

Trends in Medicare Procedure Utilization and Physician Fee Reimbursement for Foot and Ankle Arthrodesis and Arthroplasty Procedures

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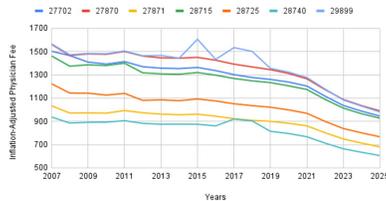
INTRODUCTION: As the aging US population continues to expand, there has been an increase in the utilization of Medicare and healthcare services. Prior studies have assessed the trends in Medicare physician fee reimbursement and utilization trends in total hip and knee arthroplasty; however, there is sparse data for foot and ankle procedures. This study aims to provide an analysis of physician fee reimbursement from 2007 to 2025 and utilization trends from 2007 to 2022 for total ankle arthroplasty and ankle arthrodesis procedures.

METHODS: Physician reimbursement data, National Payment Amount, for total ankle arthroplasty and ankle arthrodesis were extracted from the CMS Physician Fee Schedule Look-Up Tool using relevant CPT codes between 2007 and 2025. National payment amounts were adjusted for inflation using the Consumer Price Index (January 2025 values) and reported in 2025 USD. For each CPT code, nominal and inflation-adjusted reimbursement trends were analyzed, with percentage changes calculated. The Medicare Part B Summary Data File was used to collect utilization trends per CPT code from 2007 to 2022.

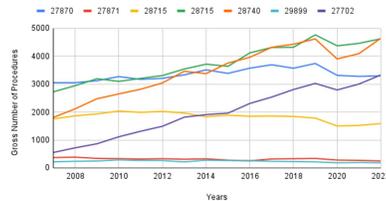
RESULTS: From 2007 to 2025, nominal reimbursement rates for all five CPT codes marginally changed: 27702 (Total Ankle Arthroplasty) by -1.21%, 27815 (Triple Ankle Arthrodesis) by -0.38%, 27870 (Open Ankle Arthrodesis) by -0.44%, and 28725 (Subtalar Arthrodesis) by -1.52%. The only procedure to have a nominal increase was 27871 (Tibiofibular Arthrodesis) by +3.41%. When adjusted for inflation, all procedures experienced substantial declines in reimbursement; 27702 by 37.05%, 27815 by 36.52%, 27870 by 36.56%, 27871 by 34.11%, and 28725 experienced the largest percentage decline at 37.25%. The total percentage change from 2007 to 2022 for each CPT showed increased utilization for CPT codes 27702 (+502.54%), 27870 (+8.06 %), 28725 (+69.78%), and 28740 (+156.98%). However, there was a reduction for CPT codes 27871 (-32.88%), 28715 (-9.52%), and 29899 (-17.35%).

DISCUSSION AND CONCLUSION: Between 2007 and 2025, there were reimbursement reductions ranging from 34.11% to 37.25% for foot and ankle arthroplasty and arthrodesis procedures when adjusted for inflation. From 2007 to 2022, utilization trends showed a notable overall increase in procedures coded as CPT 27702, 27870, 28725, and 28740, while CPT codes 27871, 28715, and 29899 demonstrated a decline in usage over the same period.

Inflation-Adjusted Physician Fee Reimbursement



Medicare Procedure Utilization Trends by CPT Code



Non-adjusted Physician Fee Reimbursement

