

Centralized Ultrasound Champion Mentoring at an Academic Medical Center: Spreading the knowledge on how to perform and interpret focused ultrasound

Introduction: Ultrasound Mentorship has been spotty at some institutions yet at Ohio State the Ultrasound Academy developed to centralize resources and encourage collaboration. Toward that end principles with the Curriculum Development for Medical Education, Kern, Thomas and Hughes outline a six step method that provides a backbone for the following curricular process. The entire production of documents, presentations, protocols, checklists, websites, and examinations will follow some general outlines yet focus on the content area and what is important for the learner to emerge from this exercise and perform competently.

Methods: Each Champion will report back each month as more components of the curriculum evolve to a more cohesive service. The imprint of each program can be tracked from its immature state to a “mature” state whereby their goals, objectives and performance are on target for the reality of the providers’ skill.

Developing curriculum in specific cohorts of adult learners
Identify a Champion to Liaison with the Ultrasound Academy
Determine who is the Group of learners
Construct a specialized survey from the Master US survey construct
Sort the group by clinical experience and technophilia
Identify the problem and perform a General Needs Assessment
Targeted Needs Assessment
Set Goals and Objectives
Delineate Educational Strategies
Describe Implementation Process
Measure Evaluation and Feedback
Evolve Curricula with Annual review and refinement

Developing curriculum in specific cohorts of adult learners
Learners with little ultrasound experience
Identify a Specialty Champion to Liaison with the Ultrasound Academy

Determine who is the Group of learners
Residents/Fellows/Students
Sort the group by clinical experience and technophilia
MS 1-4, PGY 1-7, F 1-4, Attending
Identify the problem and perform a General Needs Assessment
Lack of ultrasound training and standardized assessment
Targeted Needs Assessment
Didactics/Online Quizzes/Facilitated Hands on/Mentorship
Set Goals and Objectives

Intro Survey/Online Module(s)-Quiz(zes), Cases, Practical
Delineate Educational Strategies
Asynchronous, Synchronous, Cadaveric Lab, Hands On, Review Sessions,
Shadowing sonographers, Bedside Teaching
Describe Implementation Process
Simulation Scripts, Deliberate Practice, Documentation of Exams, Assessments
Measure Evaluation and Feedback
Final Completion of Tasks, Final Survey, Evaluations, Optional Debriefing
Evolve Curricula with Annual review and refinement
Final Report Card (Number of Operators, Fulfilled Goals, Total Exams, Etc...)

Results: Each champion will report back to the Ultrasound Academy the annual performance data in regards to competency training. As curricula and assessments evolve, more advanced procedures can be tested with innovative methods.

Conclusions: Some components of learning a psychomotor skill transcend specialty training. Ultrasound can be learned by utilizing a combined asynchronous and synchronous learning atmosphere. Structured training with encouraged deliberate practice along with clinical opportunities will provide a manner for operators to gain ultrasound proficiency.

Future revisions of curricula and assessments may be made by multidisciplinary teams that scan the same areas independent of training and thus form communities of practice.