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RESEARCH LETTER

An analysis of internal and regional dermatology matches during the second year of the COVID-19 pandemic: A cross-sectional study

To the Editor: The COVID-19 pandemic has significantly impacted the dermatology residency application process over the past 2 cycles. Our previous analysis of the 2020-2021 match, in which most applicants could not complete away rotations and interviews were virtual, revealed a significant increase in internal matches (40.3%) compared with prepandemic levels (26.7%) ($P < .001$).¹ Updated guidelines released by the Coalition for Physician Accountability and confirmed by dermatology program directors limited away rotations to 1 per student with a home dermatology program for the 2021-2022 cycle.² This investigation examined the changes in internal and regional matches during this second pandemic match.

Publicly available match lists produced directly from the institution were gathered from allopathic medical schools with associated dermatology residency training programs. The total possible number of programs that met these criteria was 115. A 3-year control was established from 2017 to 2020 (70 schools) to establish baseline internal and regional match percentages. This was compared with the 2021-2022 first pandemic match (66 schools) and 2020-2021 second pandemic match (63 schools). Regions were established via the Association of American Medical Colleges Residency explorer tool.³ Statistical analysis was performed using the χ^2 test in Excel.

During prepandemic match cycles (2017-2020), 26.7% of dermatology applicants matched to their home institution. There were statistically significant increases in internal matches of 40.3% during the first pandemic match (2020-2021) and 33.5% during the second pandemic match (2021-2022). There were no significant differences in the overall proportion of regional matches across the prepandemic (61.6%), first pandemic (67.5%), or second pandemic (60.1%) matches. (Tables I and II).

The cause of this increase in internal matches is likely multifactorial, with 2 large contributors potentially being the lack of in-person interviews and the limited away rotation opportunities. The average number of self-reported dermatology away rotations undertaken by the matched applicants was as high as 2.82 between the prepandemic match years (2016-2018).⁴ Analyses have established the perceived importance of these experiences and their influence on the rank list decisions for both applicants and programs.⁵

Table I. Comparison of internal and regional matches among the baseline prepandemic match cycle (2017-2020) and the second pandemic match cycle (2021-2022)*

	Baseline match (2017-2020)	Second pandemic match (2021-2022)	P value
Regional matches	61.6% (394/639)	60.2% (160/266)	.671
Internal matches	26.7% (171/641)	33.5% (89/266)	.039 [†]
East	27.5% (53/193)	38.7% (29/75)	.073
South	29.5% (67/227)	25.3% (20/79)	.476
Central	23.0% (40/174)	31.3% (25/80)	.161
West	21.3% (10/47)	46.9% (15/32)	.016 [†]

*There was a significant increase between the baseline internal match percentage of 26.7% and the second pandemic match cycle of 33.5% ($P = .039$). There was also a significant increase in the West subgroup ($P = .016$).

[†]Significance is defined at $P < .05$.

Table II. Comparison of internal and regional matches among the first pandemic match cycle (2020-2021) and the second pandemic match cycle (2021-2022)*

	First pandemic match (2020-2021)	Second pandemic match (2021-2022)	P value
Regional matches	67.5% (156/231)	60.2% (160/266)	.088
Internal matches	40.3% (93/231)	33.5% (89/266)	.116
East	31.7% (19/60)	38.7% (29/75)	.398
South	42.2% (38/90)	25.3% (20/79)	.021 [†]
Central	45.2% (28/62)	31.3% (25/80)	.089
West	42.1% (8/19)	46.9% (15/32)	.741

*There was no significant difference between internal matches in the first and second pandemic matches ($P = .116$). There was also a significant decrease in the South subgroup ($P = .021$).

[†]Significance is defined at $P < .05$.

Although not statistically significant, the decrease in internal matches from 40.3% in the 2020-2021 cycle to 33.5% in the 2021-2022 cycle could be a result of applicants having the ability to perform 1 away rotation. If the analysis of the upcoming 2022-2023 match cycle, with normal away rotation opportunities, shows the internal match rate reverting to the baseline, then this would support the notion that away rotations have the highest impact, whereas a persistently high internal match rate would support that other factors, such as virtual interviews, are still contributing. Persistently high levels of internal

matches also create an even greater barrier to matching for medical students without a home dermatology residency program. These trends are very important to track as these data will help leaders in dermatology better understand the factors related to the pandemic that influence match patterns. The limitations of this study include that the data set only captures about 57% of medical school match lists and the inability to determine how many students match to programs they completed away rotations at.

Travis S. Dowdle, BS,^a Michael P. Ryan, MD,^b Michelle B. Tarbox, MD,^c and Richard F. Wagner, MD^d

From the School of Medicine,^a and Department of Dermatology, Texas Tech University Health Sciences Center, Lubbock, Texas^c; Department of Dermatology, University of Texas Health Science Center at Houston, Houston, Texas^b; and Department of Dermatology, University of Texas Medical Branch, Galveston, Texas.^d

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Correspondence to: Travis S. Dowdle, BS, School of Medicine, Texas Tech University Health Sciences Center, 3601 4th Street, Stop 9400, Lubbock, TX 79430-9400

E-mail: travis.dowdle@ttuhsc.edu

Conflicts of interest

None disclosed.

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