Risk Assessment with Outpatient Arthroplasty Risk Assessment (OARA) Score for Same Day Outpatient Primary TJA: A Multi-Center Study

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INTRODUCTION: The Outpatient Arthroplasty Risk Assessment (OARA) Score was developed to risk stratify patients for safe same day discharge outpatient total joint arthroplasty (TJA). It has demonstrated predictive ability for length of stay in primary TJA compared to other medical risk stratification systems. However, there is minimal external validity of the original studies. This multi-center database study evaluated the risk assessment and predictive ability for same day discharge of the OARA score on clinical outcomes following primary TJA.

METHODS: Across 40 locations, 12,809 primary TJAs (4,656 hips, 8,153 knees) performed from 2017 to 2023 were identified. A total of 5,552 and 4,974 cases had length of stay and complication/readmission data, respectively. Statistical models evaluated the predictive ability of the OARA Score on same day discharge, complications, and readmission rates within 90-days. *P*-values ≤ 0.05 were considered statistically significant.

RESULTS: Overall, 1,864 (34%) patients were discharged on the same day after primary TJA. Patients who had an OARA Score <60 and <80; and hips (compared to knees) were ≥2.6 and 1.2 times more likely to discharge on the same day of surgery; however, only a lower OARA Score was associated with proportionally less complications and readmissions (*P*≤0.001). OARA Scores <60 and <80 were associated with ≤8.0% and ≤9.4% likelihood of any complication, and ≤6.4% and ≤7.6% likelihood of readmission, respectively. Complications and readmissions were 2.9 to 3.1 and 3.1 to 3.3 times more likely with OARA Scores ≥60 and ≥80, respectively.

DISCUSSION AND CONCLUSION: Study results demonstrate lower OARA Scores were predictive of same day discharge, and less chance for a complication or readmission after primary TJA. These results from multiple centers across the United States further support the original studies and provide evidence for the continued use of the OARA Score to identify appropriate candidates for outpatient primary TJA.