

# Health Professions Education Institute (HPEI)

## POCUS Champion Pathway: Innovative Training Structure Supporting the Ultrasound Curriculum of a large Internal Medicine Residency Program

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### **CURRICULAR INNOVATIONS**

*Problem/Needs Assessment:* Integrating formal point-of-care ultrasound (POCUS) training within Internal Medicine (IM) residency is necessary to develop 21<sup>st</sup> century clinicians. The Wake Forest IM residency (116 residents) started a POCUS curriculum in 2017, but we have since exhausted the protected time allotted for POCUS education.

*Program Objectives:* We therefore created a POCUS Champion Pathway to advance our curriculum further while working within the confines of the program's structure and complex scheduling dynamics. Here, we describe this training pathway and the impact it is having on the IM residency POCUS curriculum and medical school.

*Description of Program:* The POCUS Champion Pathway cultivates diagnostic, clinical reasoning, medical management, and procedural skills. It provides guidance for teaching POCUS. Interested rising upper-level residents apply each spring. If accepted, they undergo multimodal training between May – August, consisting of: 1) online curriculum, 2) written test, 3) simulator instruction/competency assessment, 4) supervised scanning (“gel rounds”). Residents earn the “POCUS Champion” title after completing all training requirements. They become ultrasound advocates, instructors, and leaders. POCUS Champions educate others through: 1) POCUS Focus Noon Report presentations, 2) teaching/encouraging POCUS in the clinical setting, 3) procedure workshops, 4) supervising “gel rounds” for the medical school's POCUS elective, 5) didactic presentations during pathway conference.

*Evaluation/Assessment:* 28 (2021), 29 (2022), and 32 (2023) residents accepted into the POCUS Champion Pathway the past three years completed POCUS Champion training. All passed the written and scanning assessment. 100% felt their training increased their comfort performing and interpreting POCUS exams. Collectively, IM residents performed a couple hundred POCUS exams each academic year (2018-2021) prior to the POCUS Champion Pathway's inaugural year in 2021. IM residents logged 942 POCUS exams during the 2021-2022 academic year and 2,155 exams during the 2022-2023 academic year. IM clerkship medical students observed over 850 POCUS exams and performed over 720 POCUS exams with resident led clinical instruction the past two years. The satisfaction rating for our POCUS curriculum has shifted from unsatisfied in 2017 to satisfied/extremely satisfied in 2023.

*Conclusions and Lessons Learned:* The POCUS Champion Pathway advances our POCUS curriculum. It increases comfort, curriculum satisfaction, and clinical use. The key to POCUS proficiency is frequent repetition. Workshops and didactics introduce concepts, but continued use in practice is an essential part of our learning theory. IM resident POCUS Champions are pivotal to this. Resident POCUS Champions perpetuate a culture of using ultrasound on the wards and interns and students learn while simultaneously caring for patients. We as educators must remember that learners can evolve into teachers and teachers continue to learn through experience. The POCUS Champion Pathway embraces this concept and guides residents to become proficient in this skill and then pay it forward.