UC Irvine
Mediterranean Journal of Emergency Medicine & Acute Care

Title
Education in Point of Care Ultrasound

Permalink
https://escholarship.org/uc/item/1p06g6tv

Journal
Mediterranean Journal of Emergency Medicine & Acute Care, 7(3)

ISSN
2642-7168

Author
Myers, Melissa

Publication Date
2026-04-08

DOI
10.52544/J5.66167

Copyright Information
This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

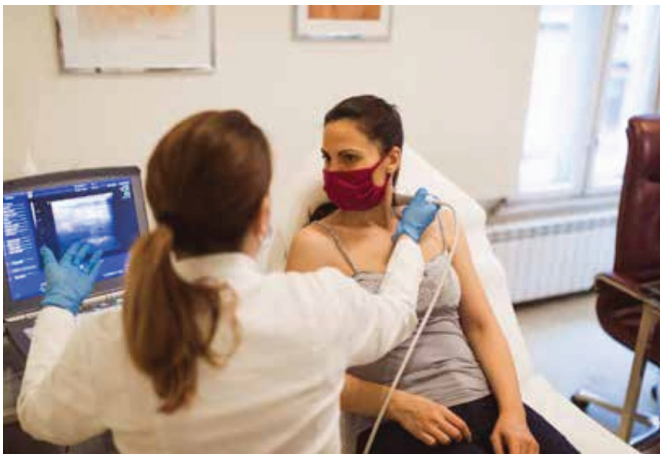
Peer reviewed

eScholarship.org Powered by the California Digital Library
University of California

DOI: 10.52544/J5.66167

Education in Point of Care Ultrasound

Melissa Myers, MD FAAEM



Widespread adoption of Point of Care Ultrasound (POCUS) in Emergency Medicine (EM) has accelerated over recent years. This increase in the use of POCUS has led to safety concerns by those outside our specialty about the use of ultrasound outside of radiology.[1] These concerns do not consider the efficiency and accuracy of emergency physician performed ultrasound or reflect an understanding of the environment in which we operate.[2,3] In general, I consider these fears to be inaccurate. I do believe that there is one problem with the widespread adoption of POCUS which has not been completely acknowledged. This potential problem is training pathways for physicians who did not have access to training in the use of POCUS during residency.

Medical students frequently start residency after having learned the basics of POCUS during medical school. In addition, POCUS training is a requirement for EM residencies. At many programs, including my own, this training takes the form of a month-long rotation with immediate feedback from fellowship-trained faculty and ongoing quality assurance. These residents graduate fully competent to perform and interpret any core ultrasound exam.

Many physicians who are currently practicing did not have access to POCUS training during residency. Safety concerns arise when physicians who are not adequately trained perform these exams as with any other procedure. Performing an ultrasound exam without adequate training leaves the physician open to misinterpretation of the results or missing an important finding. Previous research has shown that it may take up to 50 exams, with feedback from an expert to be fully competent in performing the E-FAST exam.[4]

We must acknowledge that this is a barrier to the continued adoption of POCUS and followed established guidance prior to incorporating new exams into our practice. Initiatives from both from AAEM and the EUS section are ongoing to meet this need. At this year's scientific assembly, the ultrasound pre-course will include the second iteration of a skills competency exam. Those who attend the ultrasound pre-course can opt into a skills test where they will perform a single modality multiple times to receive feedback and ultimately certification of competency in this modality. In addition, the EUS section has restarted an initiative to bring ultrasound courses to community hospitals. Physicians with a strong background in POCUS need to be willing to follow these initiatives from AAEM with strong continued training and quality assurance image review programs in community hospitals. With these initiatives, and through many others initiated across our specialty, I firmly believe

that we can meet and overcome this barrier.

"Performing an ultrasound exam without adequate training leaves the physician open to misinterpretation of the results or missing an important finding."

ACKNOWLEDGMENT:

MedJEM acknowledges AAEM & its "Common Sense" newsletter for their support.

References

1. Myers, M. and Chin, E. (2020). Is Emergency Physician Performed Bedside Ultrasound Dangerous? Common Sense, March/April 2020.

2. Randazzo, M. R., Snoey, E. R., Levitt, M. A., & Binder, K. (2003). Accuracy of emergency physician assessment of left ventricular ejection fraction and central venous pressure using echocardiography. Academic Emergency Medicine, 10(9), 973-977.

3. Volpicelli, G. (2011). Sonographic diagnosis of pneumothorax. Intensive care medicine, 37(2), 224-232.

4. Blehar, D. J., Barton, B., & Gaspari, R. J. (2015). Learning curves in emergency ultrasound education. Academic Emergency Medicine, 22(5), 574-582.