

Are There Regional Patterns in Industry Funding Among Academic Orthopedists?

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INTRODUCTION: On average, academic orthopedists receive larger research and non-research industry payments than their community counterparts. Literature supports that receiving funding has a positive effect on one's scientific impact. To our knowledge, no study has been conducted on the payment differences among U.S. regions in the field of academic orthopedics. The purpose of this cross-sectional study was to assess these differences in industry funding among four geographic regions in the U.S.

METHODS: Academic orthopedic programs in the United States were identified using the Fellowship and Residency Electronic Interactive Database (FREIDA). Available demographic and training data for surgeons was collected from institutional websites and Doximity. Programs were categorized based on geographic location: Northeast, Midwest, West, or South. General payments and number of payments were collected from the Centers for Medicare & Medicaid Services Open Payments Program for all available years (2014-2020). Average payment size was calculated by dividing the total CMS general payment amount by the total number of payments. Statistical analyses were conducted using IBM SPSS Version 25 and SAS Studio 3.8.

RESULTS: Of 2,725 orthopedists identified from 122 residency programs, 799 (29.32%), 437 (16.04%), 444 (16.29%), and 1,045 (38.35%) worked in the Northeast, Midwest, West, and South, respectively. The average CMS general payments were \$204,167.24, \$168,164.33, \$235,857.29, and \$99,925.15 in the Northeast, Midwest, West, and South, respectively. The average payment sizes were \$1,725.56, \$1,229.17, \$1,524.41, and \$918.34 in the Northeast, Midwest, West, and South, respectively. The Northeast and West had greater CMS general payments than the South ($p = 0.013$; $p = 0.007$). No other regional comparisons demonstrated significant differences in CMS general payments. The average payment size was greater in the Northeast than the South ($p = 0.013$). The number of payments was greater in the Midwest compared to the Northeast ($\bar{x} = 140.48$ vs. 61.83 , $p = 0.028$) and South ($\bar{x} = 140.48$ vs. 71.00 , $p = 0.042$). A Northeastern orthopedist was 1.57 times more likely to receive a payment than a Southern orthopedist ($p = .041$).

DISCUSSION AND CONCLUSION: On average, orthopedists in the Northeast received the greatest industry funding. The Northeast and West received greater industry funding than the South. Further, the average payment size and likelihood of receiving a payment was greater in the Northeast than the South. CMS data is a measure of industry funding that can provide insight into resource allocation and scholarly impact at academic institutions.