.5, 54.6, and 71.0%, respectively ( $P=.2687$ ). Further, no statistical differences were observed with respect to payer among ASES preoperative or one-year postoperative scores ( $P > .05$ ; Figure 2).

**DISCUSSION AND CONCLUSION:** This study found no differences in PROM thresholds of MCID, SCB, or PASS preoperatively or at one year for aRCR patients based on payer type. These results confirmed the hypothesis, as we anticipated modest differences. This finding should reassure patients and payers that outcomes from aRCR are agnostic to payer type.

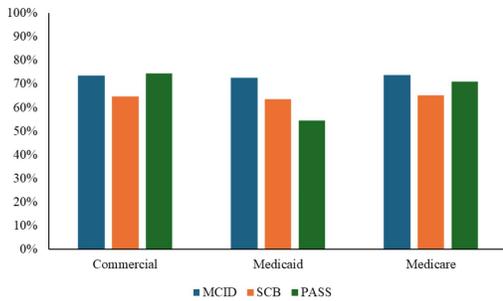


Figure 1. Frequency of ASES Score Achievement of MCID, SCB, and PASS among Payer Types.

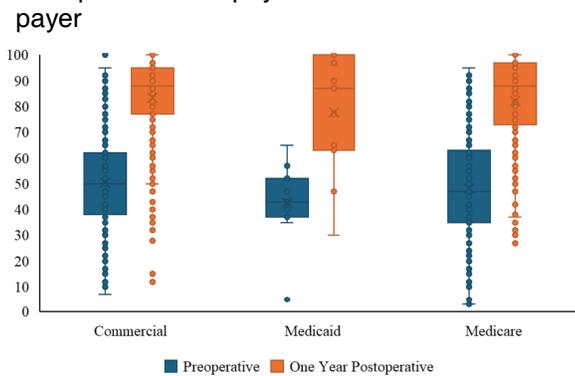


Figure 2. Preoperative and One Year Postoperative ASES Scores among Payer Types.