## **Special Topics**

T4.3 Training in Emergency Medicine

13:15 Convention Hall C

## Point-of-care Ultrasound in Emergency Department: Enhancing Our Role and Integrating with Ambulatory Care Model

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Emergency medicine (EM) has been developing rapidly in the last three decades. One of the significant developments is the use of better technology and enhanced clinical practice such as incorporation of emergency ultrasound to bedside care in the Emergency Department (ED).

Emergency ultrasound has greatly enhanced the process of resuscitation and critical care. It was first introduced to the ED in Hong Kong about 20 years ago. Its portability, rapidity to use, availability, and repeatability favour its use in ED. The practice and standard of emergency ultrasound in Hong Kong is evolving rapidly and reaching international standards. In this presentation, different points will be shared such as the development of emergency ultrasound in Hong Kong, the concept of point-of-care ultrasound (POCUS), the use of ultrasound in managing critical and emergency conditions, and the impact on quality of care especially in resuscitation, time dependent critical management, extended and ambulatory patient care.

The use of POCUS in changing the delivery of patient care in ED will also be illustrated. Compression ultrasound (CUS) for patients with suspected lower limb deep vein thrombosis (LL DVT) and pelvic focused ultrasound (FoUSG) for first trimester pregnant ladies are two prototypical modalities. In the past, these patients would be admitted to hospital for further management. LL CUS and pelvic FoUSG allow us to safely manage them in an outpatient setting. Additionally, the protocols serve to risk stratify and triage those in real emergency for timely definitive treatment, resulting in reduced admission, and improved quality of patient care and patient satisfaction.

Despite its widespread of use, the quality of ultrasound is operator dependent. Currently the ultrasound trainers are credentialed and affiliated with overseas organisation, namely Winfocus. There is no emergency ultrasound training centre in Hong Kong. Therefore future development, potentials and challenges will be shared in this presentation.