

Ultrasound Track in the University of Michigan (UM) Family Medicine Residency (16)

Teaching Techniques: Highlighting specific and/or novel educational methods

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Background:

Point-of-care Ultrasound (POCUS) is a rapidly growing modality in Family Medicine residency (FMR) education. It has the potential to decrease cost and time to diagnosis, reduce radiation exposure, and increase patient satisfaction. A 2019 Council of Academic Family Medicine Educational Research Alliance (CERA) survey found 53% of program directors with an established POCUS curriculum, or one in progress, a significant increase over the survey five years earlier. Other programs have reported on their POCUS curricula, and we seek to describe an ultrasound track within our curriculum.

Actions, Methods or Intervention:

The UM FMR built its POCUS curriculum around an Advanced Ultrasound Fellowship-trained faculty member. All residents (n=39) receive POCUS training in dedicated hands-on sessions every year of residency, with additional efforts focused on a subset of interested residents (n=3) in an ultrasound track. The track residents use the majority of their elective time, as well as free time after hours, to acquire more POCUS experience, both inpatient and outpatient. They are also encouraged to incorporate POCUS during their continuity clinic sessions.

Results:

In the first half of their PGY3 year, three ultrasound track residents have performed over 200 educational ultrasound scans. All scans are archived, with quality assurance done by our POCUS faculty, sometimes in real-time and sometimes asynchronously.

Lessons Learned:

There is a recommended POCUS curriculum from the American Academy of Family Physicians (AAFP), but we are still in the early stages of development of POCUS across the specialty. As noted in the CERA survey, many face challenges such as a lack of ultrasound equipment and trained faculty. We have found early success with an ultrasound track in our residency as it has provided its residents the confidence needed to use POCUS frequently and independently, and easier access to POCUS-trained faculty and related resources.

Future Application and Next Steps:

The goal is 300 scans per ultrasound track resident; it remains to be seen how many each will acquire in a year and how relatively confident these residents become in each scan type. There is also an ultrasound fellowship under development in our department, and an initiative to train a subset of interested faculty, so we expect to have a handful of credentialed physicians within a year or two, which can help push ultrasound forward within our department and beyond. Next steps will involve further refining didactic/hands-on sessions within the broader residency didactic curriculum, and determining how to best involve POCUS-trained faculty and fellow(s) in the furthering of FM residents' POCUS skills.

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