

Exo Works

CASE STUDY

WVU Medical Center Propels POCUS Education

WVU Medical Center implemented Exo Works[™] to provide real-time feedback for medical students' ultrasound studies, saving time and accelerating education.

+500
medical students
per year

<15
minutes to review 20 cases

Challenges with the Status Quo

Working at multiple hospitals and teaching hundreds of medical students as the Director of West Virginia University's Medical Center for Point-of-Care Ultrasound (POCUS), Joseph J. Minardi, MD, had grown familiar with convoluted systems to retrieve medical records. An administrative piece was missing from WVU's POCUS workflow, making it challenging from an educational perspective. Dr. Minardi's only opportunity to provide feedback to his students on their ultrasound studies was in-person, through live demonstrations or evaluation sessions. Not only was this process time-consuming, but it was literally impossible to provide feedback to every student in one day. With nothing on record, students didn't have access to review examples of their work either. Dr. Minardi noted that, because of this process, students spent excessive time keeping track of their POCUS scans on spreadsheets and rarely revisited feedback needed to further their skills.

A convoluted POCUS workflow limits the learning experiences for many students. "If POCUS workflow is not part of their usual practice, they won't adopt the process. It's a vicious cycle of complacency," Dr. Minardi said. "And the biggest risk in not having a streamlined, intuitive and effective workflow is that it slows down adoption of point-of-care ultrasound altogether."

For these reasons, Dr. Minardi and the WVU Medical Center POCUS Department sought a new solution to address their POCUS workflow challenges.

The Benefits of a New Solution

After facing challenges in both the classroom and hospital setting, Dr. Minardi integrated Exo Works, a simplified POCUS workflow solution, into his lesson plans to manage exams for compliance, quality assurance, credentialing, and education. "It looked great from the get-go," he reminisced of the first time he saw the software. "It's a great workflow. It's intuitive."

I can use Exo Works anywhere. It's easy to

justify from a patient care perspective.

JOSEPH MINARDI, MD DIRECTOR, WVU MEDICAL CENTER FOR POINT-OF-CARE ULTRASOUND

Further explaining his implementation of Exo Works, Dr. Minardi remarked how much time he'd saved in providing feedback to students on their ultrasound scans, "It's day and night – I wouldn't even compare it, because it's not the same." Beforehand, reviewing and providing feedback would have taken an hour for each study. He smiled, "Yesterday, I reviewed 20 studies in 15 minutes."

"Students are more excited when they get immediate feedback," he said. "The goal is to give them an opportunity to practice ultrasound scanning and have them graduate with a portfolio in hand." Because Exo Works has been designed to be device agnostic, it presents additional value to Dr. Minardi for its potential to integrate with his other healthcare workflows and devices. His students now have more flexibility — the new workflow can be accessed on any mobile device, making it faster to review studies, and easier to upload and store scanned images. "If I had my way, I'd be incorporating it even further into my other clinical workflows," he shared.

Dr. Minardi emphasized, "I can use Exo Works anywhere. It's easy to justify from a patient care perspective."

About the Organization

West Virginia University's Medical Center for Point-of-Care Ultrasound has more than 500 medical students per year seeking to learn how to use point-of-care ultrasound in their future medical practice. West Virginia University's Health System comprises more than 20 hospital facilities; its medical school serves the surrounding region's patients throughout the mountainous state of West Virginia.