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Resident Spotlight: Olivia Schimmel, PGY2; Alex Christofis, PGY2; Kanika Bhatara, PGY1
Family Medicine Residency, Ascension Providence Rochester Hospital, Rochester, MI
FM POCUS [Point-of-Care Ultrasound] curriculum

Residency Times: When did you first become interested in medicine as a career?

- *Olivia*: When I was in high school and my father was diagnosed with multiple myeloma. After several years witnessing the impact that his physicians had on both his physical and mental well-being, I decided that this was the sort of fulfilling career I wanted to pursue. I chose Family Medicine after realizing I liked all of my medical school rotations and couldn't narrow down my interests to just one area. I love the unpredictable nature of my clinic days and never knowing what pathology I might run into next!
- *Alex*: There was never a specific "eureka" moment where I decided on medicine; I naturally gravitated towards the field as it is the intersection of science, problem solving, and helping others, all things I enjoyed growing up. What I especially value and enjoy about Family Medicine is that it provides you with a broad set of tools to help patients achieve their goals, enhance quality of life, and improve function, while forging meaningful relationships along the way.
- *Kanika*: Medicine captivated me from a young age. In med school, Family Medicine's holistic patient approach resonated most deeply. The field's diversity, spanning pathologies and demographics, as well as its adaptability allowing focus in areas like women's health, noninvasive office procedures, or obesity management, aligned perfectly with my passions. Every patient encounter was unique: one moment I addressed mental health concerns and the next conducted a child's wellness check. This range kept me engaged, excited and consistently challenged.

RT: Can you briefly describe the POCUS curriculum and why it's important for the FM residency training?

Olivia, Alex, Kanika: Our curriculum reflects the broad nature of FM. Currently, it encompasses musculoskeletal exams, screening exams (DVTs, abdominal aortic aneurysms), various organ systems (gallbladder, lungs, and heart), and procedures (ultrasound guided injections, venipuncture, and abscess drainage). POCUS is one of the most important advances in bedside diagnosis since the invention of the stethoscope over 200 years ago. While the stethoscope enabled us to quickly hear inside the body, POCUS enables us to quickly see inside the body, providing valuable information via a non-invasive modality that's risk-free. There is evidence that POCUS improves clinical outcomes, helps in quickly narrowing down a diagnosis, reduces the time to beginning treatment, lowers procedure

complications and failures, reduces patient exposure to the ionizing radiation of computed tomography imaging, and decreases costs. Additionally, POCUS involves patients more closely in their diagnosis by showing them the relevant anatomy, which improves the patient-physician relationship. It instills confidence in the physician's diagnosis, ultimately increasing patient satisfaction with the treatment. The integration of POCUS into our residency curriculum is a pivotal asset, furnishing trainees with real-time diagnostic abilities, procedural expertise, and the kind of immediate visual feedback crucial for delivering optimal patient care across a variety of clinical scenarios.

RT: The POCUS curriculum has been partially funded by two GME Seed Grant awards. How were the awards used?

Olivia, Alex, Kanika: Our SEED Grant from 2022-23 was used to purchase a linear probe for the ultrasound machine in our clinic. This probe has enabled us to perform a wide variety of exams and has helped us to continue evolving our curriculum. The acquisition of training models through the 2023-24 SEED grant will aid us in learning POCUS during our formal curriculum across the academic year. The shoulder model will be used to teach ultrasound-guided shoulder injections; the gallbladder model to teach a right upper quadrant POCUS exam; and the abscess model to demonstrate the incision and drainage of abscesses under ultrasound guidance. We are distributing a Bingo card (with squares denoting various procedures) to all FM residents to encourage utilization of POCUS during clinical care. Having the training models for residents to learn these office-administered exams will be vital for years to come as FM continues to expand the POCUS curriculum.

RT: Will there be any scholarly outcomes from the adoption of the new curriculum?

Olivia, Alex, Kanika: We plan on presenting a poster on the POCUS project at the GME/APRH QI Research Day in May 2024. We would also like to publish a paper on our Bingo card as a novel teaching tool for increasing resident physicians' independent engagement with POCUS outside of formal didactic sessions. Overall, we anticipate that our project will introduce FM residents to a new way of teaching as well as increasing independent adoption of POCUS in clinical settings.

Family Medicine faculty Heidi Hilton during POCUS training

