



## INTRODUCTION



Lung ultrasound (LUS) has the potential to enhance respiratory physiotherapist's clinical examination and inform treatment. However there are very limited formal training opportunities for physiotherapists within the United Kingdom. This paper evaluates a training programme initiated on two intensive care units.

## METHODS



Six physiotherapists commenced a four phase competency based LUS training programme. The training programme followed the LUS component of the Core Ultrasound Intensive Care (CUSIC) accreditation pack offered by the Intensive Care Society (ICS). The training included an introductory course, supervised scan sessions, completion of scan report logbook and finally a triggered assessment. The first 100 scan reports to be submitted by the physiotherapy trainees were collected and analysed and each trainee was involved in a peer discussion about their experiences.

## RESULTS



Mentor feedback from the first 100 scan reports included advice about optimal scanning depth, artefact identification, avoiding rib shadows, orientation within the thorax/abdomen and lung sliding. Reported barriers to completing the training programme were a lack of access to diagnostic ultrasound machines. This was due to either being in use by other members of the critical care team or time spent away from the critical care unit. Two of the physiotherapists had managerial responsibilities that took precedence over some aspects of the training. As the training progressed a list of physiotherapy specific indications to scans began to emerge. At the time of writing, two of the trainees had completed the triggered assessment and been deemed competent to practice independently.



## DISCUSSION



Physiotherapists can learn LUS but there are a number of potential barriers to completing a LUS training programme that need to be addressed. However the scan reports included a wide range of pathologies including all of the most common identifiable pathologies seen with LUS. The four trainees, who submitted scan reports, were consistently identifying pathologies and artefacts correctly after ten scans. It is essential that sufficient time is allocated to complete the training and attendance on an introductory course is advised. Finally it is essential to be under the supervision of an experienced mentor throughout the training process for regular guidance and feedback. This allowed any feedback points to be integrated into practice earlier on during training to improve image acquisition and interpretation.

## CONCLUSION



Once a LUS introductory course has been completed, sufficient time has been allocated and a suitable mentor has been recruited, physiotherapists are able to become independent and competent in lung ultrasound use on critical care.

## REFERENCES



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