

# **AAEM Clinical Practice Committee Statement**

## **Ultrasound Should be Integrated into Undergraduate Medical Education Curriculum (Draft 5/30/2014)**

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### **Policy Statement:**

It is the position of the American Academy of Emergency Medicine that ultrasound should be integrated into the core curriculum of undergraduate medical education.

### **Background:**

Medical diagnostic ultrasound has been used by various specialties since the 1950s. Contemporary point of care ultrasound (POCUS) was first researched and utilized by emergency physicians in the mid 1980s. Emergency physicians have formally defined and pioneered POCUS over the past two decades. Research in a broad array of applications indicate improved patient care via procedural safety and success (11,13,17), improved diagnostic accuracy (20,21,22), decreased procedural pain (8), decrease time to critical interventions (11, 22), and decreased time to discharge (3).

The practice of POCUS continues to grow. In the most recent decade there is an expanding role for POCUS across many specialties in medicine. As hospital wide ultrasound application has increased many healthcare institutions struggle to meet the growing educational needs of faculty and residents to obtain standardize ultrasound training. In addition, multiple specialties have POCUS fellowships and specialized POCUS training during other fellowships.

Leaders in the field of US technology in medical education have implemented longitudinal ultrasound training programs into the core medical school curriculum. Early research demonstrates that the technology is viewed by students as enjoyable (4,6,10,16,23) and useful in various specialties (1,6,16). Furthermore studies demonstrate better student understanding of complex core anatomic and physiologic concepts (6,19,23) and improved physical exam skills (7,9,12,14,15) with the incorporation so US into the curriculum. Practical application of POCUS also provides early clinical correlates, thus further engaging the students (4,10).

Given the broad and diverse use of US in contemporary medical practice, multiple medical societies have supported the incorporation of US into the core medical school curriculum. The American Institute for Ultrasound in Medicine (AIUM), a multi-disciplinary society, has advocated for the integration of US training into core medical

school curricula. In 2013, at the 2<sup>nd</sup> World Congress on US in Medical Education, over 85 medical schools convened to discuss US in medical education.

Incorporation of US into the core medical school curriculum enhances learning of core concepts, improves understanding of the physical exam, engages students in active learning, and is viewed as useful and enjoyable by students. Early integration of US in medical training incorporates a key, broadly used, and growing medical technology thus better preparing current students for practice they will encounter as the next generation physician.