An Unsustainable Reimbursement Model: A 12-Year Analysis of Surgeon Compensation for Revision Total Hip Arthroplasty

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INTRODUCTION: Septic revision total hip arthroplasty (R-THA) is a technically complex and resource-intensive procedure. However, physician compensation has not evolved to reflect this complexity. Declining relative value units and the lack of procedure-specific coding continue to obscure the true clinical effort required. We sought to describe the trends in physician and 90-day episode of care reimbursement during a 12-year period.

METHODS: Using the PearlDiver national claims database, we identified patients who underwent aseptic or septic R-THA between 2010 and 2022 using CPT and ICD-9/10 codes. Debridement, antibiotics and implant retention (DAIR) procedures were excluded. The mean dollar reimbursement was calculated each year and adjusted for inflation using the consumer price index. Patients were grouped by insurance type: 1) Commercial, 2) Medicare Advantage (MCR-A), 3) Medicare (MCR). A subgroup analysis compared septic revisions based on procedure type, categorizing them into single stage exchange, explant/first stage of two stage exchange and reimplantation/second stage of two stage exchange.

RESULTS: A total of 57,821 aseptic and 17,379 septic procedures were identified. Commercial insurance claims comprised 53.6% and 55% of the aseptic and septic cohorts, respectively. Commercially insured septic procedures showed the highest increase in physician (mean difference [delta]=$1,525.3, p<0.001) and 90-day (Delta=$529.9, p<0.001) reimbursement during the 12-year period (Figure 1). Although compared to 2010, physician reimbursement in 2022 had a slight increase in the MCR and MCR-A groups, 90-day reimbursement was significantly decreased (MCR Delta=$-2,889.3, p<0.001; MCR-A Delta=$-1,601.3, p<0.001) (Figure 2). Regarding procedure type, single-stage and explant procedures had a constant slight increase in reimbursement, but reimbursement for aseptic revisions and reimplantation procedures remained stagnant throughout the 12-year period (Figure 3).

DISCUSSION AND CONCLUSION: Reimbursement for R-THA has remained stagnant over the past 12 years and fails to reflect the increasing procedural complexity. Medicare-based plans consistently underperform compared to commercial payers, and the lack of growth in payments for both aseptic and septic reimplantations threatens the sustainability of care for these patients. These trends discourage physician and institutional engagement in complex revision procedures. Urgent policy reform is needed to align reimbursement with clinical demands, ensure equitable compensation, and preserve patient access to this essential surgical service.

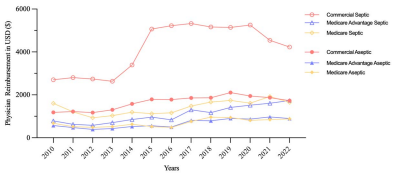

Figure 1. Temporal trends in physician reimbursement for revision total hip arthroplasty by insurance type 2010-2022

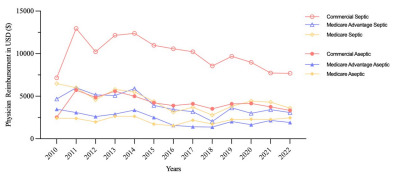

Figure 2. Temporal trends in 90-day episode of care reimbursement for revision total hip arthroplasty by insurance type 2010-2022

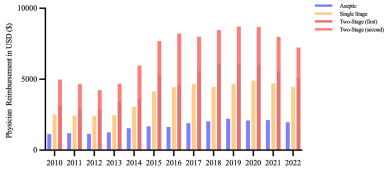

Figure 3. Temporal trends in physician reimbursement for revision total hip arthroplasty by procedure type 2010-2022