

Work in Progress

'Evaluation of a Change in Teaching Modality to the Virtual Environment on the Neurovascular Ultrasound CME Course due to the COVID-19 Pandemic'

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Background: Wake Forest School of Medicine has more than a 40-year history in hosting ultrasound continuing medical education (CME) courses. These courses have traditionally been held in person with hands-on scanning opportunities. Currently, the Center for Experiential and Applied Learning (CEAL) hosts the ultrasound courses in partnership with clinical departments such as Neurology. In 2020, the COVID-19 pandemic forced a shift in educational format from an in-person event to a virtual learning environment for the Neurovascular Ultrasound course.

Objective: To evaluate the learning experience and impact of the virtual teaching modality on Neurovascular Ultrasound CME course participants.

Methods: In October 2020, the education modality of the Neurovascular Ultrasound course changed from a five-day, in-person CME course with half-day didactic and half-day ultrasound scanning labs (CME=40 hours) to a four-day primarily didactic CME offering with live ultrasound scanning demonstrations (CME=32 hours). Participants were given the option of course participation on-site at Wake Forest Bowman Gray Center for Medical Education (n=10) or course participation virtually via the WebEx video conferencing platform (n=37).

Evaluation Plan: A feedback survey was administered via QR code and survey link placed in the WebEx chat box. With a 53.1% return rate (n=25) and using a scale of 1=strongly disagree to 4=strongly agree, we found that, while hands-on scanning practice would have added value to the course (3.9+0.3), participants agreed that the dual learning modality added value to the course (3.0+1.1). Participants were neutral about any unique benefits to be gained by participating in a course from a distance (2.9+1.0) and in their confidence about their ability to apply what they learned in the clinical environment (2.9+0.6). Qualitative comments were mixed indicating that it was a successful course

with excellent faculty, but participants desired better visualization of hand movements during demonstrations and a hands-on experience, especially by those who travelled to Winston Salem.

Conclusions: CEAL will transition back to in-person hands-on scanning labs for the Neurovascular Ultrasound course post-COVID-19, but is evaluating its entire ultrasound portfolio for what CME course components might be presented virtually.