A Retrospective Analysis of Modifier 22 Reimbursement Rates in TJA

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INTRODUCTION: The 22-Modifier requests additional compensation for increased procedural case complexity. Unfortunately, there is little to guide physicians on the appropriate use of the modifier with regard to patient or operative factors that may increase successful reimbursement. We sought to evaluate various factors affecting reimbursement of the 22-modifier in primary Total Joint Arthroplasty (TJA) and report which factors contributed to successful utilization.

METHODS: In this retrospective cohort study, all cases from a single practice where the 22-modifier was added to 27130 (THA) and 27447 (TKA) from October 2018 to March 2022 were evaluated. Out of 6,869 total cases performed, 816 22-modifier cases were identified (11.9%). Operative reports, demographics, insurance type, billing information, and clinical records were assessed. T-tests were used to determine statistical significance.

RESULTS SECTION: Of the 816 cases, 221 (27.1%) were successfully reimbursed. Cases justified their 22-modifier addition with obesity, abnormal anatomic variation, or intraoperative factors. Some cases lacked justification, and some submitted incomplete documentation. Reimbursement was successful for 27.6% of obesity cases, 29.7% for intraoperative complications, and 35.7% for abnormal anatomic variations. There was a significantly higher likelihood of successful Medicare reimbursement than third-party payers or Medicaid (69.6% vs 20.5% and 6.9%). Additionally, Medicare was consistently more likely to pay for obesity (76.6% vs. 20.0% and 5.2%), anatomic variations (77.3% vs. 22.0%), and intraoperative factors (66.6% vs 21.1% and 1.7%).

DISCUSSION: Reimbursement for 22-modifier cases in TJA is unlikely. Obesity was cited for most 22-modifier justifications, but anatomic variation justification was successfully reimbursed most often. Medicare was most likely to reimburse compared to Third-Party Payers or Medicaid. These findings should be considered when applying the 22-modifier to TJA procedures.

SIGNIFICANCE/CLINICAL RELEVANCE: By evaluating the reimbursement rate of the 22-modifier in TJA, surgeons and orthopedic practices can obtain appropriate compensation for work performed and better understand the successful deployment of the 22-modifier.

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IMAGES AND TABLES

Table 1. Payer Type and 22-Modifier Outcomes.

Payer Type	Did Not Pay n=595	Paid n=221	P-Value
Medicaid	54 (93.1%)	4 (6.9%)	**< .0001**
Medicare	38 (30.4%)	87 (69.6%)	**< .0001**
Third-Party	503 (79.5%)	130 (20.5%)	**< .0001**
Total	595 (72.9%)	221 (27.1%)	**< .0001**

Table 2. Paid and Unpaid Claims by 22-Modifier Justification.

Justifications	Paid Claims	Unpaid Claims
Anatomic Variation	20 (35.7%)	36 (64.3%)
• Medicaid	0 (0%)	5 (100%)
• Medicare	11 (73.3%)	4 (26.7%)
• Third Party	9 (25%)	27 (75%)
Intraop Factor	14 (29.8%)	33 (70.2%)
• Medicaid	1 (20%)	4 (80%)
• Medicare	6 (66.7%)	3 (33.33%)
• Third Party	7 (21.2%)	26 (78.8%)
No Justification	6 (13.6%)	38 (86.4%)
• Medicaid	0 (0%)	5 (100%)
• Medicare	2 (28.6%)	5 (71.4%)
• Third Party	4 (12.5%)	28 (87.5%)
Incomplete Documentation Submitted	22 (23.4%)	72 (76.6%)
• Medicaid	0 (0%)	7 (100%)
• Medicare	9 (52.9%)	8 (47.1%)
• Third Party	13 (18.6%)	57 (81.4%)
Obesity	159 (27.7%)	416 (72.4%)
• Medicaid	3 (8.3%)	33 (91.7%)
• Medicare	59 (76.6%)	18 (23.4%)
• Third Party	97 (21.0%)	365 (79.0%)
Grand Total	221 (27.1%)	595 (72.9%)