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A Survey of Medical Student Competencies and Training at Student-Run Free Clinics: Before and After the COVID-19 Outbreak



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Background

Student-run free clinics (SRFCs) simultaneously provide accessible community care and healthcare training opportunities,¹ yet there is little research on how medical students are prepared to serve in clinics.^{2,3} This study examines the effect of type and length of training on perceived student competency at 11 UC Davis-associated SRFCs.

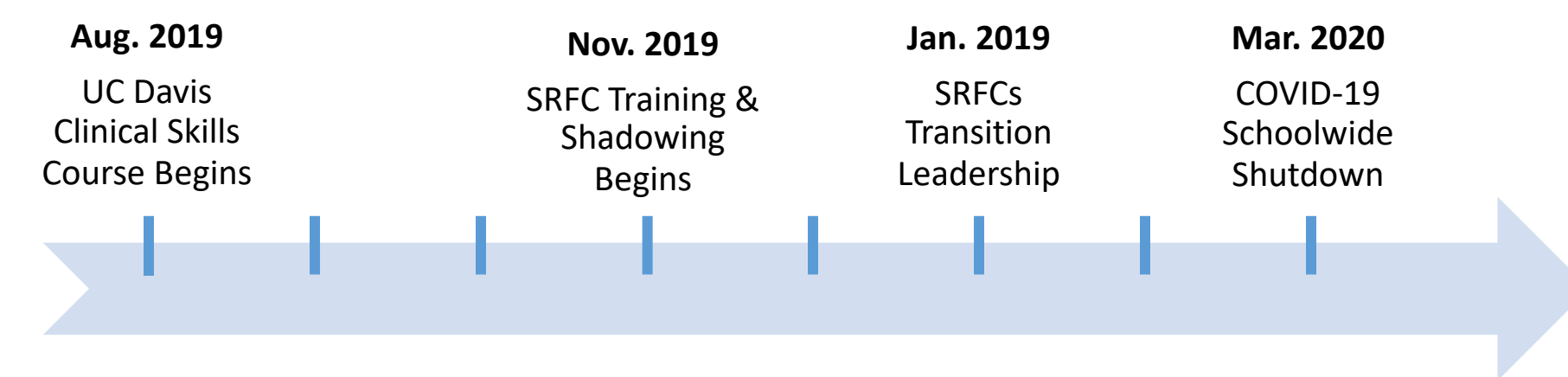


Figure 1. A timeline of the 2019 – 2020 training process for first-year medical students at UC Davis-associated SRFCs.

Students perceived UCDSOM training to be significantly more helpful compared to SRFC training ($t=3.7$, $p=0.0004$).

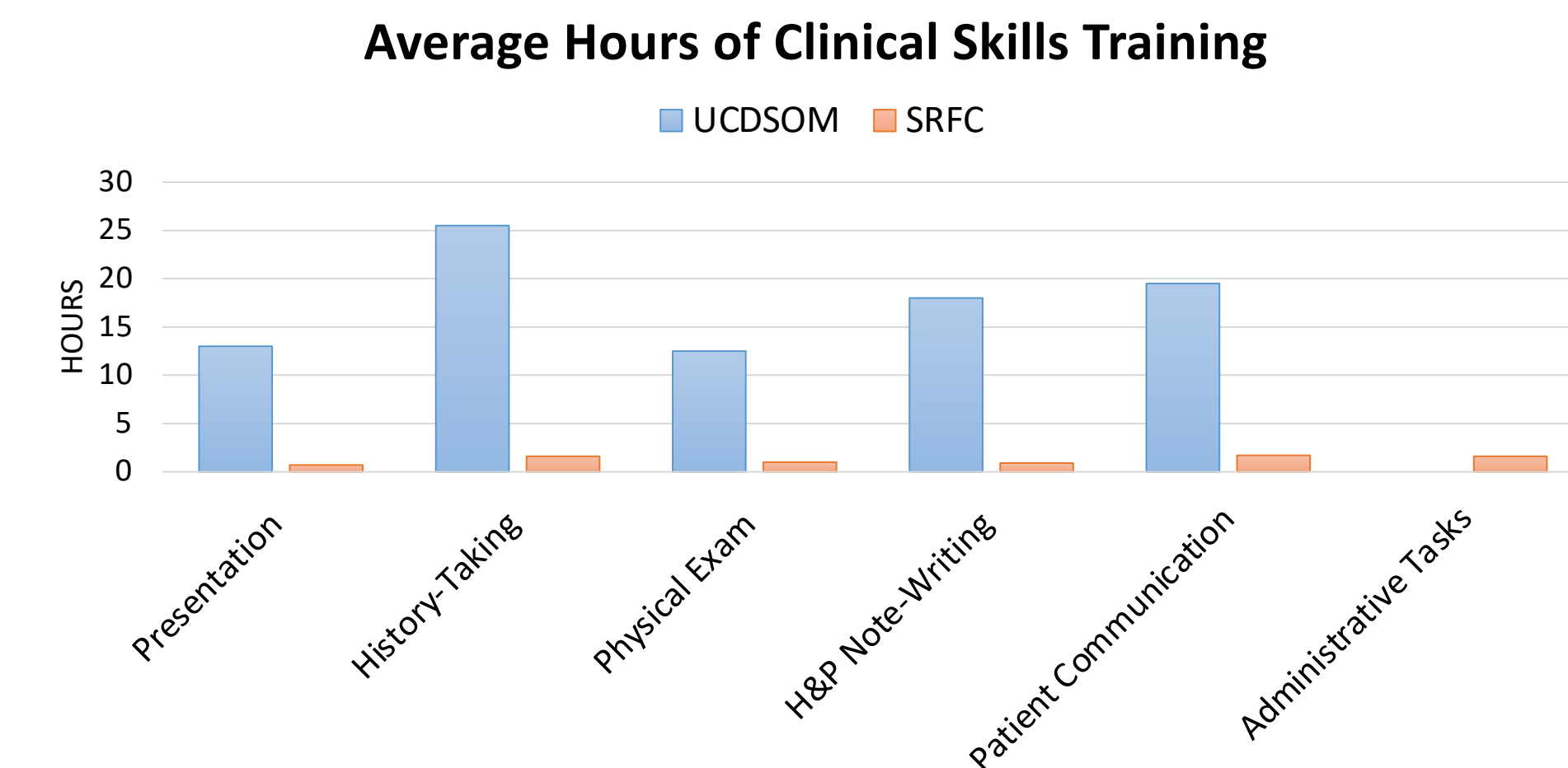


Figure 2. Average hours of training provided to medical students in six clinical skills competencies by the UC Davis School of Medicine (UCDSOM) and the SRFCs prior to the transition of leadership at SRFCs in January.

Methods

This was a cross-sectional study of scripted interviews with 38 medical students and eight preceptors conducted from June to July 2020. Participants represented 11 UC Davis-associated SRFCs. Primary outcomes included self-reported student preparedness in six competencies and preceptors' perception of student preparedness overall, both pre- and post-COVID-19. Secondary outcomes identified unmet training needs as reported by students and preceptors.

Results

No significant correlation was found between length of training and student preparedness to run SRFCs. However, the majority of both medical students (89%, $N=38$) and preceptors (87%, $N=8$) reported that more medical training was necessary prior to medical students taking over leadership of the SRFCs.

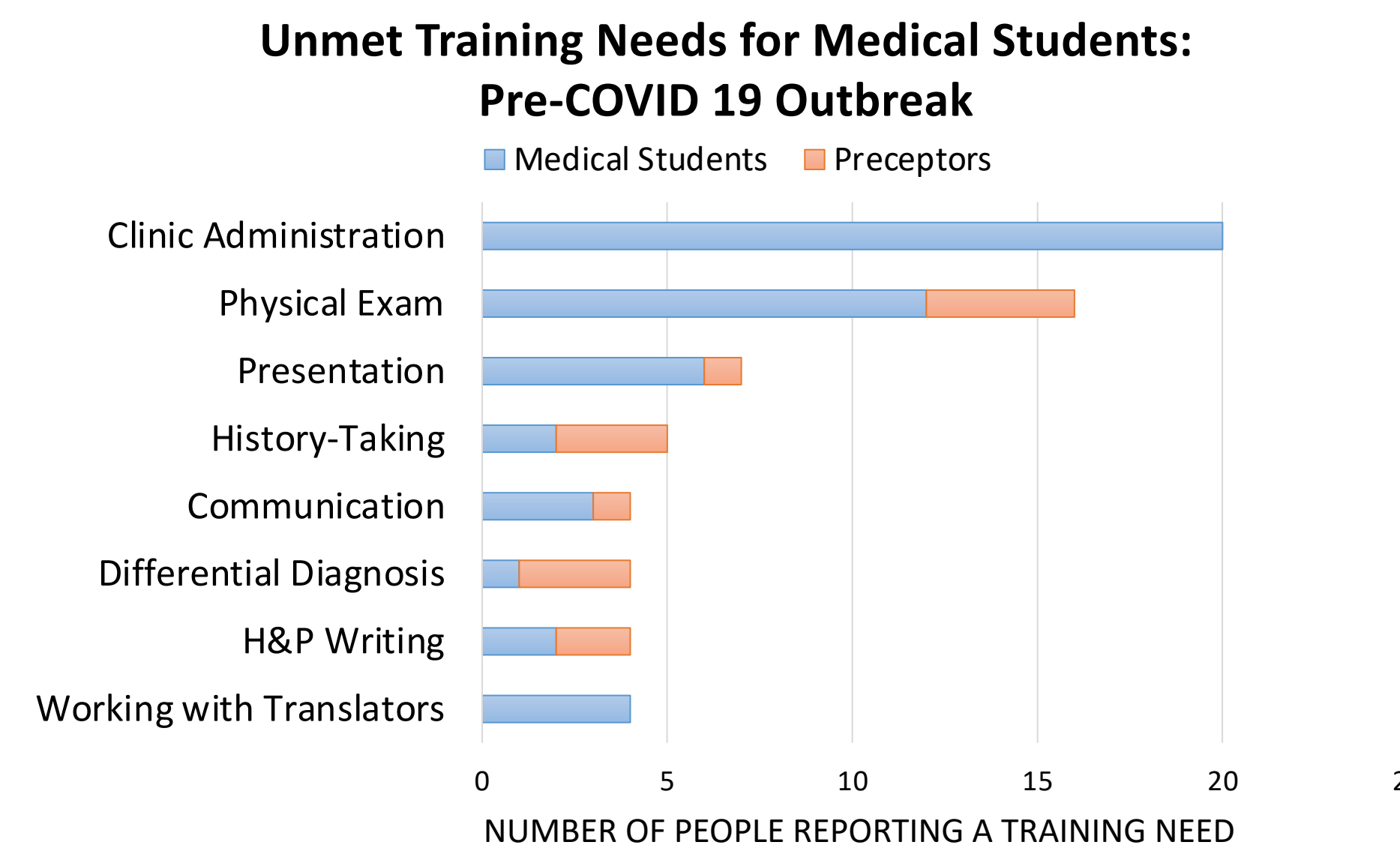


Figure 3. Additional training topics reported by medical students ($N=34$) and preceptors ($N=7$) to be necessary for successfully transitioning clinic leadership each January.

Additionally, the majority of both medical students (79%, $N=38$) and preceptors (62%, $N=8$) reported more medical training was necessary for medical students to successfully handle the COVID-19 transition at SRFCs.

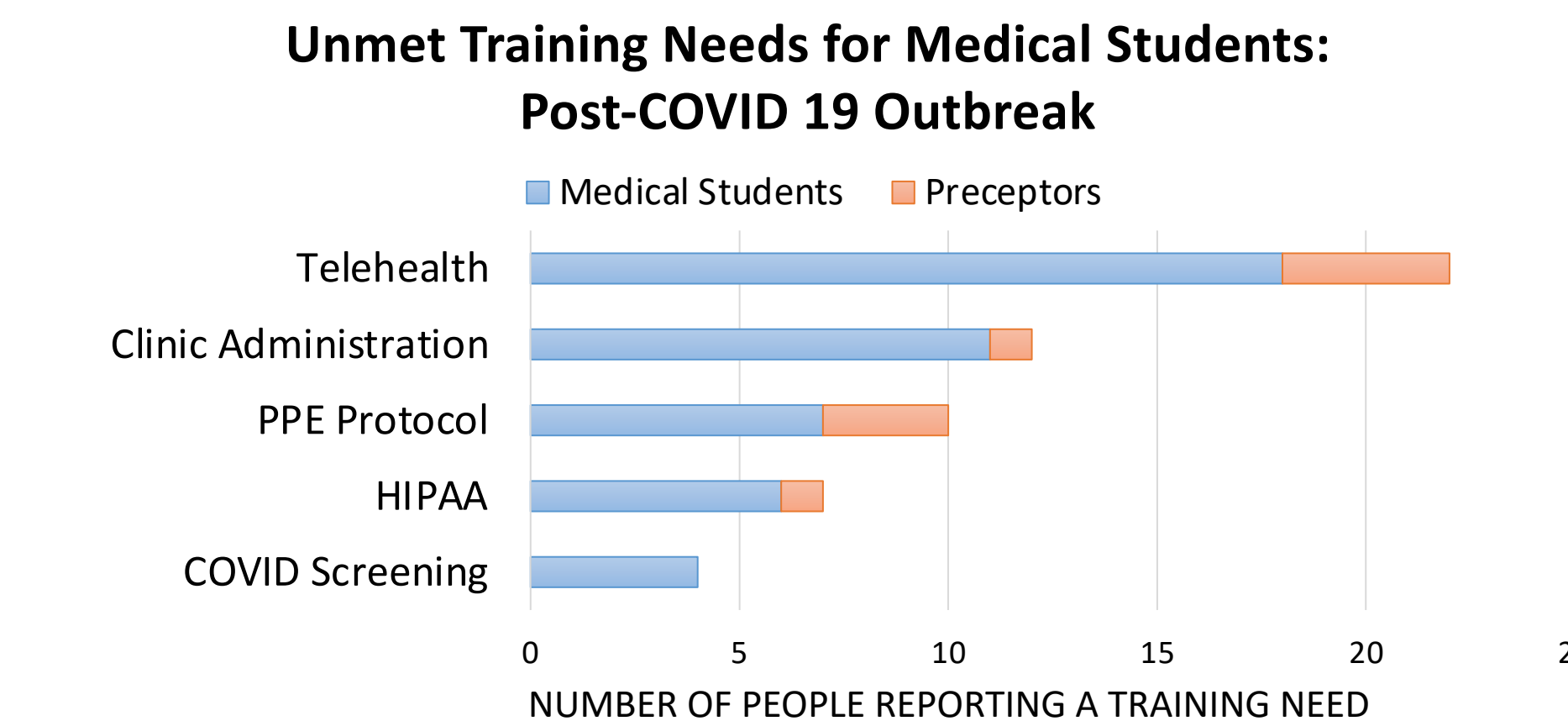


Figure 4. Additional training topics reported by medical students ($N=30$) and preceptors ($N=5$) to be necessary for successfully handling the transition at SRFCs following the COVID-19 outbreak in March 2020.

Average Perceived Medical Student Preparedness

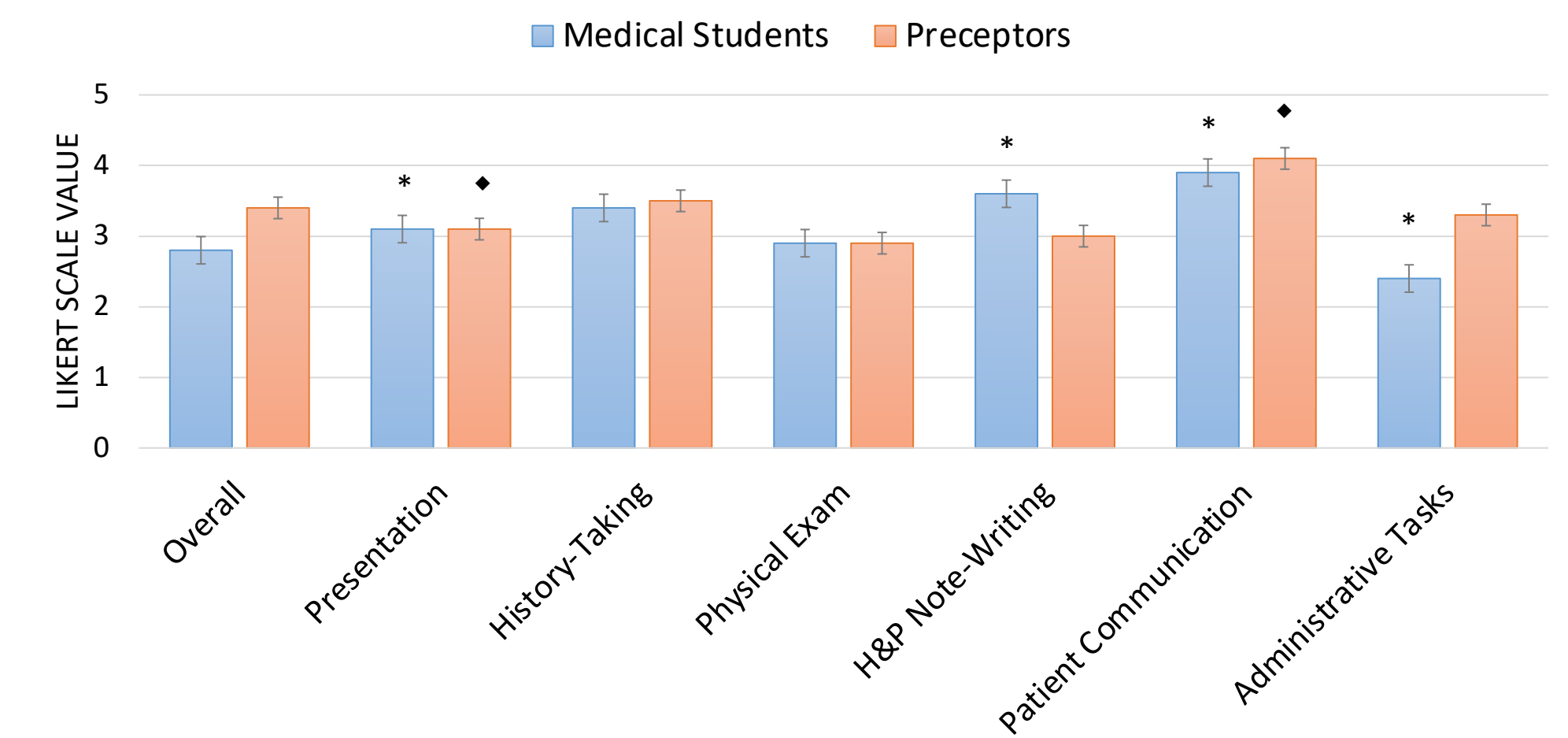


Figure 5. Average medical student preparedness as reported by medical students ($N=38$) and preceptors ($N=8$) on a five-point Likert scale, with one being "Not Prepared At All" and five being "Extremely Prepared." *; ♦ indicate statistical significance ($p<0.05$).

Conclusions

There is a perceived need for increased medical student training at UC Davis-associated SRFCs. In response to this study, a one-credit course called "Advancing Student-Run Clinics" was created and will run in January 2021. The aim is to provide a standardized training structure that can be repeated and improved upon in future iterations.

Acknowledgements

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