## JAAD ONLINE: NOTES & COMMENTS

## Preliminary outcomes of 2020-2021 dermatology residency application cycle and adverse effects of COVID-19



To the Editor: Due to the SARS-CoV-2 (COVID-19) pandemic, the dermatology residency application cycle was altered to mitigate adverse outcomes. The resulting actions necessitate governance processes to monitor outcomes and effects.

In December 2020, the Association of American Medical Colleges (AAMC) indicated that there was a "maldistribution of residency interview invitations," with increased invitations to the "highest tier applicants." Programs and students were encouraged to increase the number of rankings, with a recommendation for programs to focus on diversification. The AAMC also recommended students with abundant interviews to release some interviews. Overall, there was an imbalance in the average number of interviews offered to applicants.

Interestingly, preliminary 2021 application data showed a steady increase in the number of applicants over the last 6 years. Compared with 2016, the total number of applicants increased by 19.7%, the average applications submitted increased by 6.2%, and the average applications received by programs increased by 6.5% in 2021. However, the number of dermatology programs increased by 12.5% from the 2016-2017 to 2019-2020 academic years, with 527 open residency positions for the 2020 cycle. As discrepancy increases between dermatology applicants and positions, solutions must be sought.

A potential solution is to limit the total applications submitted and interviews accepted (12-14, matching probability >95%) with the support of majority stakeholders.4 An applicant's accepted invites will be blinded to programs, allowing the prioritization of interviews. The difficulty lies in the feasibility of implementation because the AAMC is financially disincentivized to change the status quo. Residency applications provide 41.1% (94 million) of the AAMC's total revenue. <sup>5</sup> The Electronic Residency Application Service revenue increased at 9.0% compounding annual growth rate (2009-2019) compared with the applications submitted, which increased by 6.2% (2016-2021), and a potential explanation is the increase in application fees to offset operational expenses.<sup>2,5</sup>

Additionally, we encourage programs to participate in coordinated releases with a sequential multistep timeline, allowing 2 weeks to evaluate invites and prepare for the next steps, repeated in multiple

rounds. The current coordinated release was a great first attempt; however, further modifications are required. Sequential processes allow participants and programs to better plan and coordinate interview logistics. However, interview maldistribution might persist with a preponderance for "highest tier applicants" through each release. This downfall could be alleviated when implemented in combination with preferential signaling, allowing holistic applicant review.

With favorable outcomes for PhD candidates and in predictive models, the 2020-2021 otolaryngology match cycle uniquely implemented a 5-token preference signaling.<sup>4</sup> The implementation of preference signaling in dermatology would allow the applicants to signal serious interest, which was previously indicated through rotations. 4 Programs can holistically review select candidates. <sup>4</sup> As 7%-21% of applicants receive over half of the interviews, the token system will allow for a comprehensive review. 4 However, the students may be interested in more than the allotted token number and may not be able to change their choice if their interests change over the interview season. Rolling tokens are not recommended as the applicants could send preference signals to numerous programs. These combined steps might allow for the maximization of successful matching.

The changes to the dermatology residency application cycle have resulted in increased barriers for the applicants and programs. We anticipate these challenges may affect the next match cycle as COVID-19 cases may still persist. Overall, we hope our recommendations will trigger positive systemwide changes allowing for greater transparency and support of applicants.

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Funding sources: None.

IRB approval status: Not applicable.

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J AM ACAD DERMATOL JUNE 2021 e263

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## Conflict of interest

None disclosed.

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https://doi.org/10.1016/j.jaad.2021.03.034