

#### The use of live and continuous training 'Ultrarounds' to enhance use of Point of Care Ultrasound on a busy Ambulatory Assessment Unit

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#### Introduction

Point of care ultrasound (POCUS) is now a mandated section in the new Acute Internal Medicine (AIM) curriculum (1). However large gaps in the ability for AIM to deliver this teaching, remain (2). As a means to optimise confidence, competency (probe selection/position/image optimisation) and encourage active use of POCUS, 'Ultraround' (3) was introduced on a busy Ambulatory Assessment unit (AAU) in a tertiary hospital.

#### Methods



Image 1: Butterfly IQ+ ultrasound probe

Weekly basics of ultrasound (lung, abdomen, cardiac) were taught by a FAMUS accredited trainer using the 'Butterfly IQ+' probe (Image 1). This was called the 'Ultraround' where trainees (all clinical grades/disciplines) and trainer go around the department scanning 4-5 patients, with live feedback and interpretation of different pathologies. Weekly feedback was obtained from attendees to ensure training was trainee guided/focused. We sought to assess the confidence of trainees each week and their use of POCUS, looking for long term trends. Regular governance meetings were set up.

#### Results

Doctors (IMTs, fellows, specialty trainees and Consultants), Physician Assistants and Advanced Pharmacy Practitioners participated in Ultrarounds. Confidence with POCUS was fairly static. However data were collected each week with different attendees, so we are as yet unable to assess impact (Fig 1).

### Results

**Qualitative feedback** from trainees was universally positive. Trainees felt that use of POCUS helped early treatment initiation; assessment of fluid status, guided diuretic therapy, decisions on urinary catheterisation and paracentesis. The most common limitation to POCUS use was confidence (Fig 2).





## Discussion

Ultraround provides an additional method of training, mentorship and quality assurance to embed POCUS into clinical practice. It augments the traditional learning/mentorship model, making POCUS a group learning/discussion activity open to all grades. Clinicians now see POCUS on AAU whilst delivering care to help 'normalise' POCUS as part of everyday care. Ongoing evaluation will hopefully mark a watershed moment where trainee confidence improves to guide time/cost equivalent to train trainees to a point where confidence translates to active independent clinical use of POCUS. Next iterations include increased availability of Butterfly IQ+ probes, allowing images to be stored and reviewed by trainers and a separate 'Ultraround' with intensive training for Consultants to become trainers.

#### References

 Joint Royal College of Physicians Training Board (IRCTB) 2022. Curriculum for Acute Internal Medicine Implementation. August 2022 viewed 16/1/22 <u>https://www.rotb.org.uk/sites/default/files/AIM%202022%20curriculum%20DRAFT.odf</u>
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2. Knight T, Clare S, Smallwood N et al. Gaps in point of care ultrasound provision and the cost of ultrasound equipment provision: results of a nationwide audit of acute medical units. Acute Med. 2020;19(2):64-68. PMID: 32840255.

3. Nunab J, Walden. A POCUS in Acute Medicine. Acute Medicine 2020; 19(2): 62-63 https://pubmed.ncbi.nlm.nih.gov/32840254/

