

Factors and Attributes of Adult Hip and Knee Fellowship Programs that are Important to Applicants and their Perspectives on Robotic-Assisted Arthroplasty Surgery

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INTRODUCTION: There are a multitude of factors dictating applicants' preferences when applying to Orthopaedic Surgery Fellowship programs. Learning what applicants value in a training program could help existing programs evolve and improve their training environments. In the case of Adult Reconstruction programs, robotic-assisted surgery exposure has been a widely discussed topic. The purpose of this study is to determine the relative value of various factors to Adult Hip and Knee Fellowship applicants when choosing a program and their perspectives on robotic-assisted arthroplasty during training and in their future practice.

METHODS: We surveyed 780 Adult Hip and Knee Fellowship applicants who applied to our fellowship to matriculate in 2020-2024. The survey assessed factors concerning people and perceptions, logistics, salary and benefits, program reputation and curriculum, and surgical experience. Additionally, we surveyed fellows' attitudes toward using robotic surgery and toward its impact on patient outcomes.

RESULTS: We received 130 responses (16.7% response rate). Using a Likert Scale, the highest rated factor was Level of Hands-On Operative Experience (4.83/5). The attributes most frequently included in applicants' Top-5 Factors included Revision Hip Volume (53.8%), Revision Knee Volume (52.3%), Level of Hands-On Operative Experience (46.2%), Anterior Hip Case Volume (40.8%), and Perceived Happiness/Quality of Life of Current Fellows (34.6%). Robotic hip and knee volume were included in 3.1% and 9.2% of applicants' Top-5 factors. Sixty-five percent of applicants plan to use robotics in their practice, 7.7% do not, and 26.9% said "Maybe." Those who plan to use robotics most frequently cited procedure fidelity (36.4%), patient preference (31.8%), and marketability (29.4%) as reasons to use robotics. Of all respondents, 35.3% believe patient outcomes are improved with robotics.

DISCUSSION AND CONCLUSION: In general, surgical experience was the most important factor for fellowship applicants, Applicants' attitudes toward the impact and use of robotics in arthroplasty are highly variable.

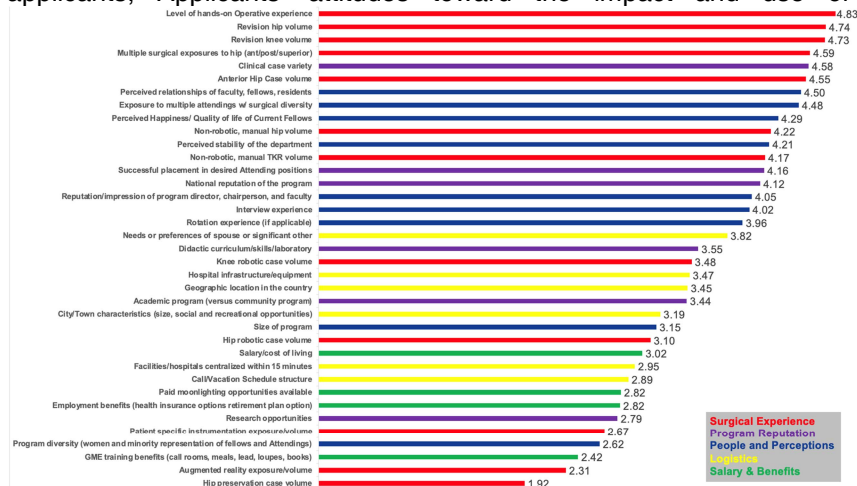


Figure 1. Rankings of Factors Most Important to Fellowship Applicants. Factors were rated for importance via a 5-point Likert Scale (1= Not at All, 5= Extremely Important). Factors are colored based on the categories shown in the key above.