

Continuous Quality Improvement of a Race Concordant ‘Family-Style’ Mentorship Program



Kathryn Reed, MS, PA-C, Yousra Elsir, PA-C, Jeffrey Cooper, PhD, Marshall Honaker, MS, Mariah Jones, MS, PA-C, AAHIVS, Erica Williams, MS, PA-C, Fallon Lotson, DHSc, PA-C, Christa M. Fleming, PA-C, Jordan Hood, MS, PA-C
University of Pittsburgh Department of Physician Assistant Studies

Abstract

Studies show that increasing the proportion of underrepresented in medicine (URiM) providers would lessen the impact of provider bias, prejudice, and stereotyping, thereby improving health outcomes for minoritized populations.¹ However, the path to actualizing this goal remains difficult, specifically within the PA profession, due to a lack of identity-concordant PAs who represent URiM students and a lack of accessible support through the application, educational, and career processes. Race-concordant mentorship has been proposed as part of the solution.² The National Society of Black PAs (NSBPA) Mentorship Program aims to improve this critical issue through the continued implementation of a sustainable model of mentorship. This study provides an interval evaluation of the impact and quality improvement of this mentorship model and how the data-driven process continues to improve the experience and perceived participant value.

Introduction

Mentorship remains an important tool for recruiting and retaining diverse health science students and race-concordant mentorship is highly desired by underrepresented in medicine (URiM) students.^{2,3} Minority-focused mentorship programs have a positive impact on increasing the numbers of health professionals from URiM backgrounds.^{1,3} The National Society of Black PAs (NSBPA) Mentorship Program began in January 2021 as a response to the lack of racial and ethnic diversity in the PA profession and was based on research which suggests that increased proportions of URiM providers would lessen the impact of provider bias thereby improving health equity and reducing health disparities.¹

The National Commission on Certification of PAs (NCCPA)'s 2023 Statistical Profile of Certified Physician Assistants shows that the responding PAs identify as follows:

- 79.9% White
- 3.4% Black or African American
- 0.3% Native Hawaiian/Pacific Islander
- 0.4% American Indian or Alaskan Native
- 7.2% Hispanic

The desirability of race-concordant mentorship and the limited number of practicing certified PAs who identify as being from URiM backgrounds led to the development of a “family-style” mentorship structure. This structure effectively utilizes practicing certified PA volunteer mentors without overburdening a single person – a consideration which is of vital importance to the sustainability of these models.⁴

Methodology

The NSBPA Mentorship Program begins new cohorts every January. Geographically similar “families” are created by the NSBPA Mentorship Committee. Each “family” consists of 2-4 pre-PA students, 1-2 current PA students, and 1-2 practicing certified PAs of varying experience levels. These “families” then communicate via Zoom, e-mail, and group texts at intervals determined by the individual “families” for one year to support the pre-PA students as they navigate the Centralized Application Service for PAs (CASPA) and PA program application processes.

Participants (pre-PAs and their mentors) from the first four cohorts completed surveys containing 13-32 items related to their demographics, program quality, participant satisfaction, and goals of the pre-PAs, especially regarding admission to a PA program. Surveys were completed at six months (program mid-point), allowing the NSBPA Mentorship Committee to adjust and better serve both the current and following cohorts. Descriptive statistics were used to compare data between the cohorts at the six-month mark to assess for improvement.

Results

Mid-point program survey responses from participants in the NSBPA Mentorship Program (Cohorts 1 – 4) were analyzed to assess both communication effectiveness and overall program satisfaction. Mentor response rates ranged from 29 to 41 participants per cohort (number of mentors in Cohorts 1 – 4 were 63, 60, 100, and 44, respectively). Mentee response rates ranged from 24 to 52 participants per cohort (number of mentees in Cohorts 1 – 4 were 120, 158, 129, and 74, respectively).

Communication effectiveness showed a positive trend across cohorts. Mentor-reported mean scores steadily increased from 3.24 (Cohort 1) to 4.15 (Cohort 4), and mentee scores rose from 3.00 to 3.50 over the same period. Median and mode scores also improved, with higher proportions of “Extremely effective” responses observed in later cohorts.

Similarly, program satisfaction scores were consistently high and increased in later cohorts, particularly among mentors. Mentor satisfaction means ranged from 3.93 (Cohort 1) to 4.46 (Cohort 4), with Cohort 4 reporting the highest level of satisfaction. Mentee satisfaction peaked in Cohort 3 (mean = 4.14), with a slight decline in Cohort 4 (mean = 3.79). However, medians remained ≥ 4.00 across all groups.

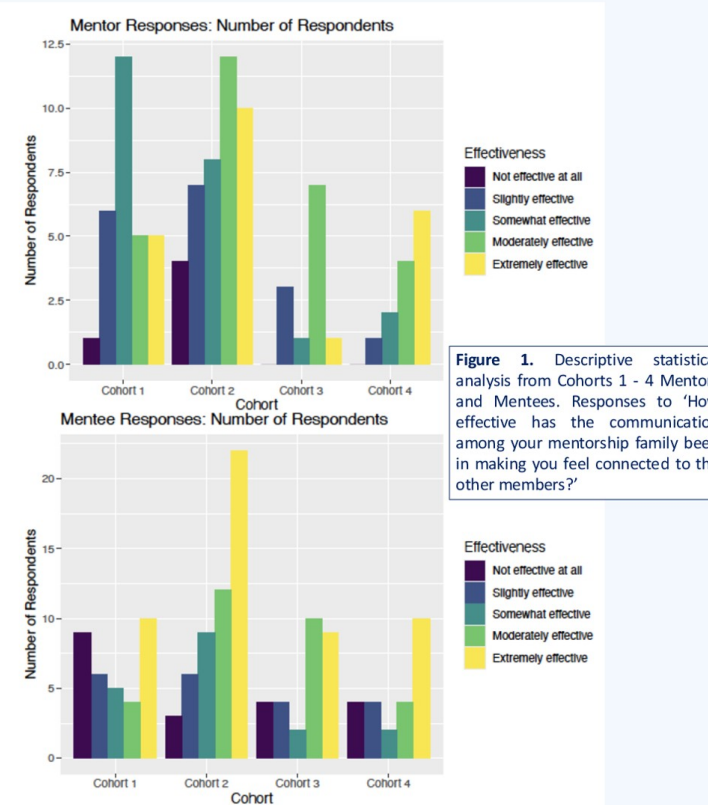


Figure 1. Descriptive statistical analysis from Cohorts 1 - 4 Mentors and Mentees. Responses to ‘How effective has the communication among your mentorship family been in making you feel connected to the other members?’

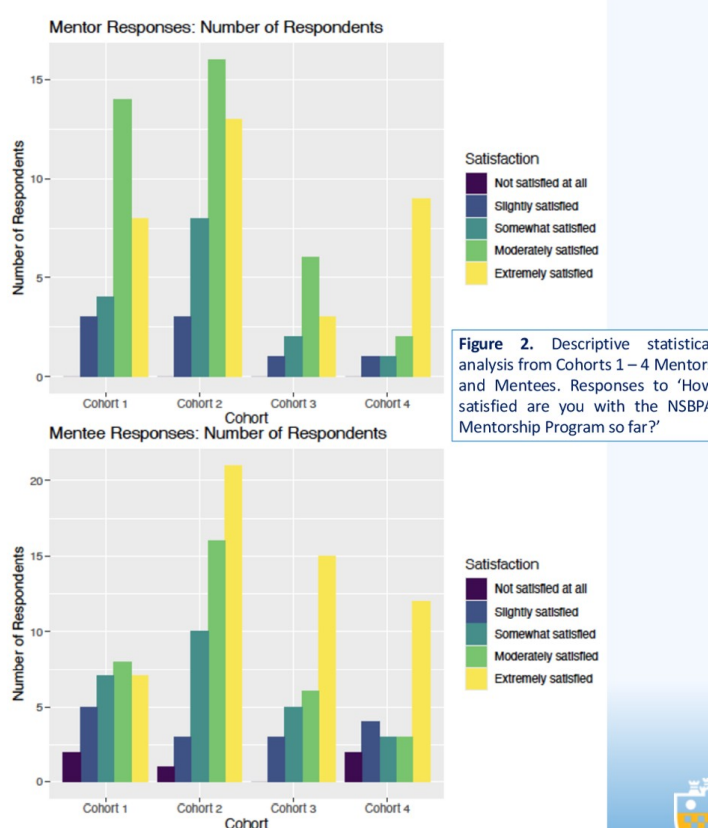


Figure 2. Descriptive statistical analysis from Cohorts 1 - 4 Mentors and Mentees. Responses to ‘How satisfied are you with the NSBPA Mentorship Program so far?’

Discussion

These results suggest strong and growing participant satisfaction, particularly among mentors in later cohorts. The improving positive experiences align with interval program alterations including a Mentor Resource Google Folder (Cohorts 3 and 4), a Zoom-based Mid-Point Mentor Check-In (Cohort 4), an improved mentorship application and marketing process (Cohort 2 – 4), and smaller mentorship families with fewer mentees (Cohorts 3 and 4).

The slight decrease in mentee program satisfaction in Cohort 3 could be due to a variety of factors. Themes identified from the qualitative data from Cohort 3 include challenges with mentor responsiveness, preference for mentor-directed engagement, and requests for in-person shadowing experiences with mentors.

Conclusion and Limitations

Novel race-concordant mentorship programs, like the NSBPA Mentorship Program, that use data analysis to improve experiential and perceived participant value for URiM pre-PA students, current PA students, and practicing certified PAs are an integral component in the sustained effort to increase the diversity of the PA profession and improve health outcomes for minoritized populations.

There are several limitations to this study. First, data was collected at a single time point, capturing only mid-program perceptions and not reflecting changes over time. Second, response rates, particularly among certain cohorts, were relatively low, which may limit the impact of the findings. Finally, as the data were drawn from a single mentorship program, the results may not be generalizable to other programs or contexts.

Acknowledgements

We are grateful for the involvement and responsiveness of the NSBPA Mentorship Program participants as well as the support and expertise shared by faculty and staff in the University of Pittsburgh Department of Physician Assistant Studies and Department of Statistics.

References

1. Kayingo, G., Bradley-Guidry, C., Burwell, N., Suzuki, S., Dorough, R., & Bester, V. (2022). Assessing and benchmarking equity, diversity, and inclusion in healthcare professions. *JAAPA (Montvale, N.J.)*, 35(11), 51–54. <https://doi.org/10.1097/01.JAA.0000885184.50730.94>
2. Penalzo, N.G., E. Zaila Ardines, K. Does, S., Washington, S. L., Tandel, M. D., Braddock, C. H., Downs, T. M., Saigal, C., & Ghanney Simons, E. C. (2023). Someone Like Me: An Examination of the Importance of Race-Concordant Mentorship in Urology. *Urology (Ridgewood, N.J.)*, 171, 41–48. <https://doi.org/10.1016/j.urology.2022.08.059>
3. Moreno, N.A., Dimick, J. B., & Newman, E. A. (2020). Mentorship strategies to foster inclusivity in surgery during a virtual era. *The American Journal of Surgery*, 220(6), 1536–1538. <https://doi.org/10.1016/j.amjsurg.2020.07.006>
4. McClelland, S. & Gardner, U. G. (2022). The giant triplets impeding black academic physician workforce diversity. *Journal of the National Medical Association*, 114(6), 554–557. <https://doi.org/10.1016/j.jnma.2022.09.011>
5. Rinderknecht, F. B., Kouyate, A., Teklu, S., & Hahn, M. (2023). Antiracism in action: Development and outcomes of a mentorship program for premedical students who are underrepresented or historically excluded in medicine. *Preventing Chronic Disease*, 20, E49. <https://doi.org/10.5888/pcd20.220362>
6. National Commission on Certification of Physician Assistants. (2023). *Statistical profile of board certified PAs: Annual report 2023*. Retrieved December 20, 2024, from <https://www.nccpa.net/wp-content/uploads/2023/04/2022-Statistical-Profile-of-Board-Certified-PAs.pdf>
7. Physician Assistant Education Association. (2020). *By the numbers: Student report 4: Data from the 2019 matriculating student and end of program surveys*. Washington, DC: Author. <https://doi.org/10.17538/SR2020.0004>