

Health Professions Education Institute (HPEI)

Title: Comfort Level with Performing a Foot and Ankle Exam

Presenter: Ashleigh Medda

Co-investigators: Jennifer Kipp, Harrison Huang, Malini Nair, Anuj Jailwala,

MEDICAL EDUCATION RESEARCH

Background:

Primary care as well as a large majority of subspecialties involve evaluating and treating the lower extremities; however, due to the fast-paced nature of graduate student (medical and physician assistant) education there is minimal time built into the curriculum to focus on ensuring students know how to adequately perform a thorough foot and ankle exam.

At the Wake Forest University School of Medicine (WFUSOM) Delivering Equal Access to Care (DEAC) foot and Ankle Clinic, we aimed to provide both medical students and physician assistant students the opportunity to learn and perform a lower extremity exam.

Objectives:

The objective of our study was to improve the students' (medical and physician assistant) comfort level with performing a foot and ankle exam.

Methods/Design:

Our DEAC Foot and Ankle Clinic is a WFUSOM student-run and physician-staffed clinic that serves the homeless community of Winston-Salem. At each clinic the students are taught how to perform a foot and ankle exam by a board-certified podiatrist who is assisted by podiatry residents. The students are then able to apply their knowledge by evaluating individuals who come to the DEAC Foot and Ankle Clinic.

From August 2021 to May 2023, we surveyed 49 first-time student volunteers. We collected information entailing how many students had previously performed a foot and ankle exam, their comfort level prior to and after the DEAC Foot and Ankle Clinic, and their reasoning if they felt a sense of improvement in their comfort level following clinic.

Results:

From the 49 students who were surveyed, 32 were 1st year medical students, 8 were 2nd year medical students, 2 were 4th year medical students, 2 were 1st year physician assistant students and 5 were 2nd year physician assistant students. Of the 49 total students, 31 students had previously completed a foot and ankle clinical assessment. On a scale of 1-10, the average comfort level of performing a foot and ankle exam prior to the DEAC Foot and Ankle Clinic was 3.81 and the average comfort level after the clinic increased to 7.1. The average increase in comfort of performing a foot and ankle exam before the clinic to after the clinic was 3.29 which was statistically significant ($P < 0.0001$). The students who felt they had an increase in comfort in performing a foot and ankle exam after participating in the clinic felt it was due to 1) the demonstration/education by the provider (82%), 2) the opportunity to practice on

patients (91%), 3) the ability to see different pathology than what they had been previously exposed to (32%), and 4) the chance to work face-to-face with a foot and ankle provider (43%).

Conclusions:

In conclusion, we were able to improve the comfort level of performing a foot and ankle clinic exam for 1st time medical and physician assistant student volunteers at the WFUSOM DEAC Foot and Ankle Clinic. We are hopeful that this clinic provides students with invaluable opportunity to expand on their knowledge and expertise regardless of if they have previous experience with performing a foot and ankle exam. With our clinic's ability to provide students with demonstration and education by a provider that they can work with face-to-face as well as the opportunity to practice their knowledge on individuals and increase their exposure to more pathology, we feel the DEAC Foot and Ankle Clinic is vital to the medical education at WFUSOM.