In order to address this gap, a Dynamic Haptic Robotic Trainer (DHRT) was developed to help train surgical residents in the placement of ultrasound guided Internal Jugular Central Venous Catheters and to incorporate personalized learning” Yovanoff et al (2017).

Abstract:

While Virtual Reality (VR) has emerged as a viable method for training new medical residents, it has not yet reached all areas of training. One area lacking such development is surgical residency programs where there are large learning curves associated with skill development. In order to address this gap, a Dynamic Haptic Robotic Trainer (DHRT) was developed to help train surgical residents in the placement of ultrasound guided Internal Jugular Central Venous Catheters and to incorporate personalized learning. In order to accomplish this, a 2-part study was conducted to: (1) systematically analyze the feedback given to 18 third year medical students by trained professionals to identify the items necessary for a personalized learning system and (2) develop and experimentally test the usability of the personalized learning interface within the DHRT system. The results can be used to inform the design of VR and personalized learning systems within the medical community.

Reference:


Thank you to our partners for supporting IVTEAM