Project HEART – The Benefits of a Heart Health Service-Learning Opportunity Among First-Year Medical Students

Anson Y. Lee^a, Jonathan Hu^a, Helaine Kwong, MD, PharmD^{a,b}, Dee-Ann Carpenter, MD^a

^aUniversity of Hawaii John A. Burns School of Medicine, Honolulu, Hawaii, USA ^bQueen's Heart Institute, The Queen's Medical Center, Honolulu, Hawaii, USA



Background

- Cardiopulmonary resuscitation (CPR) is not a graduation requirement in Hawai'i high schools
- Public awareness surrounding cardiovascular disease is also low despite it being a leading cause of mortality in the state¹
- Project HEART (Heal, Exercise, and Rescue Together) was established as a service learning (SL) activity to address this issue
- The purpose of this study was to evaluate the benefits of the John A. Burns School of Medicine (JABSOM) Project HEART as an SL activity and its ability to:
 - Encourage greater community engagement amongst medical students
 - Facilitate acquisition of didactic skills and CPR proficiency



Design

- First-year medical students at JABSOM were recruited on a volunteer-basis to participate in Project HEART workshops
- Workshops were 1-hour long and were conducted at public high schools across Oahu
- Following each workshop, participating medical students would complete a retrospective pre/post-survey
- Self-reported didactic and communication skills before and after the event on a five-point Likert-type scale
- Subjective feelings of community engagement and interest in cardiology, academia, or primary care
- Wilcoxon Signed-Rank Test was used to determine the significance in reported data before and after Project HEART participation

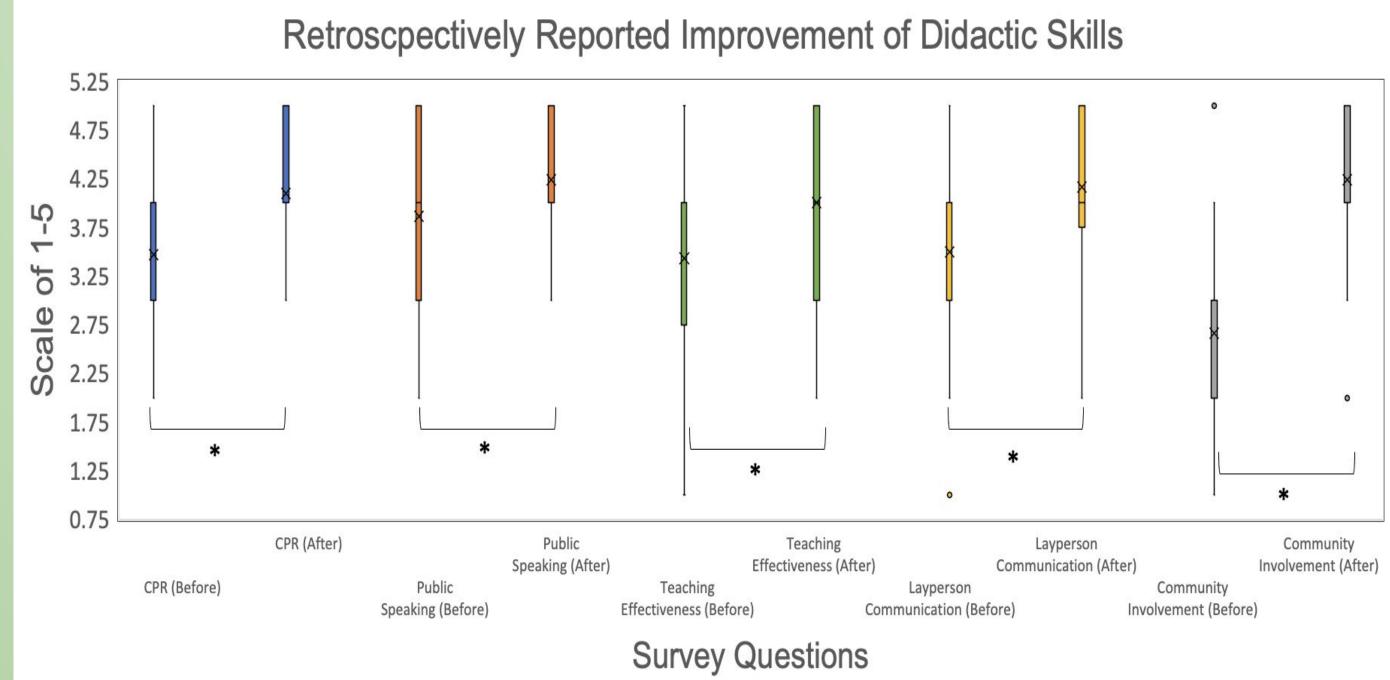


Figure 1. Student-reported pre/post survey results of didactic skills learned while a part of Project HEART.

* Indicates significant difference.

References

1. Felix H, Narcisse MR, Rowland B, Long CR, Bursac Z, McElfish PA. Level of Recommended Heart Attack Knowledge among Native Hawaiian and Pacific Islander Adults in the United States. Hawaii J Med Public Health. 2019;78(2):61-65.

Outcomes

- Between 2021-22, 23 first-year medical students participated in nine workshops
- There was a statistically significant increase in self-reported ability to:
- 1) Perform effective CPR
- 2) Engage in public speaking
- 3) Teach effectively
- 4) Translate medical topics to "layperson terms"
- Participants also expressed a greater sense of community engagement and drive for future involvement
- 52% (12/23) medical students responded that participating in Project HEART made them consider cardiology, primary care, or academia

