Medicaid Reimbursement for Total Hip and Knee Arthroplasty: A State-by-State Analysis Compared with Medicare

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INTRODUCTION: Medicare reimbursement for arthroplasty procedures has been declining, but little has been reported on Medicaid reimbursement. We sought to determine Medicaid reimbursement rates using state Medicaid data for nine arthroplasty procedure codes and compare them to Medicare reimbursement rates.

METHODS: The Centers for Medicare & Medicaid Services physician fee schedule was used to collect Medicare reimbursement rates, and state Medicaid fee schedules were accessed to collect Medicaid rates for nine procedures encompassing all primary and revision hip and knee arthroplasty surgery. State Medicare and Medicaid rates were compared to determine the mean dollar difference and dollar difference per relative value unit. Cost-of-living adjustment was performed using the Medicare Wage Index for each state. Coefficients of variation were calculated for each state to determine overall variability between the two systems.

RESULTS: The mean reimbursement rates for Medicaid were lower for seven of the nine codes used in the study. Medicaid reimbursed physicians an average of 8.9% less overall, and 19.9% less when adjusted for cost-of-living. The amount of variability in the Medicare rates was low with a consistent coefficient of variation of 0.06 but was higher in the Medicaid rates with a range of 0.29-0.36 in the unadjusted rates and 0.39-0.47 in the adjusted rates. There was a mean \$5.31 decreased reimbursement per RVU for Medicaid procedures.

DISCUSSION AND CONCLUSION: For the most common arthroplasty procedures, Medicaid reimburses physicians less than Medicare on average. Medicaid also demonstrates increased variability when compared to Medicare rates between states.



CPT	Procedure Name	Work RVII's	
27130	ARTHROPLASTY, ACETABULAR AND PROXIMAL FEMORAL PROSTHETIC REPLACEMENT (TOTAL HIP ARTHROPLASTY), WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	19.6	
27132	CONVERSION OF PREVIOUS HIP SURGERY TO TOTAL HIP ARTHROPLASTY, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	25.7	
27134	REVISION OF TOTAL HIP ARTHROPLASTY: BOTH COMPONENTS, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	30.3	
27137	REVISION OF TOTAL HIP ARTHROPLASTY: ACETABULAR COMPONENT ONLY, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	22.7	
27138	REVISION OF TOTAL HIP ARTHROPLASTY: FEMORAL COMPONENT ONLY, WITH OR WITHOUT ALLOGRAFT	23.7	
27445	ARTHROPLASTY, KNEE, HINGE PROSTHESIS (EG, WALLDIUS TYPE)	18.7	
27447	ARTHROPLASTY, KNEE, CONDYLE AND PLATEAU; MEDIAL AND LATERAL COMPARTMENTS WITH OR WITHOUT PATELLA RESURFACING (TOTAL KNEE ARTHROPLASTY)	19.6	
27486	REVISION OF TOTAL KNEE ARTHROPLASTY, WITH OR WITHOUT ALLOGRAFT; 1 COMPONENT	21.1	
27487	REVISION OF TOTAL KNEE ARTHROPLASTY, WITH OR WITHOUT ALLOGRAFT; FEMORAL AND ENTIRE TIBIAL COMPONENT	27.1	

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Table 3: Dellar difference alone and dellar difference per RVU between national MCD and MCR data										
Descriptor	Mean	Standard Deviation	Median	Lower	Upper	Ceefficient of Variation				
Dollar Difference between Medicaid and Medicare										
ARTHROPLASTY, ACETABULAR AND PROXIMAL FEMORAL PROSTHETIC REPLACEMENT (TOTAL HIP ARTHROPLASTY), WITH OR WITHOUT AUTOGRAPT OR ALLOGRAPT	.525	8411	.8112	.5547	\$1.917	.17.56				
CONVERSION OF PREVIOUS HIP SURGERY TO TOTAL HIP ARTHROPLASTY, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	-5179	5492	-5214	\$1.686	51.65	2.76				
REVISION OF TOTAL HIP ARTHROPLASTY; BOTH COMPONENTS, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	3186	5420	.5709		\$1,252					
REVISION OF TOTAL HIP ARTHROPEASTY; ACETABLEAR COMPONENT ONLY, WITH OR WITHOUT AUTOGRAPT OR ALLOGRAPT	-5124	\$371	-5172	-5700	\$1,322	-3.00				
REVISION OF TOTAL HIP ARTHROPLASTY; FEMORAL COMPONENT ONLY, WITH OR WITHOUT ALLOGRAPT	-3162	\$431	-5187	\$1,533	\$1,261	-2.66				
ARTHROPLASTY, KNEE, HINGE PROSTHESIS (EG, WALLDIUS TYPE)	-5122	\$369	-5162	51,272	\$1,000	-3.82				
ARTHROPLASTY, KNIE, CONDYLE AND PLATEAU; MEDIAL AND LATERAL COMPARTMENTS WITH OR WITHOUT PATELLA RESURFACING (TOTAL KNEE ARTHROPLASTY)	59	5378	-536	-5546	\$1,317	43.59				
REVISION OF TOTAL KNEE ARTHROPLASTY, WITH OR WITHOUT ALLOGRAFT; I COMPONENT	-5192	\$398	-5192	\$1,421	\$1,313	-2.19				
REVISION OF TOTAL KNEE ARTHROPLASTY, WITH OR WITHOUT ALLOGRAFT; FEMORAL AND ENTIRE TIRAL COMPONENT	-8174	\$459	-5227	\$1,013	\$1,200	-2.63				
Dellar Difference p	er RVL									
ARTHROPLASTY, ACETABULAR AND PROXIMAL FEMORAL PROSTHETIC REPLACEMENT (TOTAL HP ARTHROPLASTY), WITH OR WITHOUT AUTOGRAFT OR ALLOCRAFT	-61	\$22	-56	-525	599	-17.56				
CONVERSION OF PREVIOUS HIP SURGERY TO TOTAL HIP ARTHROPLASTY, WITH OR WITHOUT AUTOGRAPT OR ALLOGRAPT	-87	\$19	-58	-\$66	\$64	-2.76				
REVISION OF TOTAL HIP ARTHROPLASTY; BOTH COMPONENTS, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	-56	\$16	-57	-536	541	-2.52				
REVISION OF TOTAL HIP ARTHROPLASTY; ACTTABLEAR COMPONENT ONLY, WITH OR WITHOUT AUTOGRAFT OR ALLOGRAFT	-85	\$16	-58	-631	558	-3.00				
REVISION OF TOTAL HIP ARTHROPLASTY; FEMORAL COMPONENT ONLY, WITH OR WITHOUT ALLOGRAFT	-57	518	-58	-\$65	\$53	-2.66				
ARTHROPLASTY, KNEE, HINGE PROSTHESIS (EG, WALLDIUS TYPE)	-57	520	-59	-568	\$54	-3.82				
ARTHROPLASTY, KNEE, CONDYLE AND PLATEAU; MEDIAL										