

# Stagnant Physician Reimbursement as Hospital Reimbursement Increases for Primary Total Knee Arthroplasty

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**INTRODUCTION:** As inflation, new technology, and rising costs continue to strain health care in the United States, it is important to understand the trends in insurance reimbursement. We sought to evaluate commercial insurance reimbursement for patients undergoing inpatient primary total knee arthroplasty (TKA) based on technology utilized and over time.

**METHODS:** We retrospectively reviewed a commercial claims database for 76,329 inpatient primary TKAs that were performed with cemented or uncemented components between 1/1/2016 and 12/31/2021. All patients had private commercial insurance only and procedure codes for both the hospital and physician were present. Records were reviewed for technology used and financial reimbursement, without adjusting for inflation. Independent-samples T-test and analysis of variance were performed.

**RESULTS:** Hospital reimbursement increased from \$26,202.44 per TKA in 2016 to \$28,918.66 in 2021 ( $p < 0.001$ ). However, physician reimbursement remained similar, from \$2,263.98 per TKA in 2016 to \$2,251.22 in 2021 ( $p = 0.2$ ). These trends persisted when evaluating patients with a length of stay of only 1 day (hospital reimbursement \$25,207.65 to \$28,291.10,  $p < 0.001$ , physician reimbursement \$2,368.25 to \$2,279.70,  $p = 0.1$ ). Cemented TKA was associated with increased hospital reimbursement compared to uncemented TKA (\$27,520.38 versus \$26,210.07,  $p < 0.001$ ), but similar physician reimbursement (\$2,312.53 versus \$2,300.86,  $p = 0.7$ ). Robotic cemented TKA had the higher hospital reimbursement (\$29,761.23) than manual cemented TKA (\$27,259.62), manual uncemented (\$26,105.73), and robotic uncemented (\$26,481.39,  $p < 0.001$ ). Robotic cemented TKA had the higher physician reimbursement (\$2,434.24) than manual cemented TKA (\$2,298.37), manual uncemented (\$2,263.76), and robotic uncemented (\$2,397.32,  $p < 0.001$ ).

**DISCUSSION AND CONCLUSION:** Physician reimbursement has remained similar for inpatient primary TKA from 2016 to 2021, despite hospital reimbursement increasing independent of length of stay and inflation increasing the cost of living over this time period. We believe that physician reimbursement should increase each year to reflect the increased cost of living caused by inflation. In addition, robotic cemented primary TKA provides the highest reimbursement for both hospitals and physicians.

