



## Case Study

Technion Medical School (Haifa, Israel)

Medical Students

Mission in Uganda



## Summary

eMedical Academy courses can help healthcare organizations such as medical schools, teach FoCUS exam to a large cohort of students. The eMedical Academy online learning shifts learning from the instructor to the trainee while maximizing hands-on opportunities.



**Organizational  
Challenges**



**eMedical  
Academy Course  
Implementation**



**Return on  
Investment**



**Path to Success**

# Challenges

- Significant institutional resources, in a constrained setting, were required to train medical students on FoCUS Exam.
- Training a cohort of medical students year after year presented a scalability issue.
- Quality of instruction varied significantly based on trainer expertise and availability.
- Trainee FoCUS practice was limited to availability of a qualified clinician and clinic hours.



# Implementation



## Train the trainer

Senior medical students used eMedical Academy courses including eViews, eClips, eTopics, and eCases to develop expertise in FoCUS.



## Foundation Using eViews

Trainees used eViews Course to learn FoCUS anatomy recognition, image acquisition and troubleshooting tips.



## Hands-on Practice

Trainees practice image acquisition using a handheld US device, guided by the eViews modules in real time, at the patient's bedside.



## Building Expertise Using eClips

eClips which are videos of actual patients, are used to develop recognition of normal vs pathological conditions.



## Testing Knowledge

Hands on testing on live models to verify image acquisition skill.





# Return on Investment

How working with eMedical Academy positively impacted our organization.



## **Long-Term Access to Training Materials Lead to Deep Engraining of the Topic**

In contrast to the traditional FoCUS training via a conference based lecture followed by a few hours of hands on practice, having long term access to the online courses facilitated a deeper embedding of the content. Reference to video images and trouble shooting strategies at the patients' bed-side improve image acquisition skills.



# Results



## Positive impact of eMedical Academy courses on the organization

### ✓ Online learning made high-quality education accessible to a larger group of students.

Embedding eMedical Academy online courses as a required integral part of medical students' training had multiple advantages:

1. Shifting the foundational learning from the instructor to the student
2. Establishing a strong and consistent academic baseline of the FoCUS exam across a larger cohort of students.
3. Focusing instructor time to hands on optimization of image acquisition

### ✓ Access to the eMedical Academy Course improved FoCUS image acquisition.

A study comparing FoCUS image acquisition among 120 medical students with and without access to eMedical Academy eViews course showed statistically significant improvement in FoCUS image acquisition and speed among the group supported by the eViews course.



# Path to Success

Hands-on practice is critical to mastery of FoCUS image acquisition. Defining how to incorporate hands-on practice into the educational plan is essential to a successful outcome.

Defining the organizational FoCUS training needs is critical in building an optimal education plan (identifying the number of trainees/yr, trainer availability, course selection, etc.).

Integrating eMedical Academy online courses into the organization's educational plan ensures a consistent and robust knowledge base. Self-directed online learning is key to a flexible learning environment for the trainee and reduced time commitment on the part of the trainer.

Training compliance, comprehension, and skill is verified using data and proficiency testing.

