Report Summary
and
Key Findings & Statewide Statistics

Report Summary

Click **Summary and Highlights** for an overview of this report.

Key Findings and Statewide Statistics

Click each of the procedures below to view key findings and statewide statistics:

Spinal Fusion

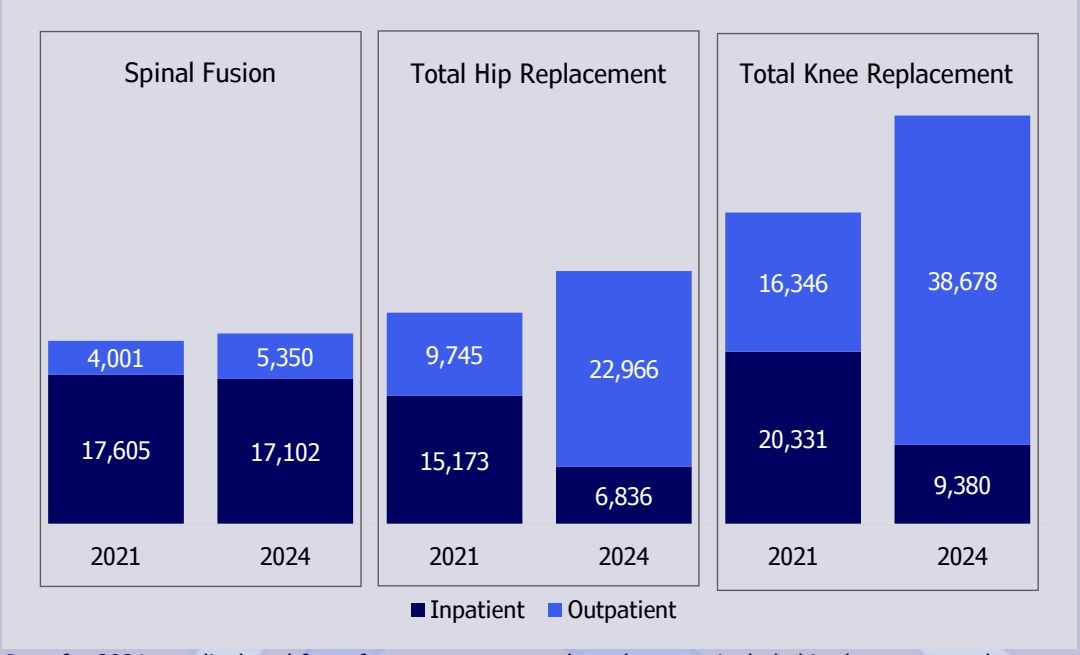
Total Hip Replacement

Total Knee Replacement

Summary and Highlights

The *Common Procedures Report* released by the Pennsylvania Health Care Cost Containment Council (PHC4), displays information about the performance of Pennsylvania facilities for three orthopedic procedures including spinal fusion, total hip replacement, and total knee replacement for inpatient acute care hospital discharges and hospital outpatient department and ambulatory surgery center encounters from October 1, 2023 through September 30, 2024 (fiscal year 2024). Hospital-specific ratings for complication and postoperative length of stay as well as statewide Medicare payments are reported for inpatient acute care hospitalizations. The overall volume of cases by the procedure of interest is reported for inpatient stays and outpatient encounters. In-depth information can be found in the individual reports for each orthopedic procedure. See www.phc4.org for the full report.

Volume of Cases



Data for 2021 are displayed for reference purposes only and are not included in the report analyses.

The following changes occurred from fiscal years 2021 to 2024.

- The number of inpatient spinal fusion cases decreased 2.9%, while the number of outpatient cases increased 33.7%.
- The number of inpatient total hip replacement cases decreased 54.9%, while the number of outpatient cases increased 135.7%.
- The number of inpatient total knee replacement cases decreased 53.9%, while the number of outpatient cases increased 136.6%.

Complications for Inpatient Hospital Stays

- For spinal fusion, 2.3% of patients had an in-hospital complication, and 2.3% were readmitted to an acute care hospital for a complication.
- For total hip replacement, 4.2% of patients had an in-hospital complication or were readmitted to an acute care hospital for a complication.
- For total knee replacement, 2.5% of patients had an in-hospital complication or were readmitted to an acute care hospital for a complication.

Postoperative Length of Stay

Average Inpatient Postoperative Length of Stay by Procedure

Procedure	Average Postoperative Length of Stay (Days)
Spinal Fusion	3.6
Total Hip Replacement	2.2
Total Knee Replacement	2.2

- For spinal fusion, the average inpatient postoperative length of stay was 3.6 days. 2.4% of patients experienced an extended postoperative length of stay, where the average was 14.2 days.
- For total hip replacement, the average inpatient postoperative length of stay was 2.2 days. 3.0% of patients experienced an extended postoperative length of stay, where the average was 8.3 days.
- For total knee replacement, the average inpatient postoperative length of stay was 2.2 days. 2.3% of patients experienced an extended postoperative length of stay, where the average was 8.5 days.

Medicare Payments, Calendar Year 2023 Data

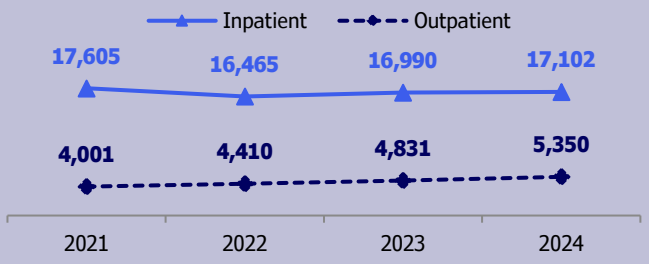
Statewide average Medicare fee-for-service payments were:

Procedure	Average Payment
Spinal Fusion	$34,243
Total Hip Replacement	$13,360
Total Knee Replacement	$13,415

Key Findings & Statewide Statistics

Spinal Fusion

Number of Cases by Fiscal Year



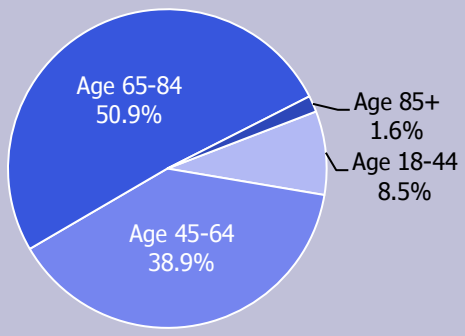
2021 through 2023 data are displayed for trending purposes only and are not included in the report analyses.

There were **17,102** inpatient hospitalizations and **5,350** outpatient encounters for spinal fusion procedures in Pennsylvania facilities from October 1, 2023 through September 30, 2024 (fiscal year 2024).

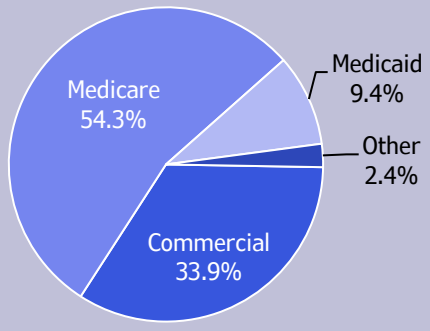
Of the inpatient hospitalizations, **12,503** cases, after exclusions, were examined in the Hospital Results section of this report in determining statewide rates of complications and postoperative length of stay.

The number of inpatient spinal fusion cases decreased **2.9%** and the number of outpatient cases increased **33.7%** between fiscal years 2021 and 2024.

Spinal Fusion, by Age
for Inpatient Hospitalizations



Spinal Fusion, by Payer
for Inpatient Hospitalizations



Percentages may not add to 100% due to rounding.

Complications for Inpatient Hospital Stays

- The in-hospital complication rate was **2.3%** and the readmission for complication rate was **2.3%**.
- Patients age 85 and older had the highest rate of in-hospital complication at **3.3%**. This age group also had the highest rate of readmission for complication at **3.0%**.
- The in-hospital complication rate for Black (non-Hispanic) patients was **3.3%**. White (non-Hispanic) and Hispanic patients had in-hospital complication rates of **2.2%** and **1.3%**, respectively.
- The readmission for complication rate among Black (non-Hispanic) patients was **3.2%**. White (non-Hispanic) and Hispanic patients had readmission for complication rates of **2.3%** and **2.2%**, respectively.
- The in-hospital complication rates were **2.2%** and **2.3%** for female and male patients, respectively. The readmission for complication rates were **2.8%** and **1.8%** for female and male patients, respectively.

Postoperative Length of Stay for Inpatient Hospital Stays

- Patients stayed in the hospital an average of **3.6 days** following an inpatient spinal fusion.
- **2.4%** of patients who had a spinal fusion during an inpatient hospitalization experienced an extended postoperative length of stay; that is, after accounting for patient risk, they stayed in the hospital longer than expected. The average postoperative stay for these patients was **14.2 days**.

Medicare Payments for Inpatient Hospital Stays

- The average Medicare fee-for-service payment for spinal fusion hospitalizations was **$34,243**.
- The average Medicare fee-for-service payment for spinal fusion hospitalizations with an extended postoperative length of stay was **$48,916**.

Results were based on the Centers for Medicare and Medicaid Services Calendar Year 2023 Medicare fee-for-service payment data.

Spinal Fusion Inpatient Hospitalization Rates per 10,000 Pennsylvania Residents
Statewide Rate: 14.8

Age		Female/Male		Race/Ethnicity	
Age 18-44	2.9	Female	14.8	White (non-Hispanic)	16.4
Age 45-64	18.7	Male	14.8	Black (non-Hispanic)	13.1
Age 65-84	33.1			Hispanic	3.7
Age 85 and older	8.8				

Poverty		Rural/Urban		Region	
High Poverty	11.0	Rural County	16.4	Western PA	16.2
All Other	15.3	Urban County	14.2	Central & Northeastern PA	14.3
				Southeastern PA	14.1

Rate calculations: The inpatient hospitalization rates above were based on Pennsylvania residents (15,427 hospital stays or 90.2% of all 17,102 hospitalizations for spinal fusion) using PHC4 discharge data and 2024 US Census Bureau population figures (2023 for poverty rates).

High Poverty rates included inpatient hospitalizations for residents living in areas where 20% or more of the population lives in poverty.

Rural County and *Urban County* rates were based on the designation of the county of residence as defined by The Center for Rural Pennsylvania. Urban counties are italicized in the following list of counties by region. Regional rates were adjusted for population differences in age and sex.

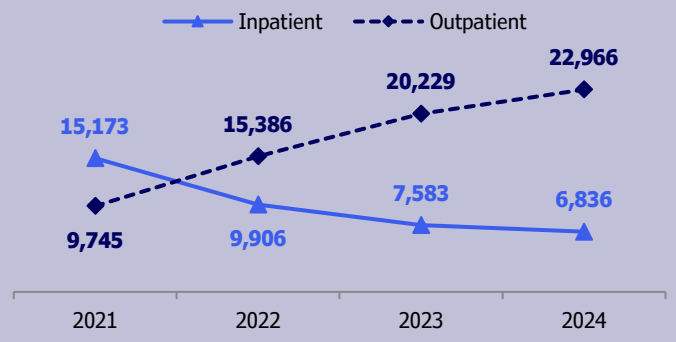
- Western PA includes the following counties: *Allegheny*, Armstrong, *Beaver*, Bedford, Blair, Butler, Cambria, Cameron, Clarion, Clearfield, Crawford, Elk, *Erie*, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, McKean, Mercer, Potter, Somerset, Venango, Warren, Washington, and *Westmoreland*.
- Central & Northeastern PA includes the following counties: Adams, Bradford, Centre, Clinton, Columbia, *Cumberland, Dauphin*, Franklin, Fulton, Huntingdon, Juniata, *Lackawanna, Lancaster, Lebanon, Luzerne*, Lycoming, Mifflin, Monroe, Montour, Northumberland, Perry, Pike, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming, and *York.*
- Southeastern PA includes the following counties: *Berks, Bucks,* Carbon, *Chester, Delaware, Lehigh, Montgomery, Northampton, Philadelphia*, and Schuylkill.

For County Rates, see "Maps – Rates by County"

Key Findings & Statewide Statistics

Total Hip Replacement

Number of Cases by Fiscal Year



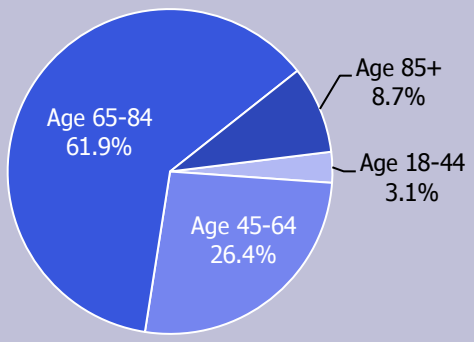
2021 through 2023 data are displayed for trending purposes only and are not included in the report analyses.

There were **6,836** inpatient hospitalizations and **22,966** outpatient encounters for total hip replacement procedures in Pennsylvania facilities from October 1, 2023 through September 30, 2024 (fiscal year 2024).

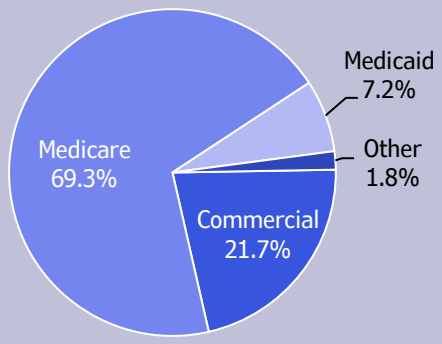
Of the inpatient hospitalizations, **3,878** cases, after exclusions, were examined in the Hospital Results section of this report in determining statewide rates of complications and postoperative length of stay.

The number of inpatient total hip replacement cases decreased **54.9%** and the number of outpatient cases increased **135.7%** between fiscal years 2021 and 2024.

Total Hip Replacement, by Age
for Inpatient Hospitalizations



Total Hip Replacement, by Payer
for Inpatient Hospitalizations



Percentages may not add to 100% due to rounding.

Complications for Inpatient Hospital Stays

- The complication rate was **4.2%**.
- Patients age 65 to 84 had the highest complication rate at **4.4%**.
- Hispanic patients had a complication rate of **9.1%**. White (non-Hispanic) and Black (non-Hispanic) patients had complication rates of **4.2%** and **3.4%**, respectively.
- Female patients had a complication rate of **4.5%** and male patients had a complication rate of **3.7%**.

Postoperative Length of Stay for Inpatient Hospital Stays

- Patients stayed in the hospital an average of **2.2 days** following an inpatient total hip replacement.
- **3.0%** of patients who had a total hip replacement during an inpatient hospitalization experienced an extended postoperative length of stay; that is, after accounting for patient risk, they stayed in the hospital longer than expected. The average postoperative stay for these patients was **8.3 days**.

Medicare Payments for Inpatient Hospital Stays

- The average Medicare fee-for-service payment for total hip replacement hospitalizations was **$13,360**.
- The average Medicare fee-for-service payment for total hip replacement hospitalizations with an extended postoperative length of stay is not displayed due to the small number of cases.

Results were based on the Centers for Medicare and Medicaid Services Calendar Year 2023 Medicare fee-for-service payment data.

Total Hip Replacement Inpatient Hospitalization Rates per 10,000 Pennsylvania Residents
Statewide Rate: 6.1

Age		Female/Male		Race/Ethnicity	
Age 18-44	0.4	Female	7.2	White (non-Hispanic)	6.8
Age 45-64	5.1	Male	4.9	Black (non-Hispanic)	5.8
Age 65-84	16.6			Hispanic	1.2
Age 85 and older	18.9				

Poverty		Rural/Urban		Region	
High Poverty	5.0	Rural County	6.0	Western PA	5.9
All Other	6.2	Urban County	6.1	Central & Northeastern PA	5.1
				Southeastern PA	6.9

Rate calculations: The inpatient hospitalization rates above were based on Pennsylvania residents (6,330 hospital stays or 92.6% of all 6,836 hospitalizations for total hip replacement) using PHC4 discharge data and 2024 US Census Bureau population figures (2023 for poverty rates).

High Poverty rates included inpatient hospitalizations for residents living in areas where 20% or more of the population lives in poverty.

Rural County and *Urban County* rates were based on the designation of the county of residence as defined by The Center for Rural Pennsylvania. Urban counties are italicized in the following list of counties by region. Regional rates were adjusted for population differences in age and sex.

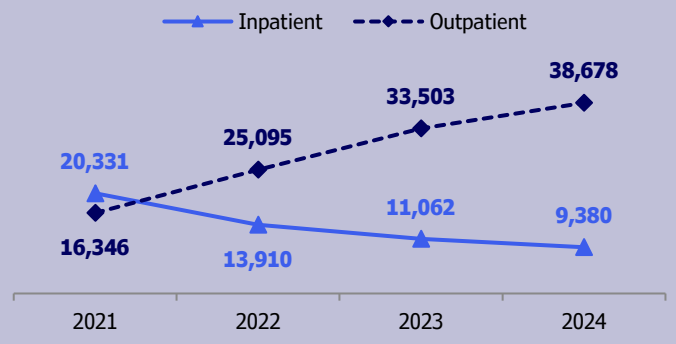
- Western PA includes the following counties: *Allegheny*, Armstrong, *Beaver*, Bedford, Blair, Butler, Cambria, Cameron, Clarion, Clearfield, Crawford, Elk, *Erie*, Fayette, Forest, Greene, Indiana, Jefferson, Lawrence, McKean, Mercer, Potter, Somerset, Venango, Warren, Washington, and *Westmoreland*.
- Central & Northeastern PA includes the following counties: Adams, Bradford, Centre, Clinton, Columbia, *Cumberland, Dauphin*, Franklin, Fulton, Huntingdon, Juniata, *Lackawanna, Lancaster, Lebanon, Luzerne*, Lycoming, Mifflin, Monroe, Montour, Northumberland, Perry, Pike, Snyder, Sullivan, Susquehanna, Tioga, Union, Wayne, Wyoming, and *York.*
- Southeastern PA includes the following counties: *Berks, Bucks,* Carbon, *Chester, Delaware, Lehigh, Montgomery, Northampton, Philadelphia*, and Schuylkill.

For County Rates, see "Maps – Rates by County"

Key Findings & Statewide Statistics

Total Knee Replacement

Number of Cases by Fiscal Year



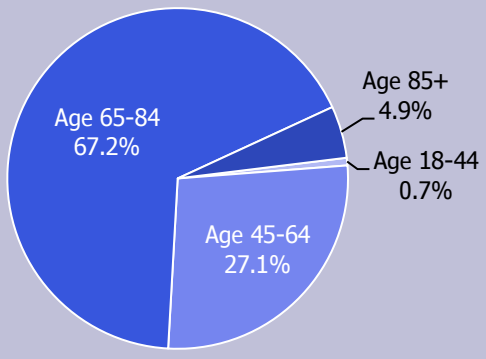
2021 through 2023 data are displayed for trending purposes only and are not included in the report analyses.

There were **9,380** inpatient hospitalizations and **38,678** outpatient encounters for total knee replacement procedures in Pennsylvania facilities from October 1, 2023 through September 30, 2024 (fiscal year 2024).

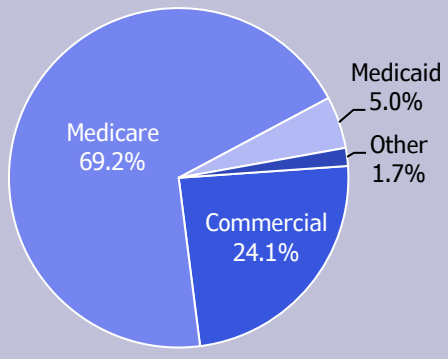
Of the inpatient hospitalizations, **6,713** cases, after exclusions, were examined in the Hospital Results section of this report in determining statewide rates of complications and postoperative length of stay.

The number of inpatient total knee replacement cases decreased **53.9%** and the number of outpatient cases increased **136.6%** between fiscal years 2021 and 2024.

Total Knee Replacement, by Age
for Inpatient Hospitalizations



Total Knee Replacement, by Payer
for Inpatient Hospitalizations



Percentages may not add to 100% due to rounding.

Complications for Inpatient Hospital Stays

- The complication rate was **2.5%**.
- Patients age 85 and older had the highest complication rate at **3.3%**.
- White (non-Hispanic) patients had a complication rate of **2.6%**. Hispanic and Black (non-Hispanic) patient categories each had complication rates of **2.3%**.
- Male patients had a complication rate of **2.6%** and female patients had a complication rate of **2.4%**.

Postoperative Length of Stay for Inpatient Hospital Stays

- Patients stayed in the hospital an average of **2.2 days** following an inpatient total knee replacement.
- **2.3%** of patients who had a total knee replacement during an inpatient hospitalization experienced an extended postoperative length of stay; that is, after accounting for patient risk, they stayed in the hospital longer than expected. The average postoperative stay for these patients was **8.5 days**.

Medicare Payments for Inpatient Hospital Stays

- The average Medicare fee-for-service payment for total knee replacement hospitalizations was **$13,415**.
- The average Medicare fee-for-service payment for total knee replacement hospitalizations with an extended postoperative length of stay was **$17,370**.

Results were based on the Centers for Medicare and Medicaid Services Calendar Year 2023 Medicare fee-for-service payment data.

Total Knee Replacement Inpatient Hospitalization Rates per 10,000 Pennsylvania Residents
Statewide Rate: 8.4

Age		Female/Male		Race/Ethnicity	
Age 18-44	0.1	Female	10.3	White (non-Hispanic)	9.2
Age 45-64	7.3	Male	6.3	Black (non-Hispanic)	8.9
Age 65-84	24.8			Hispanic	2.2
Age 85 and older	15.0				

Poverty		Rural/Urban		Region	
High Poverty	7.2	Rural County	7.8	Western PA	8.2
All Other	8.5	Urban County	8.6	Central & Northeastern PA	7.3
				Southeastern PA	9.3

Rate calculations: The inpatient hospitalization rates above were based on Pennsylvania residents (8,732 hospital stays or 93.1% of all 9,380 hospitalizations for total knee replacement) using PHC4 discharge data and 2024 US Census Bureau population figures (2023 for poverty rates).

High Poverty rates included inpatient hospitalizations for residents living in areas where 20% or more of the population lives in poverty.

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