

Medicare Reimbursement Declines Have Not Reduced Access to Elective THA: A Nationwide Analysis From 2010 to 2022

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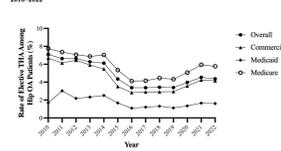
INTRODUCTION: Total hip arthroplasty (THA) is a cost-effective intervention that significantly improves quality of life for patients with end-stage hip osteoarthritis (OA). As the U.S. population ages, Medicare has become the predominant payer for THA. However, declining Medicare reimbursement relative to commercial insurance has raised concerns about reduced access. While reimbursement may disincentivize providers from offering surgery to Medicare patients, limited data exist on how payer status influences access to THA over time. This study examined trends in THA utilization by insurance type to assess whether Medicare patients have become less likely to undergo THA compared to those with commercial insurance.

METHODS: A retrospective cohort study was conducted using a national claims database. Patients aged ≥ 65 with newly diagnosed hip OA from 2010 to 2022 were identified using International Classification of Diseases codes. Patients were stratified by year of presentation and insurance type: commercial, Medicare, Medicaid, government, and cash pay. For each year and payer group, the incidence of subsequent elective THA was calculated. Multivariable logistic regression was performed to assess the association between payer type and likelihood of undergoing THA, adjusting for age, gender, and Charlson Comorbidity Index (CCI).

RESULTS: A total of 2,911,543 patients with hip OA were included, of whom 123,864 (4.3%) underwent elective THA. Medicare patients consistently had higher annual rates of THA utilization than those with commercial insurance (e.g., 2022: 5.77% vs. 4.15%). Medicaid-insured patients had the lowest utilization each year. On multivariable analysis, Medicare coverage was associated with higher odds of receiving THA (OR range: 1.00–1.63), while Medicaid, cash-pay, and government-insured patients had consistently lower odds compared to commercial insurance.

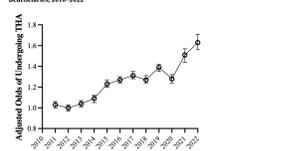
DISCUSSION AND CONCLUSION: Despite declining reimbursement, Medicare beneficiaries remained more likely to undergo THA than those with commercial insurance. In contrast, persistent disparities were observed among Medicaid, government, and cash-pay patients, highlighting ongoing barriers to surgical access.

Figure 1: Trends in Elective Total Hip Arthroplasty Utilization by Insurance Payer Type, 2010–2022



THA: total hip arthroplasty; OA: osteoarthritis. Utilization is defined as the proportion of patients with a new diagnosis of hip OA who subsequently underwent elective THA.

Figure 2: Adjusted Odds of Undergoing Elective Total Hip Arthroplasty Among Medicare Beneficiaries, 2010–2022



Adjusted for age, sex, and Charlson Comorbidity Index. THA: total hip arthroplasty. Error bars represent 95% confidence intervals.

Table 1: Annual Rates of Elective Total Hip Arthroplasty Among Patients Aged ≥ 65 With Hip Osteoarthritis, Stratified by Insurance Payer Type (2010–2022)

Year	Overall	Commercial	Medicare	Medicaid	Cash	Government
2010	7.10%	6.68%	7.70%	5.70%	5.80%	5.51%
2011	6.63%	6.14%	7.36%	5.83%	5.44%	5.72%
2012	6.64%	6.03%	7.05%	5.19%	4.96%	5.79%
2013	6.27%	5.91%	6.87%	5.19%	5.45%	5.29%
2014	6.12%	5.48%	7.05%	5.51%	5.45%	5.31%
2015	4.83%	5.51%	5.85%	4.67%	5.86%	5.39%
2016	5.38%	5.83%	6.12%	5.89%	5.28%	6.13%
2017	5.36%	5.89%	6.16%	5.25%	5.65%	6.19%
2018	5.43%	5.92%	6.45%	5.11%	6.79%	6.23%
2019	5.95%	5.96%	6.55%	5.12%	6.55%	6.29%
2020	5.97%	5.97%	6.67%	5.18%	6.41%	6.38%
2021	6.48%	6.24%	6.96%	5.88%	6.05%	6.45%
2022	6.21%	6.15%	6.77%	5.85%	6.61%	6.46%

Table 2: Adjusted Odds of Undergoing Elective Total Hip Arthroplasty by Insurance Payer Type Compared to Commercial Insurance (2010–2022)

Year	Medicare		Medicaid		Cash		Government	
	OR	P-value	OR	P-value	OR	P-value	OR	P-value
2010	REF	REF	REF	REF	REF	REF	REF	REF
2011	1.02	0.81	0.26	<0.001	0.71	0.21	1.31	0.001
2012	1.06	0.16	0.19	<0.001	0.29	0.01	1.26	0.04
2013	1.04	0.82	0.31	<0.001	0.31	0.02	1.78	0.07
2014	1.08	<0.001	0.51	<0.001	0.25	0.01	1.18	0.11
2015	1.23	<0.001	0.49	<0.001	0.60	0.11	1.11	0.28
2016	1.27	<0.001	0.56	<0.001	0.74	0.31	1.37	<0.001
2017	1.21	<0.001	0.59	<0.001	0.18	0.0003	1.55	0.002
2018	1.27	<0.001	0.41	<0.001	0.29	0.0002	1.68	0.29
2019	1.39	<0.001	0.63	<0.001	1.36	0.07	1.36	<0.001
2020	1.28	<0.001	0.52	<0.001	0.69	0.47	1.57	0.001
2021	1.51	<0.001	0.72	<0.001	0.27	0.02	1.26	<0.001
2022	1.63	<0.001	0.19	<0.001	0.38	0.10	1.38	<0.001

OR: odds ratio; REF: reference. Bolded indicates significance (P<0.05).