

Prime Time: Outcomes of a Mentorship Program for Underrepresented Pre-Medical Students from the California San Joaquin Valley (SJV)

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Purpose

To assess the impact of PRIME Time, a longitudinal pre-medical mentorship program in the San Joaquin Valley (SJV), by eliciting perspectives from the mentees.

Background

The SJV has the lowest ratio of licensed medical doctors per 100,000 people in California.¹ Recruitment of SJV pre-medical students was recommended by the University of California Health to improve the physician pipeline, but SJV students face barriers to matriculation into medical school, including lack of mentorship.² PRIME Time is a longitudinal mentorship program designed and led by medical students, aimed to improve SJV pre-medical students' matriculation into medical school.

Methods

The mentorship program

Four seminars outlining the various components of the medical school application were delivered over the course of two months. A sub-cohort of students were additionally assigned to a medical student mentor with whom they met at least twice.

The research study

- Mixed-methods surveys were administered at the beginning of the first session, and at the end of the last session.
- Descriptive statistics were used to characterize demographic data. Absolute differences and confidence intervals compared before- and after- rating scales. Confidence intervals that did not cross 0 were determined to be significantly different.
- Thematic coding was used to elicit themes from respondent's free-response answers. Two raters independently coded the responses and then combined overlapping codes to determine the final themes.

Results

Figure 1. Map of Respondent Home Counties

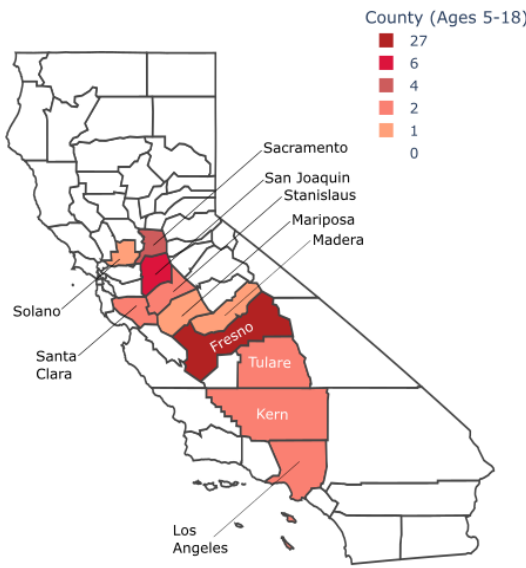


Table 1. Respondent Demographics

Category	Sub-Category	No. (%)
Age (n=56)	Between 18-23	32 (57)
	24-28	20 (36)
Gender	Female	
Primary Language Spoken in Home Between Ages 5 – 18 (n=57)	English	29 (51)
	Spanish	17 (30)
	Punjabi	12 (21)
	Hmong	5 (9)
Highest Level of Education Completed by at Least One Parent (n=59)	High School	24 (41)
	College/University	11 (19)
	Graduate School	8 (14)
Identifies as Underrepresented in Medicine (URiM) (n=59)	Yes	39 (66)
Undergraduate Institutions Attended (n=59)	Fresno State	26 (44)
	Fresno City College	14 (23)
	Clovis Community College	8 (14)
	UCLA	9 (15)
	UC Merced	7 (12)
Has a Mentor that Assists with Medical School Application (n=59)	Yes	36 (66)
	No	23 (39)



Figure 1. Percentage Correct of Responses to Pre-Med "Medical Training Knowledge Quiz"

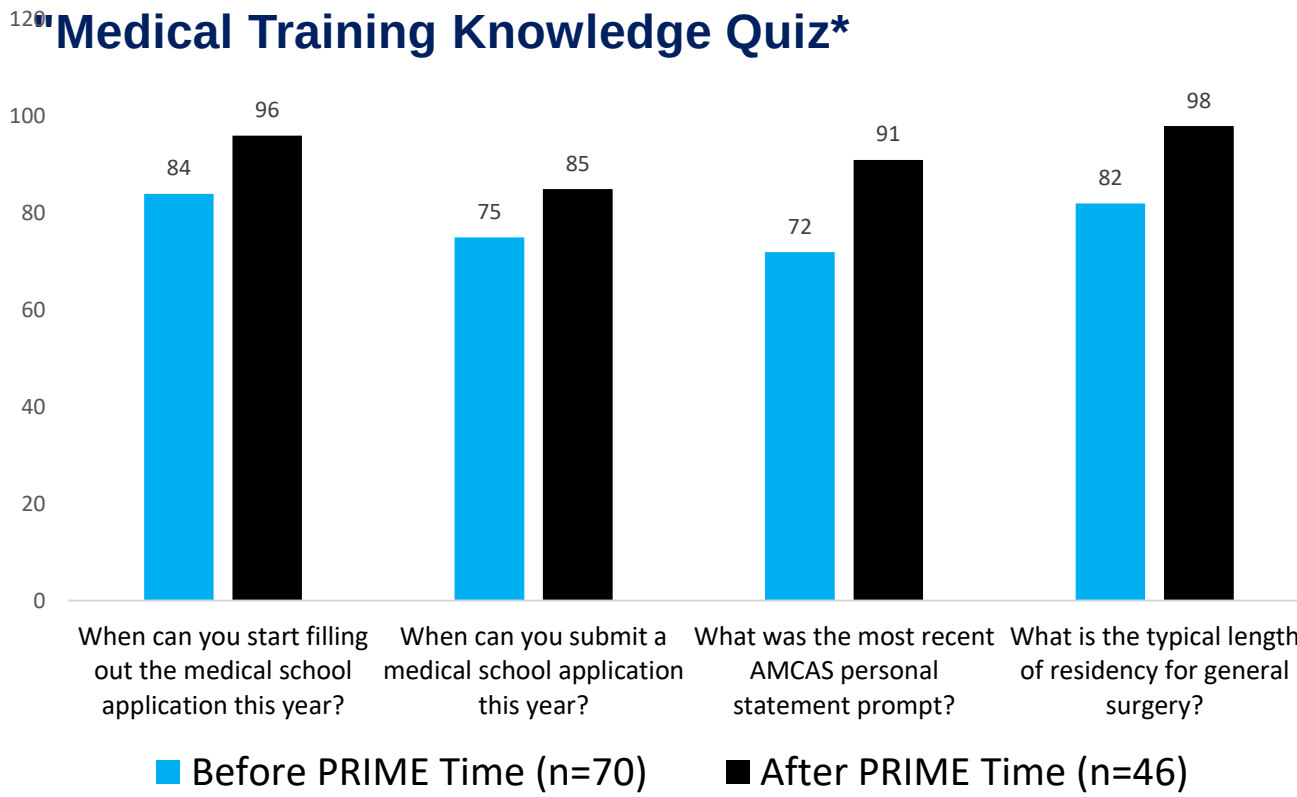
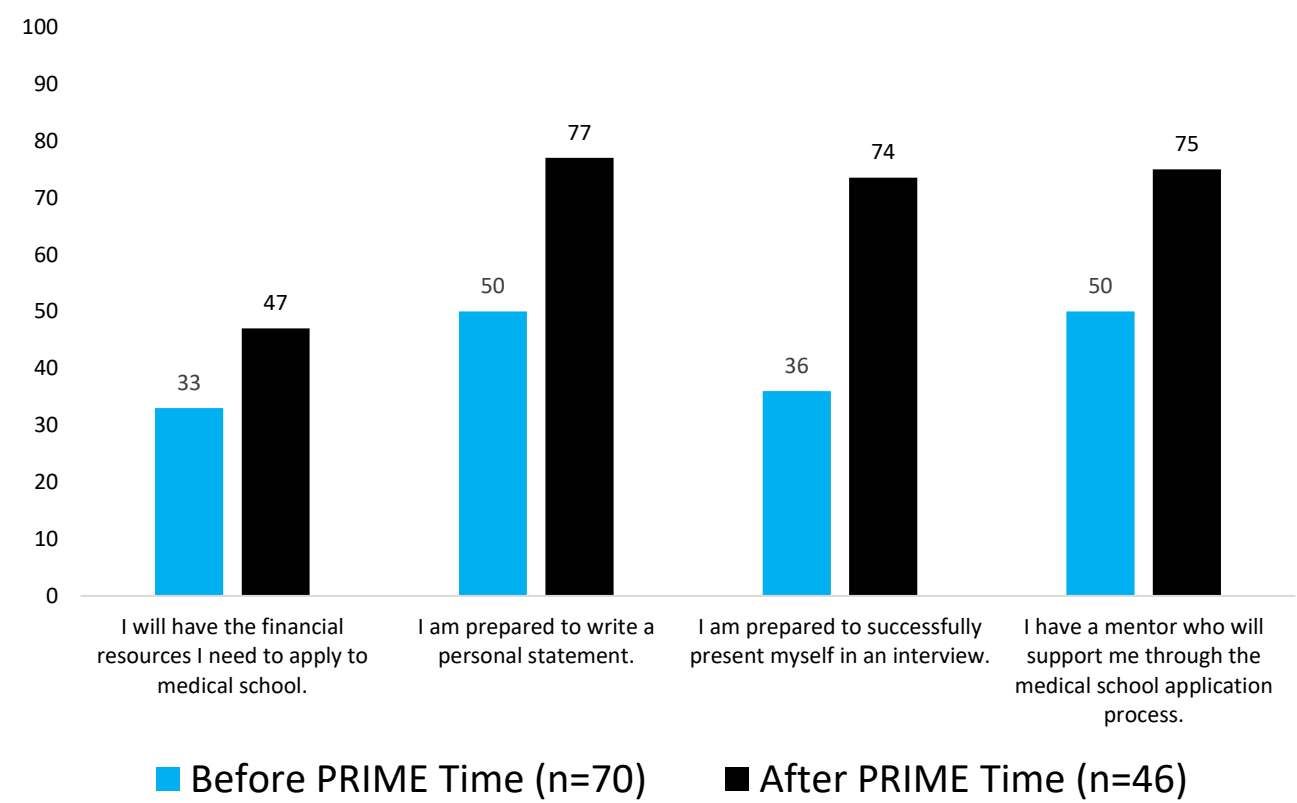


Figure 2. Median Pre-Med Ratings of "Agreement With the Following Statement..."



Qualitative Analysis

Table 2. Themes From Pre-Med Free-Response Questions

Theme	Emerging themes	Example Quote
Barriers to Medical School	Underrepresented in medicine	"I grew up in a low-income home and attended under-resourced schools during pre-k to 12th grade. My parents were immigrants who did not speak the language, so I was left navigating higher education by myself."
	Lack of Resources	"There are a lack of resources and opportunities available since most of us are first-generation students and don't have connections in the fields that we want to go to. This will deter students away from applying due to their uncertainty and low confidence."
	Lack of mentorship	"The biggest barrier I feel is the lack of knowledge that exists when it comes to applying to medical school. There is a lot of false information and myths that exist. A lot of hard-working students have self doubts when it comes to application process. Students need good advisors."
Prime Time Positive Feed back	Mentorship	"I am completely blown away by this program, and I feel very grateful...to gain a sense of community through this arduous process. I came into each session excited because I knew I'd learn so much from those who've been in my shoes before."
	In-person community building	"I appreciated the opportunity to connect with current medical students. This is an opportunity unique to PRIME Time because we do not have a med school in the area." "I especially love the in-person session. It was really helpful to talk to my peers and current medical schools about the process."
Areas for Improvement	Leadership opportunities	"I think that having the mentees produce something in the program would be beneficial both to the program and to the applicant who may include their leadership role on AMCAS application (e.g. outreach to community colleges, info sessions to first- and second-year undergrads)."
Overall Comments		"Participating in the program will prepare me to navigate the medical school application process successfully and therefore get closer to my goal of becoming a doctor." "I feel so much more knowledgeable and less nervous than I was in the beginning."

Conclusions

We demonstrate the benefits of outreach to pre-medical students from the SJV who otherwise have limited access to mentorship resources. Future steps include measuring the long-term success of our efforts, recruiting a larger pool of underrepresented SJV pre-medical students, and establishing a sustainable program model.

References & Acknowledgements

- https://www.ucop.edu/uc-health/_files/sjv-health-workforce-report-july-2017.pdf
- Zhang X, Lin D, Pforsich H, Lin VW. Physician workforce in the United States of America: forecasting nationwide shortages. *Hum Resour Health*. 2020;18(1):8. Published 2020 Feb 6. doi:10.1186/s12960-020-0448-

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