Study probes resident-selection diversity in 11 physician specialties

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Brendan Murphy
Senior News Writer

Over a six-year period, 107 first-year residency positions in otolaryngology—out of 1,841 spots—were filled by medical students from historically excluded racial and ethnic groups, according to findings published in JAMA®. That 6% share highlights an inequity found in specialties considered competitive where, in many instances, the proportion of matched residents from those historically excluded groups was lower than among other applicants.

Randall A. Bly, MD, a pediatric otolaryngologist at the University of Washington, said he and his study co-authors were “surprised at the data and how conclusive it was.”

In addition to otolaryngology, Dr. Bly and his colleagues gathered data from 2013 to 2018 in 10 other specialties, including emergency medicine, neurosurgery, urology and radiation oncology. Those specialties were selected, Dr. Bly said, because they were ones that had a higher number of applications per applicant, which has sometimes been used as a metric for competitiveness.

Researchers examined the proportion of residency applicants and matches self-reporting as being from historically excluded racial and ethnic groups—African American, American Indian or Alaska Native, Hispanic or Latino, and Native Hawaiian or Pacific Islander. They then conducted statistical tests to compare the match rates with those among residency applicants who self-reported as white or Asian.

The proportion of residency applicants from these historically excluded racial and ethnic groups who matched in the 11 specialties were as follows:

- 11%—obstetrics and gynecology.
- 9%—general surgery (categorical).
- 8%—neurological surgery.
- 7%—diagnostic radiology; emergency medicine.
Among matched residents compared with applicants, six of 11 specialties exhibited significantly higher proportions of white people, says the study, “while all 11 specialties had significantly lower proportions of people from historically excluded racial and ethnic groups. According to the study, the six physician specialties in which white matched residents were overrepresented were: dermatology, emergency medicine, general surgery (categorical), obstetrics and gynecology, and plastic surgery (integrated).

AMA policy adopted in 2021 aims to foster greater diversity within medical education, and in the physician workforce, by supporting medical student pathways to training and creating a more equitable residency-selection process.

The policy calls on the AMA to “work with appropriate stakeholders to study reforms to mitigate demographic and socioeconomic inequities in the residency and fellowship selection process, including but not limited to the selection and reporting of honor society membership and the use of standardized tools to rank applicants.”

Read more about how the AMA is seeking greater efforts to diversify the physician workforce.

Need for information, change

Understanding what is driving the overrepresentation of white matched residents in these physician specialties requires more information, Dr. Bly said. Such information needs to be individualized. “Once we have that, we can identify some of the reasons behind this, and draw conclusions,” he said.

Changes in residency-selection criteria, some of which have been instituted in the years since the study data, could help.

For instance, the University of Washington residency program in otolaryngology, in which Dr. Bly works, has instituted a “distance traveled” aspect to its residency-selection criteria.

“What that means is that if their background has hardships, and applicants can voluntarily provide that information, whether it’s the first person in their family to attend college or growing up in areas where there’s a war going on, all sorts of different circumstances—we look at that carefully,” Dr. Bly said.

AMA policy on this front advocates for stakeholders in medical training to “adopt and utilize activities that bolster efforts to include and support individuals who are underrepresented in medicine by developing policies that articulate the value and importance of diversity as a goal that benefits all
participants, cultivating and funding programs that nurture a culture of diversity on campus, and recruiting faculty and staff who share this goal.”

Learn with the AMA how diversity’s power can help overcome the physician shortage.