ImageSim – An Online Image Interpretation Learning System

Reference to abstract or paper:

2. 2. Kwan, K. Weerdenburg, M. Pecarcic, M. Pusic, M. Tessaro, H. Salehmohamed, K. Boutis. Climbing the learning curve – teaching the pediatric emergency physician how to interpret point-of-care ultrasound images. CJEM. May 2018. 20(supplS1); S35.
3. Boutis, M. Pecarcic, M. Pusic. ImageSim - performance-based medical image interpretation learning system. CJEM. May 2018. 20(supplS1); S47.

Lead Innovator:

Kathy Boutis MD MSc and Martin Pusic MD PhD
Email: Connect@imagesim.com; Twitter: https://mobile.twitter.com/ImageSim

Other Innovation Team Members: https://imagesim.com/about-imagesim/#faculty

Project website: www.imagesim.com

Description of the Innovation:

What problem does this innovation solve?

Visually diagnosed medical tests (e.g. radiographs, electrocardiograms) are the most commonly ordered tests in front-line medicine. As such, front-line health care professionals are faced with the task of learning the skill of interpreting these images to an expert performance level by the time they provide opinions that guide patient management decisions. However, discordant interpretations of these images between front-line physicians and expert counterparts (radiologists, cardiologists) is a common cause of medical error. In paediatrics, this problem is even greater due to the changing physiology with age leading to increased risk of interpretation errors.

ImageSim provides a comprehensive and evidence-based on-line education system that teaches health care professionals the interpretation of visually diagnosed medical tests using the concepts of deliberate practice and simulation. That is, our learning model includes sustained active practice of hundreds of cases where the learner is forced to commit to diagnosis for every case and then receives immediate specific feedback on their interpretation so that the participant instantly learns from each case. Importantly, we have presented these images as we
ImageSim aims to increase health care professionals’ accuracy in the interpretation of visually diagnosed tests with the goal of improved health outcomes. It offers exposure to hundreds of cases - an experience that would take years to accomplish from clinical exposure alone.

ImageSim provides courses for CME and Competency-Based Training. It is CME credited for level three credits with the Royal College of Physicians and Surgeons and College of Family Physicians of Canada. There are currently 350 active CME users and 11 emergency medicine training programs that are using this platform to improve skills in image interpretation.
References