



Expanding Representation in Otolaryngology Through Pipeline Programming

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Background

Otolaryngology remains one of the specialties with limited presence of certain demographic groups in medicine, despite a moderate increase in the national resident cohort since 2013. Over a 10-year period, demographic groups with lower presence in medicine have consistently accounted for less than 7% of all Otolaryngology residents.¹

Objectives

This study seeks to enhance representation in Otolaryngology through the implementation of a pipeline program designed to promote increased exposure, mentorship, and sponsorship within the field, while also investigating the factors influencing decisions to pursue a career in Otolaryngology.

Methods

- In August 2023 and October 2024, the Department of Otolaryngology at Emory University hosted a one-day pipeline program for medical students from demographic groups with lower presence in Otolaryngology
- The program included a morning lecture series led by academic faculty and community-based Otolaryngologists, a mentorship lunch, and an afternoon multi-station surgical simulation session.
- Participants completed 11-item pre- and post-surveys scored on a 5-point Likert scale, assessing knowledge, skills, and interest across core Otolaryngology domains
 - Statistical analysis was conducted using independent t-tests with a 95% confidence interval, performed via SPSS.

Results

- 34 students participated in the pipeline program across both years.
- 2023 cohort: Students demonstrated increased knowledge in mentorship, awareness of the competitiveness of matching into Otolaryngology, and understanding of surgical procedures including facial plating, sinonasal surgery, and tympanostomy tube placement, as well as improved comprehension of sinonasal and craniofacial anatomy.
- 2024 cohort: Students demonstrated increased knowledge in mentorship, awareness of the competitiveness of matching into Otolaryngology, and understanding of surgical procedures including suturing and knot-tying, middle ear anatomy, tympanostomy tube placement, sinonasal and craniofacial anatomy, and recognition of what constitutes a strong Otolaryngology applicant.



Program Implementation and Participant Activities

Results

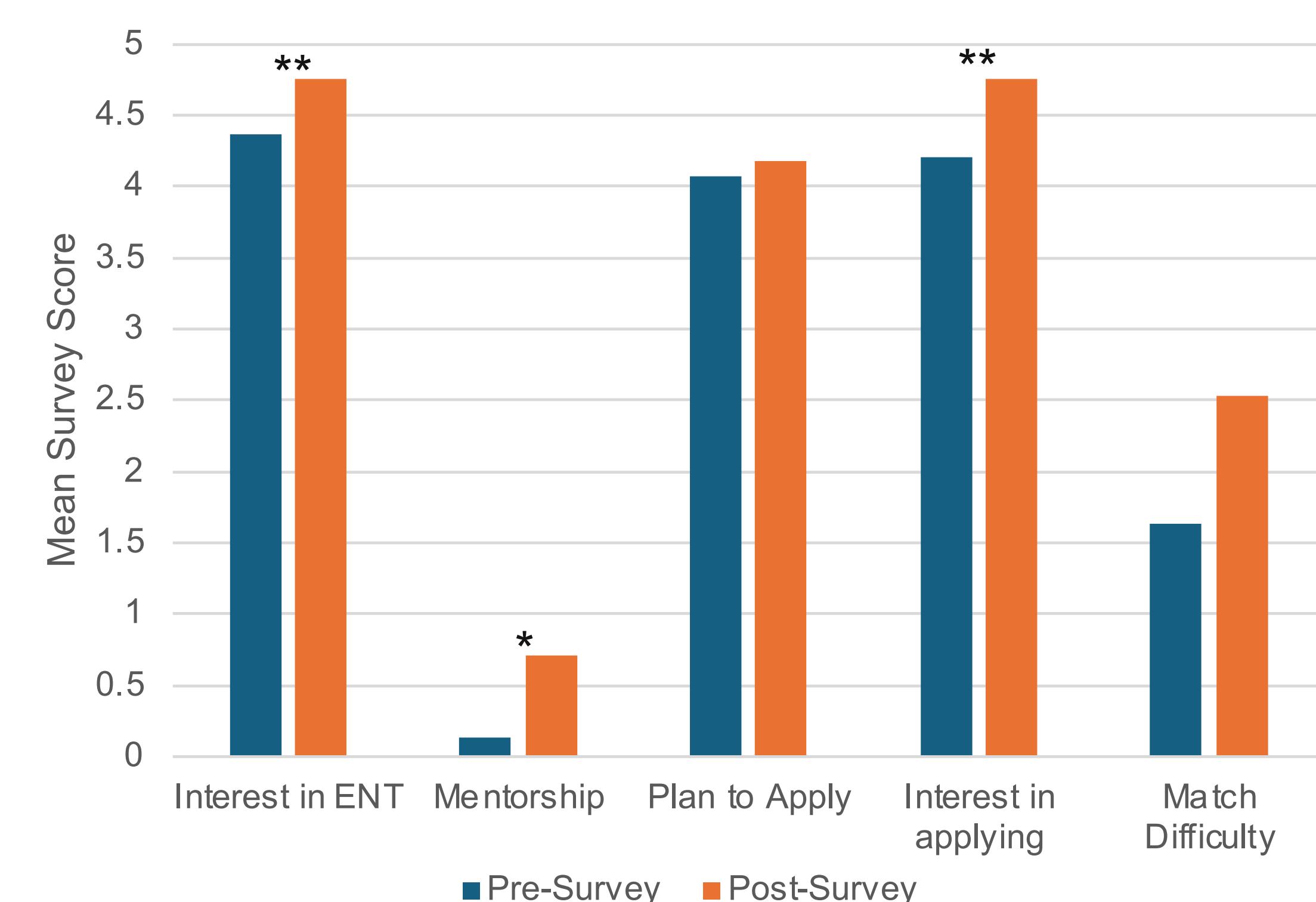


Figure 1. 2023 Growth in Mentorship Awareness and Knowledge of the Otolaryngology Field and Application Process

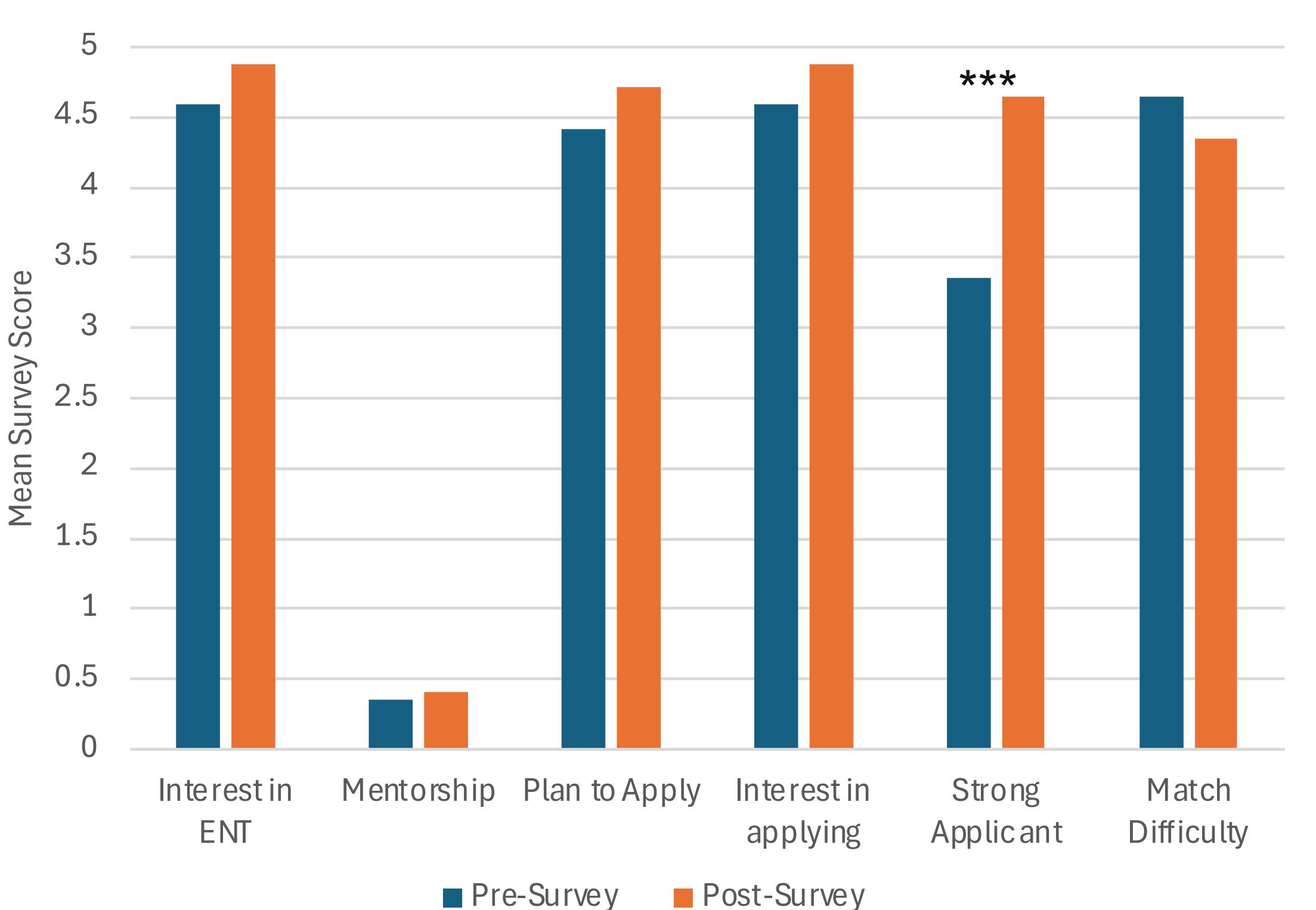


Figure 2. 2024 Growth in Mentorship Awareness and Knowledge of the Otolaryngology Field and Application Process

	Pre-Survey	Post-Survey	p-value
Middle Ear	3.29	3.53	0.445
Tympanostomy	2.07	3.82	0.533
Craniofacial	3.29	4.24	0.062
Facial Plating	1.14	4.65	0.024
Sinonasal Anat.	2.64	4.06	0.43
Sinonasal Surg.	1.29	3.76	0.012

Table 1. 2023 Participant Knowledge of Surgical Procedures

	Pre-Survey	Post-Survey	p-value
Suturing Skills	2.71	4.47	<0.001
Middle Ear	2.65	3.94	0.001
Tympanostomy	2.24	4.76	<0.001
Craniofacial	2.76	3.65	0.03
Facial Plating	1.76	1.82	0.893
Sinonasal Anat.	2.47	4.12	<0.001
Sinonasal Surg.	2.24	4.29	<0.001

Table 2. 2024 Participant Knowledge of Surgical Procedures

Participant Demographics

	Description	Number	Percent
Year in School	M2	13	76.5
	M3	3	17.6
	Post-Grad	1	5.9
	Total	17	100
Home Program	Yes	9	52.9
	No	8	47.1
	Total	17	100

Table 3. 2023 Participant Demographics

	Description	Number	Percent
Year in School	Undergrad	1	5.9
	M1	1	5.9
	M2	3	17.6
	M3	9	52.9
	M4	2	11.8
	Post-Grad	1	5.9
Total	17	100	
Home Program	Yes	5	29.4
	No	12	70.6
	Total	17	100

Table 4. 2024 Participant Demographics

Conclusions

- This two-year pipeline program highlights the importance of early exposure to Otolaryngology in fostering mentorship, providing guidance, and creating educational opportunities.
- These efforts are essential steps toward broadening the involvement of groups with limited presence within the field.
- To date, 2 previous participants have matched into an Otolaryngology residency program.

References

- Association of American Medical Colleges. Table B5. Number of Active MD Residents, by Race/Ethnicity (Alone or In Combination) and GME Specialty. 2024 Report on Residents. Updated October 15, 2024.

Acknowledgements

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