

Kaweah Health GME Ultrasound G & O: EM Advanced Elective

Overview

The goal of the point of care ultrasound study (POCUS) curriculum is to enable second- and third-year emergency medicine residents to become more skilled in core and advanced POCUS applications. Residents will improve their competency in ultrasound physics, image generation, acquisition, interpretation, clinical integration, documentation, and workflow management. This elective is designed in alignment with the ACGME Emergency Medicine Milestones and ACEP/CORD emergency ultrasound guidance and is intended to build on prior core ultrasound training by developing greater depth in advanced applications, image quality, interpretation, quality assurance, and teaching. Review www.kaweahem.com/ultrasound for complete details.

By completion of the advanced elective, residents will be able to:

- Patient Care (PC): Perform core and selected advanced emergency ultrasound applications with greater efficiency, independence, and appropriate clinical integration in emergency care.
- Medical Knowledge (MK): Demonstrate improved understanding of advanced indications, image optimization, and interpretation for core and advanced emergency ultrasound applications.
- Interpersonal and Communication Skills (ICS): Communicate and document studies appropriately.
- Professionalism (PROF): Use ultrasound within the scope of training, recognize when further analysis is needed, and participate in QA and feedback processes.
- Practice-Based Learning and Improvement (PBLI): Use image review, QA feedback, simulation, and self-directed study to refine acquisition, interpretation, and clinical application.
- Systems-Based Practice (SBP): Demonstrate familiarity with workflow, review, archiving, and operational aspects of emergency ultrasound that support safe, efficient patient care.

Residents should, upon completion of this elective, feel comfortable continuing to apply their ultrasound skills in the emergency department and other areas using the same ultrasound platform and workflow.

Scheduling

- Provide a schedule subject to approval 5 weeks prior to start of the rotation.
- Schedule scanning shifts except for Thursday EM conferences and afternoon JC/image review.
- Aim to do more solo shifts, e.g. afternoons after initial shifts.

Scanning Responsibilities

- Improve competency in emergency ultrasound by completing a minimum of 25 examinations in each core EM category, including scans performed during the PGY-1 ultrasound rotation.
- The minimum pace is 2 exams per hour x 8 hours/day, i.e. 16 scans a day on scanning days.
- Be listed as the primary performer for at least 90% of the exams.
- For each exam, only the primary performer and one additional performer get credit for the exam. While there can be more performers observing, only these two performers can count these exams toward their total number required for successful completion of the rotation.
- The total number of exams required is decreased by any GME excused days off, e.g. wellness days.
- Your first and last exam should be respectively within 30 minutes of the start and end of your shift.
- Know how to assign oneself, perform, interpret, document, and assign studies to the ED attending.
- Scan with the ultrasound faculty and/or fellow when they are present and with the ED patient's attending physician when they are not present. These studies will subsequently undergo QA.
- After completing a scan, use Connect Messenger to notify the attending that the exam is complete and place a brief note stating "POCUS complete" in the ED progress note.
- Make up missed or tardy shifts at the discretion of both the ultrasound and EM program directors.
- Demonstrate familiarity with the Sonosite PX and Sonosite Synchronicity workflow sufficient to perform studies, document findings, and submit for attending review.
- Participate at a more advanced level in image review and QA.
- Assist in teaching scanning technique to junior learners.

Passing Requirements for Rotation Include

- Review modules from POCUS 101 and repeat any that were previously difficult.
- Perform the minimum scans as outlined above.
- Attend program-specific conference days, journal clubs, and image review/QA sessions.
- Review your account in Sim Lab BodyWorks Eve and perform 5 or more exams in each topic.
- Maintain equipment using "CLEAR" (Clean, Locate, Energize, Augment, Remove).
- Demonstrate commitment to research by enrolling patients in any ongoing ultrasound research.

- Through QA review and direct observation, demonstrate improved independence in obtaining interpretable images and providing appropriate focused interpretations.
- Demonstrate understand use of the Synchronicity workflow to perform, document and submit ultrasound studies appropriately.
- Participate meaningfully in advanced learning activities such as QA review and teaching of junior learners.
- Successful completion of this advanced elective will contribute evidence toward higher-level achievement of relevant ACGME Emergency Medicine Milestones in patient care, medical knowledge, communication, professionalism, practice-based learning, and systems-based practice.