Structure and evaluation of a multidisciplinary point of care ultrasound guided central line program: An update

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Background: Point of Care Ultrasound (PoCUS) is well established within Emergency Medicine, however the availability of formal training for other clinical disciplines is limited. Recently, many other disciplines, including Internal Medicine, Surgery, Anesthesia, Obstetrics & Gynecology, and Rural Family Medicine, have recognized the clinical and educational benefits of PoCUS and are seeking to establish formal training programs. Memorial University has established a cost-efficient, multidisciplinary PoCUS training program that focuses on training residents discipline-specific ultrasound skills. This modular program consists of a combination of online education, practical training, competency development and subsequent knowledge transfer. The program tracks individual residents progress via a learning management system. Through learning, teaching and administration of this self-sustaining resident-driven PoCUS program, residents will reflect on and enhance development of their CanMEDS roles. Objectives: To provide an update on the structure, implementation, and assessment of Memorial University’s Ultrasound Guided Central Line Program. Methods: Assessment will consist of pre and post surveys of residents’ skill and comfort placing lines, reflection on the impact program had on CanMEDS roles development, and analysis of complication rates and instructor assessments during competency development. Also, trends in catheter related bloodstream infections using standardized hospital data before and during program implementation will be monitored. Conclusions: Memorial University’s Multidisciplinary Point of Care Ultrasound Program combines a new approach to train residents in ultrasound while using and developing the CanMEDS roles. This project will provide guidance to other Universities across Canada on the design and implementation of a cost-effective, multidisciplinary PoCUS training program incorporating the CanMEDS framework. The authors would like to thank the Medical Research Endowment Fund, Memorial University for its financial support of this initiative.