Identifying Barriers Faced by Applicants without a Home Residency Program when Matching into Plastic Surgery

Steven L. Zeng BA1, Gloria X. Zhang BA1, Denisse F Porras BS1, Caitrin M. Curtis MD3, Adam D. Glener MD1, J. Andres Hernandez MD3, William M. Tian BS5, Brett T. Phillips MD3.

1Duke University School of Medicine, Durham NC
2Department of Plastic and Reconstructive Surgery, Wake Forest University, Winston Salem NC
3Division of Plastic Surgery, Department of Surgery, Duke University, Durham NC

INTRODUCTION

- Plastic surgery residency is competitive with one of the lowest match rates.
- Several factors contribute to success: test scores, research, letters of recommendation (LOR), and performance on away rotations.
- Certain groups face additional barriers when matching.
- Applicants from institutions without home residency programs (HRPs) match at lower rates and have less representation at top quartile programs.

STUDY GOAL AND PROJECT AIM

- Study Goal: To identify challenges faced by applicants without HRPs and propose solutions aimed at promoting diversity among plastic surgeons.
- Project Aim: Provide insight and inform efforts to promote diversity among plastic surgeons.

MATERIALS AND METHODS

- Surveys: Two surveys were designed for plastic surgery applicants in the 2022 Match and plastic surgery residents (PGY1-5).
- Questions: Questions characterized their home institution, their Match process, perceptions on the impact of no HRP, and resources used during their application process.
- Analysis: Categorical variables were analyzed using Chi-square analysis, and independent student t-test was utilized for analysis of continuous variables.

RESULTS

- Figure 1: Recent trends in plastic surgery residency applications and positions. (1)
- Figure 2a: (Left) 100 applicants and residents were surveyed. 74 respondents (39%, 33 residents and 41 applicants).
- Figure 2b: (Right) 50% of applicants responded (n=41), and 33% of residents responded (n=38).
- Figure 3: Responses to “Do you feel that without a home plastic surgery department that you were at a significant disadvantage matching in a plastic surgery program?”
- Figure 4: (Upper Left) Percent of matched vs unmatched applicants with plastic surgery mentors. 4b (Bottom) Percent of resources used by matched applicants to identify a mentor. 4c (Upper Right) Percent responses from matched vs unmatched applicants showing resources used while applying.
- Figure 5: Percent responses from applicants with and without plastic surgery divisions, demonstrating that feeling delayed in their decision (p=.06 vs 73%), not having opportunities to explore the field (28% vs 76%), and difficulty finding research (20% vs 85%).

DEMOGRAPHICS

- Participants: 74 respondents (39%, 33 residents and 41 applicants).
- Match rates: 51% (37 residents and 20 applicants).
- Letters of recommendation: 70% (33 residents and 21 applicants).
- Performance on away rotations: 80% (33 residents and 25 applicants).

CONCLUSIONS

- Applicants without an HRP and home plastic surgery division face additional barriers to matching.
- Solutions can be modeled off of those used by other competitive surgical sub-specialties.

RECOMMENDATIONS

- Mentorship is a critical component to Match success.
- Apply for programs that allow applicants to identify mentors.
- Investigate the prevalence of interest groups and form additional groups associated with national organizations.
- Establish national or regional grants targeted towards students without HRPs to bolster their access to research.
- Encourage creation social media presence by all plastic surgery residency programs.
- Establish national or regional grants targeted towards students without HRPs to bolster their access to research.
- Create mentorship programs with already established ACAPS sister institutions, based on strategies in other surgical subspecialties.

REFERENCES