

# **Determinants of Salary Variation and the Gender Pay Gap: A Survey of the American Association of Hip and Knee Surgeons (AAHKS) Surgeon Member Workforce**

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## **INTRODUCTION:**

The increased emphasis on reimbursement, diversity, and burnout in medicine – and particularly hip and knee arthroplasty – necessitates a foundational understanding of the surgeon workforce. The purpose of the study was to cross-sectionally survey a representative sample of the AAHKS surgeon membership on the subject of salary, practice patterns, and demographic factors to establish a baseline framework for future advocacy efforts and initiatives.

**METHODS:** An online survey was sent to AAHKS members between December 20, 2022 and January 19, 2023. Surgeon demographic data, experience, practice geography and type, and annual case volume were solicited. Univariate and multivariate analyses were performed to describe the association of respondent characteristics with reported salary directly from patient care and indirect revenue streams.

**RESULTS:** A total of 730 AAHKS members responded to the survey. The largest proportion of surgeons performed 251 to 400 cases annually (36%); 81% (n=592) and 93% (n=679) of respondents identified as white and male, respectively. Case volume was the primary determinant for surgeon salary, followed by practice type, years in practice, and gender. After controlling for confounding variables, multivariate analyses revealed the direct salary of women surgeons was 14.4% less than men (95% C.I., 0.4% – 28.3%). When considering indirect revenue, the gender pay gap widened. Salary was not associated with reported hours worked per week, geographic location, or ethnicity.

**DISCUSSION AND CONCLUSION:** Salary is an important but under-discussed subject that reflects the realities of our culture and value system in medicine. In the largest survey of salary data among hip and knee arthroplasty surgeons to date, a direct relationship between salary and modifiable variables like case volume is clear. Even after controlling for confounders, women arthroplasty surgeons still earn 86 cents on the dollar compared to their male colleagues from direct surgical revenue.