

## ABSTRACT / METHODS

**CONTEXT/BACKGROUND:** Following the first residency match under a single-accreditation system, it remains unclear how residency applications and future match rates have changed for osteopathic medical students. A retrospective analysis of previous application and match data may reveal trends that can be used to evaluate initial changes due to the Single-Accreditation System and predict how the trajectory of osteopathic medical student representation in the medical field may continue under a single-accredited graduate medical education organization.

**OBJECTIVE:** The objective of this study is to determine a quantitative relationship between residency applications and residency matching into different specialties among osteopathic medical students over time and if these relationships deviate after the initiation of the Single-Accreditation System.

**METHODS:** This study used a retrospective analysis of residency application and match data provided by The National Resident Matching Program (NRMP) and The Electronic Residency Application Service (ERAS). Match data was collected from the NRMP archives from 2002-2020. Then the percentage of osteopathic medical students matching into different specialties was calculated to determine osteopathic medical student representation compared to allopathic medical students for ACGME-accredited residencies. Then, data was collected from ERAS to determine the percentage of residency applications for these specialties that were osteopathic medical students. Application vs. match data were quantitatively analyzed to establish trends and determine a relationship between the two from 2014-2020.

## CONCLUSIONS

These results provide a novel perspective on osteopathic residency application and match data which reveal trends in osteopathic medical student specialty interest. The initial effects of the Single-Accreditation System show promising results for future osteopathic medical student representation among several medical specialties. Future research comparing the competitiveness of allopathic vs. osteopathic medical students could also shed light on the trends of osteopathic medical student application and match percentages. Residency application and match data should be continually tracked to ensure osteopathic medical student representation under this single-accreditation system.

## RESULTS

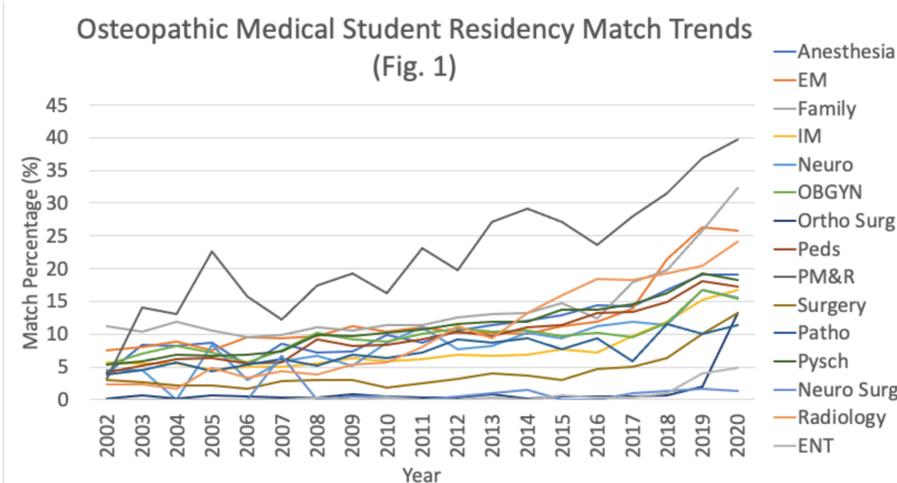


Figure 1. Percentage of Osteopathic Medical Students matching into several different specialties from 2002-2020. Family Medicine, Internal Medicine, Pediatrics, Neurology, OBGYN, etc. had a moderate increase (10-14%). Physical Medicine and Rehabilitation had a large increase of over 30%. Specialties like Orthopedic Surgery, Neurological Surgery, and Otolaryngology increased by less than 5%.

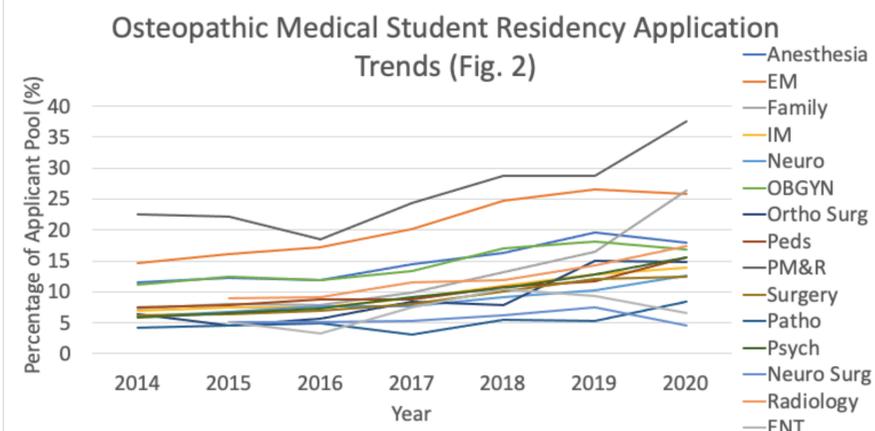


Figure 2. Percentage of Osteopathic Medical Students applying to several different specialties from 2014-2020. Most specialties have a minor increase in application percentage with Physical Medicine and Rehabilitation and Emergency Medicine having the highest percentage of applications. Pathology, Neurological Surgery, and Otolaryngology application percentage remained relatively steady.

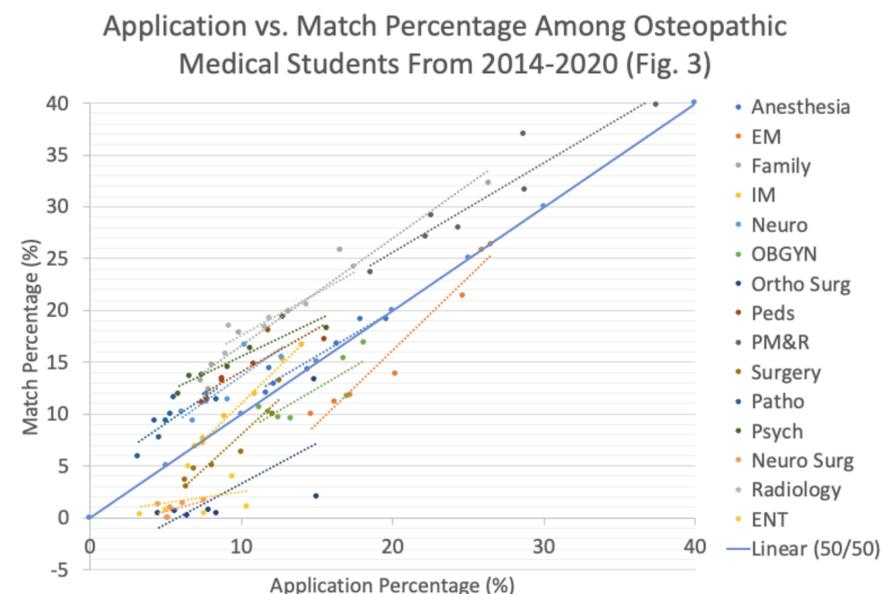


Figure 3. Application vs. Match Percentages of Osteopathic Medical Students from 2014-2020. Physical Medicine and Rehabilitation (slope=0.86,  $r=0.88$ ) and Family Medicine (slope=1.035,  $r=0.96$ ) have a strong correlation and are above the 50/50 line. Anesthesiology (slope=0.86,  $r=0.91$ ), Internal Medicine (slope=1.420,  $r=0.995$ ), and Emergency Medicine (slope=1.41,  $r=0.96$ ) remain close to the 50/50 line. Orthopedic Surgery (slope=0.773,  $r=0.48$ ), Neurological Surgery (slope=0.391,  $r=0.33$ ) and Otolaryngology (slope=0.22,  $r=0.08$ ) have shallow slopes and are below the 50/50 line.

## REFERENCES

1. "ERAS Statistics." AAMC, [www.aamc.org/eras-statistics-2019](http://www.aamc.org/eras-statistics-2019).
2. "Report Archives." The Match, National Resident Matching Program, [www.nrmp.org/report-archives/](http://www.nrmp.org/report-archives/).