

Medicare Reimbursement for Revision Arthroplasty Procedures Decrease over 20+ Years, A Concerning Trend for Arthroplasty Subspecialists and Their Patients

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INTRODUCTION: The growing number of arthroplasty procedures in recent years has been accompanied by a decline in physician reimbursement. While impact on primary arthroplasties are felt across majority of orthopedic practices, declining reimbursements for revision cases may hit the subspecialists, especially in academic tertiary centers, the hardest as a significant portion of their volume may consist of complex revisions. This trend can impact access to care for some of the most vulnerable patient populations. Our study aims to investigate trends in the volume of procedures and reimbursement rates for revision hip, knee, ankle, elbow, shoulder, and wrist arthroplasty from 2000 to 2021.

METHODS:

We analyzed the Part B National Summary Data for CPT codes related to revision knee (27486, 27487), hip (27134, 27137, 27138), shoulder (23473, 23474), wrist (25447), ankle (27703), and elbow (24370, 24371) arthroplasty. The data collected encompassed the yearly number of procedures submitted to Medicare and annual physician reimbursement. Monetary values were adjusted to the 2021 United States Dollar.

RESULTS:

All of the procedures had data from 2000 to 2021 except CPT codes associated with rTSA and rTEA which only had data from 2013 to 2021. When comparing the first and last year of the studied time periods, all CPT codes had a percent increase in procedure volume except 27137 and 24370 which decreased by -51.6% and -5.3% respectively. All CPT codes had a percent decrease in reimbursement except 24370 which increased by 8.0%.

DISCUSSION AND CONCLUSION:

The results reveal that most procedures experienced an increase in volume and a decrease in reimbursement. The only exceptions were 27137 which had a decrease in volume and reimbursement as well as 24370 with a decrease in volume and increase in reimbursement. This shows that surgeons are performing more revision surgeries while receiving lower reimbursements. These developments should urge policymakers to reassess current reimbursement policies and how it may impact access to quality subspecialty arthroplasty care.

Table 1: Percent Changes in Reimbursement Per Procedure and Volume for Each Revision Arthroplasty from 2000 to 2021

Surgery (CPT Code)	Volume (% change)	Reimbursement Per Procedure (% change)
rTHA	27134	3.1
	27137	-51.6
	27138	31.3
rTKA	27486	75.5
	27487	54.5
	27703	731.7
rTAA	27703	-27.4
rTEA**	24370	-5.3
	24371	14.6
rTSA**	23473	65.8
	23474	137.3
rTWA	25447	507.1

** rTEA and rTSA revision data was only available from 2013 to 2021

rTHA = Revision Total Hip Arthroplasty, rTKA = Revision Total Knee Arthroplasty, rTAA = Revision Total Ankle Arthroplasty, rTEA = Revision Total Elbow Arthroplasty, rTSA = Revision Total Shoulder Arthroplasty, rTWA = Revision Total Wrist Arthroplasty

Table 2: Total Volume and Average Reimbursement Per Procedure For Each Revision Arthroplasty from 2000 to 2021

Surgery (CPT Code)	Total Number of Procedures	Reimbursement Per Procedure
rTHA	27134	239,823
	27137	106,170
	27138	78,170
rTKA	27486	193,612
	27487	298,748
rTAA	27703	3,586
rTEA**	24370	1,174
	24371	989
rTSA**	23473	12,632
	23474	22,996
rTWA	25447	393,679

** rTEA and rTSA revision data was only available from 2013 to 2021

rTHA = Revision Total Hip Arthroplasty, rTKA = Revision Total Knee Arthroplasty, rTAA = Revision Total Ankle Arthroplasty, rTEA = Revision Total Elbow Arthroplasty, rTSA = Revision Total Shoulder Arthroplasty, rTWA = Revision Total Wrist Arthroplasty