An Analysis of Medicare Reimbursement Rates in Orthopaedic Trauma: 2000-2018 *Jack Haglin, BS*; Ariana Lott, MD; David Neil Kugelman, MD; Sanjit R. Konda, MD; Kenneth A. Egol, MD

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Purpose: There is a paucity of data regarding financial trends for procedural reimbursement in orthopaedic trauma. A comprehensive understanding of such trends is important as continued progress is made to advance agreeable reimbursement models. The purpose of this study was to evaluate monetary trends in Medicare reimbursement rates for 20 commonly utilized orthopaedic trauma surgical procedures from 2000 to 2018.

Methods: The Physician Fee Schedule Look-Up Tool from the Centers for Medicare & Medicaid Services was queried for each of the included 20 Current Procedural Terminology (CPT) codes in orthopaedic trauma. The procedure list was compiled by the senior author prior to collection in order to ensure a comprehensive analysis of commonly utilized procedures. All monetary data were adjusted for inflation to 2018 US dollars (USD) utilizing the consumer price index. Both the average annual and the total percentage change in reimbursement were calculated based on these adjusted trends for all included procedures.

Results: After adjusting for inflation, the average reimbursement for all procedures decreased by 23.0% from 2000 to 2018. The greatest mean decrease was observed in the open treatment of trimalleolar ankle fracture with internal fixation (-48.8%). The only procedure with an increased adjusted reimbursement rate throughout the study period was the open treatment

of scapular fracture with internal fixation (+4.0%). Additionally, the adjusted reimbursement rate for all included procedures decreased by an average of 1.5% each year (Table 1).

Conclusion: This is the first study to evaluate trends in procedural Medicare reimbursement for orthopaedic trauma. When adjusted for inflation, Medicare reimbursement for included procedures has steadily decreased from 2000 to 2018. Increased awareness and consideration of these trends will be important for policymakers, hospitals, and surgeons in order to ensure continued access to meaningful surgical orthopaedic trauma care in the United States.

CPT Code	Procedure	Average % Change Year to Year Adjusted	Total % Change 2000- 2018 Adjusted
23515	Open treatment of clavicular fx w/ internal fixation	-0.2%	-3.0%
23615	Open treatment of proximal humeral fx w/ internal fixation	-0.5%	-8.6%
24515	Open treatment of humeral shaft fx w/ plate/screws	-1.3%	-20.4%
24586	Open treatment of periarticular elbow fx elbow (distal humerus and proximal ulna and/or proximal radius)	-1.5%	-23.7%
23585	Open treatment of scapular fx (body, glenoid or acromion) w/ internal fixation	+0.2%	+4.0%
24685	Open treatment of ulnar fx, proximal end (eg, olecranon or coronoid process)	-1.7%	-26.0%
25515	Open treatment of radial shaft fx w/ internal fixation	-1.5%	-24.5%
25545	Open treatment of ulnar shaft fx w/ internal fixation	-1.9%	-28.4%
27235	Percutaneous fixation of femoral fx, proximal end, neck	-1.5%	-25.1%
27236	Open treatment of femoral fx, proximal end, neck, internal fixation or prosthetic replacement	-1.4%	-21.8%
27244	Treatment of intertrochanteric, peritrochanteric, or subtrochanteric femoral fx; with plate/screw type implant	-1.3%	-19.9%
27248	Open treatment of greater trochanteric fx w/ internal fixation	-1.7%	-29.6%
26506	Open treatment of femoral shaft fx w/ plate/screws w/ intramedullary implant	-1.2%	-18.5%
27507	Open treatment of femoral shaft fx w/ plate/screws	-1.8%	-30.3%
27536	Open treatment of tibial fx, proximal (plateau); bicondylar w/ internal fixation	-0.9%	-14.3%
27758	Open treatment of tibial shaft fx with plate/screws	-1.6%	-25.7%
27759	Treatment of tibial shaft fx by intramedullary implant	-1.6%	-26.6%
27814	Open treatment of bimalleolar ankle fx w/ internal fixation	-1.7%	-26.5%
27822	Open treatment of trimalleolar ankle fx w/ internal fixation	-3.1%	-48.8%
27828	Open treatment of pilon or tibial plafond fx w/ internal fixation	-2.8%	-40.8%
	Average	-1.5%	-23.0%

Table 1. Adjusted Reimbursement Trends. All values adjusted for inflation.

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