Preceptor Perception of Ultrasound Integration Into Preclinical Medical School Curricula

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Purpose
The purpose of this research was to provide curriculum developers with the perspective of clinical providers toward ultrasound integration in basic science curricula as well as how they believe students should learn before clinical rotations.

Demographics
- Surveyed both DO & MD clinical preceptors
- Variety of Specialties Represented
- All Ranges of Time in Practice
- Ultrasound Users and Non-Users

Methods
- 2018-2019 available preceptors for the Arizona College of Osteopathic Medicine
- 17 question, Likert-Style Survey
- Results analyzed with Mann Whitney U & Kruskal Wallis Tests

Background
- With the advent of new medical technologies, for improved patient clinical outcomes and satisfaction, medical school curricula should have parallel evolution to ensure the production of successful, competent physicians that are soon to enter their roles as healthcare providers.
- Ultrasound is an easily-accessible, affordable imaging modality that provides real-time, in vivo feedback and has been endorsed by the World Health Organization for these characteristics.
- Because of ultrasound’s real-time feedback, students are able to appreciate the 3rd Osteopathic Tenet in vivo as they can appreciate how structure and function are reciprocally related.
- Ultrasound integration has already been highly received from students for its usefulness in appreciating basic science concepts and clinical preparation.
- By understanding the clinical preceptor perception, medical school administration can develop ultrasound programs that will nurture the symbiotic relationship between basic science and clinical education.

Results
- Both users and some non-users believed that early ultrasound integration would be beneficial for a medical student’s knowledge of anatomical and physiological relationships as well as for an introduction to the technology.

Percentage of respondents on what they believe should be incorporated into an ultrasound curriculum
- Use of Technology, probe orientation, knowledge of procedures that can be done
- Interpretation of Images
- Any Ultrasound Education would be beneficial

Asterisks (*) indicate that this certain exam type was chosen more frequently per respondent, than the exam types that were performed by that respondent in their practice. This indicates that these exams are widely regarded as important both medically and as part of medical student education.

Conclusion
- AZCOM Clinical Preceptors agree that ultrasound can be useful for both understanding basic science concepts as well as prepare medical students for clinical rotations, graduate medical education, and medical practice.
- Clinical preceptors believe that ultrasound during basic science courses is a helpful adjunct.
- Preceptors believe that multiple common ultrasound examinations are useful for a medical student’s education.