

Will Orthopaedic Surgeons Survive without USMLE Step 1 Scores for Residency Selection?

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INTRODUCTION:

USMLE Step 1 has historically been one of the only objective benchmarks for residency applications, particularly in competitive specialties like Orthopaedics. As the number of medical students rise and residency spots remain stagnant, the need for an impartial criterion to stratify applicants grows. However, beginning in 2022, USMLE Step 1 is pass/fail. The reasons behind this shift include students spending a disproportionate amount of time studying for the exam, high scores consistently skewed toward economically advantaged and an overall poor correlation with clinical competency. The goal of this study is to assess the validity of USMLE Step 1 as a measure of an applicant's strength as well as identify new criteria that could take its place as well as sources of bias in application review.

METHODS:

Using The Match 2020: National Resident Matching Program Statistics, 50 artificial orthopaedic residency applications were created. All applicants were from MD programs and the remaining metrics were randomly generated, using the metric ranges provided in the Match. Independent, blinded Orthopaedic physicians reviewed blinded applications (no name, photo, medical school). Applications were scored and marked if the applicant would be awarded an interview.

RESULTS:

Regression analysis was run to determine relationships between applicant scores and variables assessed. There were statistically significant relationships between STEP 1 (0.42, $p < 0.05$), STEP 2 (0.39, $p < 0.05$) and number of research abstracts, publications, and presentations (0.02, $p < 0.05$) and overall score of the applicant. The other variables, including identifying information (ie race, gender) were not significant.

DISCUSSION AND CONCLUSION:

The importance of USMLE Step 2 and research will grow with the transition to a pass/fail USMLE Step 1. However, these metrics may also have bias and lead to medical students focusing on aspects of their applications that may also not correlate with clinical aptitude.