create conflicts of interest that should be explicitly disclosed and addressed. Furthermore, account credentials were often unmentioned (71% [104 of 146] of all influencers, and 27% [15 of 55] of health care influencers).

Medical information on social media should come from reliable sources, because patients use social media to join communities and make treatment decisions.[4,5] Given the scant regulation in these arenas, medical information from unqualified sources may result in misguided management or unnecessary treatment. Thus, Instagram may represent an unrealized opportunity for dermatologists and dermatology organizations to share quality educational content to counter potentially biased promotional content and misinformation. Moreover, dermatologists should anticipate that many patients are using Instagram as a source of dermatologic information and be prepared to advise on awareness of promotional interests and qualifications on social media.

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Reliability of self-reported data on social media versus National Residency Match Program charting outcomes for dermatology applicants

To the Editor: Matching into dermatology is extremely competitive. In 2019, there were a total of 701 applicants for 447 postgraduate year 2 spots.[1] Among US medical student seniors applying to dermatology, 257 applicants (36.6%) went unmatched. Social media has risen to the forefront of online resources residency applicants use to solicit advice, gauge the competitiveness of their application, and develop connections within the field. This potentially anonymous forum offers applicants a strong support network and a level of transparency in sharing opinions.

Few studies have examined the accuracy of self-reported match data on social media websites. One study compared data on Student Doctor Network (SDN) versus National Residency Match Program (NRMP) Charting Outcomes for radiation oncology residency applicants.[2] There is a need to examine NRMP charting outcomes and self-reported academic metrics on SDN and Reddit, 2 popular social media forums used by health professional students, to highlight trends and better inform prospective applicants in the field of dermatology.

In this study, we reviewed self-reported academic metrics for applicants on SDN and Reddit. There were 478 applicants between 2014 and 2019 who reported data on SDN and Reddit. Reporters used a yearly Google spreadsheet to document their academic metrics. The major categories reported include United States Medical Licensing Examination (USMLE) Step 1 and Step 2 scores, Alpha Omega Alpha (AOA) membership, medical school ranking, advanced degrees (eg, PhD), and research productivity. Combined match data from both SDN and Reddit were compared to NRMP Charting Outcomes (2014, 2016, and 2018).

There were 126 applicants who self-reported and successfully matched into a US dermatology residency between 2014 and 2019. Table I[3-5] shows

Table I. Comparison of dermatology self-reported applicant data and NRMP charting outcomes

Applicants	Self-reported dermatology match data*					NRMP charting outcomes			
	2014-2015 (n = 32)	2015-2016 (n = 34)	2016-2017 (n = 26)	2018-2019 (n = 34)	Average[†] (2014-2019)	2014	2016	2018	Average[†] (2014-2019)
Mean USMLE Step 1[‡]	249.2	253.3	246.6	248.5	249.4	247	249	249	248.3
Mean USMLE Step 2[‡]	257.3	261.4	256.6	250.4	256.4	255	257	256	256
AOA, %	56.2	67.64	38.4	35.7	49.5	50.8	52.8	49.1	50.9
Top 40 US medical school, %	37.5	51.61	42.3	35.2	41.6	40.3	41.9	47.6	43.2
PhD, %	15.6	14.7	3.8	2.9	9.2	5.1	8	6.2	6.4
Mean number of Publications/presentations/ posters on ERAS[‡]	9.8	11	18.2	15.6	13.6	9.5	11.7	14.7	11.9

AOA, Alpha Omega Alpha; *ERAS*, Electronic Residency Application Service; *NRMP*, National Resident Matching Program; *USMLE*, United States Medical Licensing Examination.

*Self-reported dermatology match data include both Reddit and Student Doctor Network. Year 2017-2018 was excluded in the analysis because no applicants self-reported match results.

[†]Average of the self-reported data taken from Reddit and Student Doctor Network for the academic years 2014-2015, 2015-2016, 2016-2017, and 2018-2019.

[‡]One-sided *t* test showed no statistically significant difference between self-reported social media data and NRMP charting outcomes.

a comparison of self-reported data on SDN and Reddit (2014-2019) with NRMP charting outcomes. USMLE Step 1 and Step 2 scores (2014-2019) approximated NRMP charting outcomes, with no statistically difference between the 2 groups. There was more discrepancy of non–board score academic metrics (AOA, PhD, medical school reputation) relative to the NRMP reports. Statistical similarity, however, was not assessed because of the qualitative nature of these results.

Overall, our results suggest that self-reported social media data may correlate with NRMP charting outcomes. There was no statistically significant difference between self-reported and available NRMP data for Step 1 scores, Step 2 scores, and research productivity (*P* values ranging from .15 to .45). Additionally, social media websites provide information not available through the NRMP, such as number of honored rotations, dermatology subinternships, programs applied to, interview invites, and whether applicants took a research year.

The study is, however, limited by small sample sizes, selection bias toward reporting by successfully matched applicants, and variability in self-reporting, making it difficult to infer the generalizability of the self-reported data. Our results nonetheless suggest that aggregate data on social media are relatively accurate in approximating NRMP charting outcomes. Academic metrics such as board scores and AOA status were slightly closer to charting outcomes than research productivity. Medical students should therefore look for overall trends instead of comparing themselves to any particular applicant.

In summary, social media may provide a somewhat reliable source of information for prospective applicants applying to dermatology residency.

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