



Knee and Hip Arthroplasty - Shift from Inpatient to Outpatient Care Settings

Summary

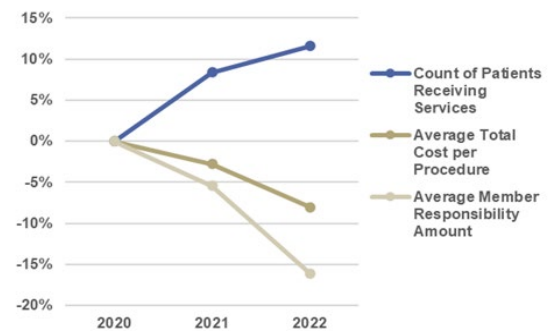
Total knee arthroplasty (TKA) and total hip arthroplasty (THA) procedures are increasingly being performed in the outpatient setting reducing overall costs and increasing the number of patients receiving services.

Reasons for the shift to the outpatient setting include the use of advanced techniques and recent changes in Medicare policies removing these procedures from the inpatient-only (IPO) list.

In Rhode Island shifting these services to the outpatient setting has:

- Decreased the average cost of a procedure by 8%.
- Decreased the average member responsibility by 16%.
- Increased the number of patients receiving services by over 11%.

Cumulative Trend of Costs and Number of Patients



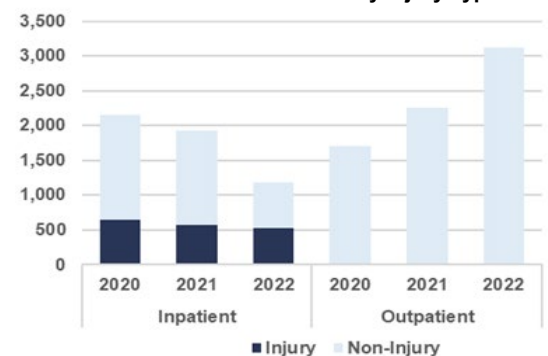
Total cost includes insurance paid and member responsibility amounts.

Member responsibility includes member copay, coinsurance, and deductible amounts.

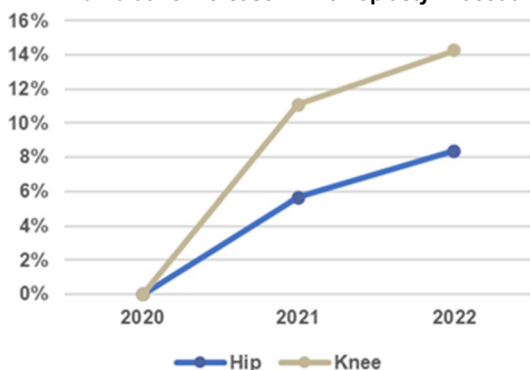
The Shift

- Non-injury related, elective procedures (e.g., to treat osteoarthritis) account for the shift of procedures to the outpatient setting.
- In 2022, only 20% of the non-injury, elective services remained in the inpatient setting as patients must be in good health with no significant medical conditions to receive these services in an outpatient setting.
- Injury related, non-elective, procedures continue to be performed in the inpatient setting.

Count of Procedures by Injury Type



Cumulative Increase in Arthroplasty Procedures



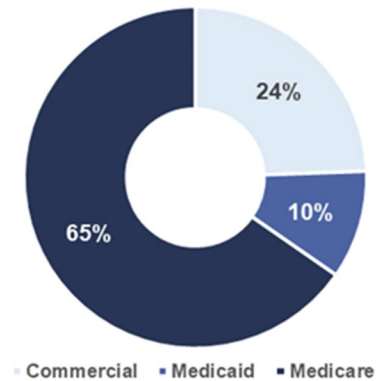
Methods: HealthFacts RI, the state's all-payer claims database (APCD)¹ which contains health services data for RI residents covered by health insurance was used for this study. The analyses were performed by Freedman HealthCare under the auspices of the Office of the Health Insurance Commissioner (OHIC) and the Health Spending Accountability and Transparency Program. Selected data included only claims paid as primary for both inpatient and outpatient services. Professional claims were excluded.

Reasons for the Shift

- **COVID-19** limiting availability of inpatient beds for non-COVID patients.
- **Advanced techniques and technologies** allow for less invasive procedures and shortened procedure duration providing quicker recovery times and reducing the need for an inpatient stay.
- **Lower costs** associated with the outpatient setting.
- **CMS policy changes** to reimburse both knee and hip arthroplasty procedures in outpatient and ambulatory surgery care settings.

Over 65% of arthroplasty procedures are provided to Medicare beneficiaries accounting the majority of the shift to the outpatient setting. These policy changes also impacted and increased demand for these services across all payer types.

Percent of Arthroplasty Procedures Performed by Payer Type 2020-2022



CMS Policy Changes

2018

- CMS allows total knee arthroplasty (TKA) to be performed in the outpatient setting for Medicare patients.

2021

- CMS adds THA as a covered service when performed in an ambulatory surgical center.

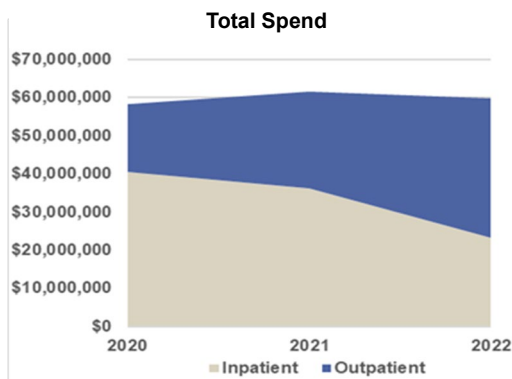
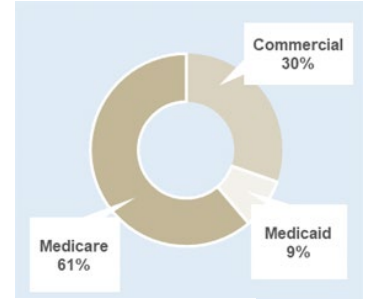
2020

- CMS adds TKA procedures as a covered service when performed in an ambulatory surgical setting.
- CMS removes total hip arthroplasty (THA) from the inpatient-only (IPO) list allowing procedures to be performed in the outpatient setting.

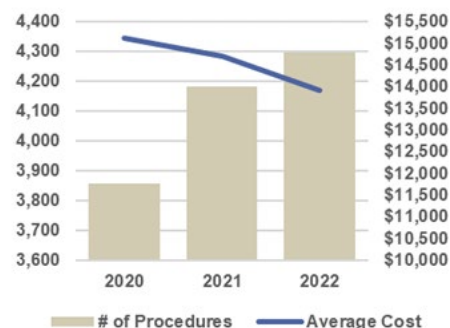
Total Spending Impacts

- Inpatient spending on these procedures decreased from almost 70% of total spend in 2020 to less than 39% in 2022.
- Average costs per procedure between 2020 and 2022 decreased by 8%. This decrease was seen across all payer types: 3.3% for Medicare, 12.4% for commercial payers, and 27.6% for Medicaid.
- Medicare beneficiaries account for over 65% of all procedures performed in the three-year period, and 61% of the total spend.

Percent of Total Spend by Payer



Count of Procedures and Average Cost



Procedures by Diagnosis Category

From 2020 to 2022, osteoarthritis diagnoses accounted for over 84% of arthroplasty procedures performed on patients. These procedures are considered elective, non-urgent, and less complex and shifted to the less costly outpatient setting with a 35% lower average cost when compared to the inpatient setting.

Procedures due to complications with existing prosthesis (e.g., infections, loosening, broken prosthesis) and injuries (e.g., fractures, tears) are considered more complex and non-elective and continue to be performed in the more costly inpatient setting.

Percent of Procedures by Diagnosis Category

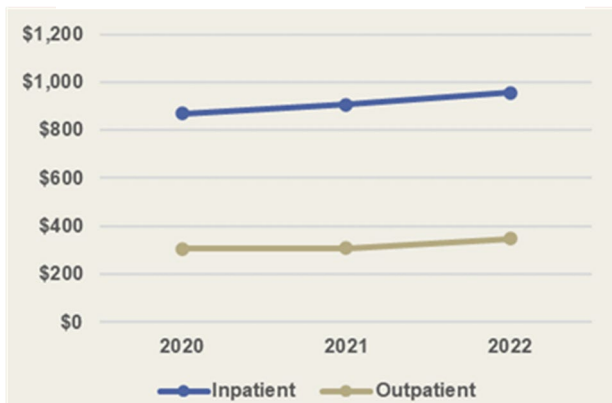


Diagnosis Category	# of Procedures	Total Spend	Percent of Inpatient Procedures		Average Cost	
			2020	2022	Inpatient	Outpatient
Osteoarthritis	10,422	\$ 138,094,720	46.3%	16.9%	\$ 17,382	\$ 11,251
Injury	968	\$ 18,667,615	99.4%	99.0%	\$ 19,379	\$ 9,247
Complications	816	\$ 20,195,242	98.7%	100.0%	\$ 24,875	\$ 10,193
Other	132	\$ 2,596,427	76.7%	47.5%	\$ 24,314	\$ 11,271

Why This Matters

- Lower total spend:** Overall total spend has declined by 2.6% since 2021, the first year where Medicare policies covering all knee and hip arthroplasty procedures in the outpatient and ambulatory settings took effect.
- Lower costs for patients:** Member out of pocket costs are over 60% less when receiving these services in an outpatient setting.
- Addressed increased demand:** Number of procedures performed increased over 11% since 2021 which helped address the increased demand for these services.
- Hospital revenue impact:** Inpatient facility providers that historically have relied on orthopedic procedures as a significant component of their business will lose revenue and must adapt.

Average Member Responsibility Amounts



Member responsibility amounts include a member's copay, coinsurance, and deductible amounts.

% Change from 2021 to 2022

	Insurance Paid amount	Member Responsibility	Procedures Performed
Total Spend	-2.6%	-8.9%	11.5%

References

- <https://health.ri.gov/data/healthfactsri/>

Learn More about OHIC at www.ohic.ri.gov



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Office of The Health Insurance Commissioner

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