

## **Resident Research Day Abstract** (Work in Progress)

**Title:** Point of Care Ultrasound (POCUS) for the Detection of Splenomegaly in a Hematology Training Program

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**Abstract** – Word Count: 282

With competency based medical education (CBME), residents must demonstrate competence to progress through four stages of training. Incoming postgraduate year (PGY)-4 hematology residents must be competent at basic physical exam maneuvers including detecting splenomegaly (enlarged spleen). Splenomegaly is important clinically in the diagnosis, staging, and prognostication of acute and chronic hematologic conditions. This study aims to determine the extent to which POCUS is a useful teaching tool for detection of splenomegaly for residents and attendings and to identify if POCUS is more sensitive and specific compared to other physical exam maneuvers for detecting splenomegaly.

Participants, referred in this study as clinical examiners, include hematology and IM residents in postgraduate year 2-5 ( $n=10$ ) and Hematology and General Internal Medicine ( $n=8$ ) attending staff at Queen's University. The educational program will be completed in two phases: a teaching session (small group face-to-face or virtual) and the data collection chronicling clinical experience in assessing patients using POCUS as compared to traditional methods of detecting splenomegaly. A convenience sample will be used for eligible, consenting Hematology in-patient/out-patient interactions with learners in one year at Kingston Health Sciences Center resulting in approximately 400 observations, which is higher than published research.

This study will provide insight regarding the teaching and learning effectiveness of POCUS as a tool for the detection of splenomegaly. Based on previous evidence, we believe that POCUS will be more accurate for detecting splenomegaly when compared to physical examination maneuvers, which could impact practice with regards to resident learning. In addition, we believe that findings will support the early introduction of POCUS to the Hematology training curriculum at Queen's and beyond. This has the potential to impact residency training and improve patient care.