

TIME-SERIES ANALYSIS OF NRMP DATA FOR THE PM&R MATCH IN THE UNITED STATES

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BACKGROUND

- Physical Medicine & Rehab (PM&R) is an increasingly competitive field for medical students in the United States.
- The residency match selection process through ERAS and the NRMP has remained largely unchanged logistically in recent years.
- However, the requirements for a successful PM&R applicant have not been well-characterized in the literature.

OBJECTIVES

- Our primary goal was to identify common metrics evaluated during the match process of successful PM&R applicants using available match data.
- Our secondary objective was to determine how these objective characteristics have changed among successful PM&R applicants over the last 2 decades.
- We hypothesized that many of the objective indicators of academic achievement reported in residency applications, such as national board exam scores, medical school grades, and research activity, have become more competitive in recent years.

DESIGN

- A time-series analysis of PM&R match data was performed using reports published by the National Residency Matching Program from the year 2009 to 2020

RESULTS

- The number of PM&R residency positions increased from 370 to 480
- the total number of applicants increased from 479 to 591
- Thus, the number of applicants per position decreased from 1.3 to 1.23
- Mean USMLE Step 1 scores increased from 214 to 228
- Mean USMLE Step 2 CK scores increased from 220 to 241
- Contiguous ranks rose from 9.6 to 13.5
- The number of research experiences increased from 1.8 to 3.1
- The number of Abstracts/ Presentations/ Publications increased from 2.3 to 5.5

NRMP Reported Metric	2009	2020
Residency Positions	370	480
Total Applicants	479	591
Applicants per position	1.3	1.23
Mean USMLE Step 1 score	214	228
Mean USMLE Step 2 CK score	220	241
Average number of continuous ranks	9.6	13.5
Average number of Research Experiences	1.8	3.1
Average Abstracts, Publications, Presentations	2.3	5.5

CONCLUSIONS

- From 2009 to 2020, the mean number of abstracts, presentations, and peer-reviewed publications produced by matched PM&R applicants nearly doubled, underscoring the value of scholarly activity.
- On average, the mean USMLE step 1 and 2 scores of matched PM&R applicants increased by 14 and 21 points respectively over the same timeframe.
- These measures demonstrate that from 2009 to 2020, PM&R has attracted applicants with increasingly higher commonly reported NRMP metrics, arguing that the specialty has become more competitive over the last decade.
- However, despite the increase in these common applicant measures, the actual number of applicants per position have decreased slightly, which can be explained by increased number of PM&R residency positions over this timeframe.

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