

Declining Medicaid Reimbursement for Total Knee and Hip Arthroplasty from 2014 to 2022: A Comparison of Expansion and Non-Expansion States

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INTRODUCTION: Medicaid reimbursement rates for orthopedic procedures such as total knee arthroplasty (TKA) and total hip arthroplasty (THA) have important implications for access and sustainability of care. However, trends in reimbursement over time, particularly following Medicaid expansion under the Affordable Care Act, remain poorly characterized. The purpose of this study was to evaluate national and state-level trends in inflation-adjusted Medicaid physician reimbursement for TKA and THA from 2014 to 2022, and to assess whether these trends differ based on Medicaid expansion status.

METHODS: Average physician reimbursement per patient for TKA and THA procedures from 2014 to 2022 was extracted from a large insurance claims database. All monetary values were adjusted for inflation using the Consumer Price Index and reported in 2022 U.S. dollars. For each procedure, we calculated the total percentage change in reimbursement over the study period as well as the average annual percentage change. Data were then broken down by state and states were categorized based on Medicaid expansion status (expanded vs. non-expanded). States that expanded during the study period were excluded from the subanalysis. Linear regression was used to assess reimbursement trends over time and to compare rates of change between groups.

RESULTS: Between 2014 and 2022, the national weighted average reimbursement for TKA declined from \$2,023.63 to \$1,578.89, representing an overall decrease of 21.97%. The annual percent change for TKA reimbursement was -3.05% per year ($p = 0.003$). For THA, reimbursement decreased from \$2,049.89 to \$1,395.19, an overall reduction of 31.93%, with a annual percent change of -4.70% per year ($p = 0.048$). When stratified by Medicaid expansion status, TKA reimbursement declined at similar rates in expansion states (-2.38%) and non-expansion states (-2.67%), with no statistically significant difference in trends ($p = 0.69$). Similarly, THA reimbursement declined with a percent change of -3.24% in expansion states and -5.41% in non-expansion states, with no significant difference between groups ($p = 0.12$).

DISCUSSION AND CONCLUSION: Medicaid reimbursement for TKA and THA procedures declined significantly between 2014 and 2022. These declines were substantial for both procedures, but did not differ significantly between states that expanded Medicaid under the Affordable Care Act and those that did not. These findings highlight the need for continued attention from policymakers, hospitals, and surgeons to ensure equitable and sustainable access to joint replacement care for Medicaid beneficiaries across the United States.

