



Australasian College
for Emergency Medicine



Ultrasound Education Programs Summary

A short reference document adapted from ACEM Guideline [G25](#)

This document has been provided by the ACEM and EMUGs Collaboration Working Group to assist Clinical Leads in Ultrasound in developing ED ultrasound training programs. The suggestions outlined are not required for accreditation for the FACEM Training Program. Due to the variation in size and resources available at sites throughout Australia and Aotearoa New Zealand, the guidance provided in this document may or may not be appropriate for your site.

Objectives of Ultrasound Education Programs

On completion of an ultrasound education program, participants will demonstrate knowledge and understanding of:

- a** the theory of ultrasound;
- b** practical applications and limitations of focused emergency ultrasound;
- c** the credentialing process for specific emergency ultrasound indications;
- d** the need for ongoing emergency ultrasound CPD to maintain skills; and
- e** be able to perform and interpret emergency ultrasound scans.

Education Program Structure

An education program may consist of a combination of online modules, lectures, and face-to-face workshops. Emergency ultrasound workshops require a significant commitment of personnel, equipment, and advanced planning.

Basic components necessary include:

Education

- An education program syllabus as well as a list of recommended texts and other references.
- A workshop site of sufficient area to accommodate both lectures and the practical sessions.
- Evidence of attendance including an appropriate certificate of completion.
- A pre and post-test to demonstrate acquisition of ultrasound proficiency and interpretation.

Faculty

- A medical specialist with appropriate and extensive clinical experience and qualifications including experience in the use of ultrasound in the peri-arrest setting.
- Practitioners with significant practical experience in the application of emergency ultrasound.
- Registered sonographers who may assist with teaching of the skills related to the fundamentals of ultrasound, image acquisition and interpretation.

Equipment

- Appropriate ultrasound machines and transducers with a ratio of no less than 1 machine for a maximum of 5 students.

Practical Ultrasound Sessions

It is essential that practical ultrasound sessions include:

- a** Demonstration of correct application protocol for emergency indication.
- b** Minimum time – two hours each for abdominal aortic aneurysm, EFAST, Procedural guidance and Lung. Four hours for focused echo in life support.
- c** Maximum student: instructor ratio – 5:1
- d** Live ultrasound models for scanning sessions, preferably including both normal subjects and patients with demonstrable pathology (e.g. peritoneal dialysis patients, patients with known abdominal aortic aneurysm). Patients or professional-grade simulators are preferable for abnormal anatomy. However, they may not always be readily available. In such cases, ultrasound cineloops showing the same pathology may be substituted. Education programs covering Focused Echo in Life Support (FELS) must fulfil the criteria outlined in the ACEM policy document.

ACEM Recognition

Previously, ultrasound workshops required ACEM approval to become a 'recognised' course for training purposes. However, due to the large number of courses and the limitations of the review process itself, ACEM recognition of these workshops is no longer required. Participants should check the program to decide whether it meets their needs. CPD approval will continue to be required as per standard processes. It is hoped that the removal of the review process will encourage providers to be as creative as possible to ensure that optimal learning and retention of skills and knowledge occurs.



Australasian College for Emergency Medicine

34 Jeffcott St
West Melbourne VIC 3003
Australia

t +61 3 9320 0444
e policy@acem.org.au

acem.org.au



Emergency Medicine Ultrasound Group Australia

Level 2, 431 St Kilda Road
Melbourne VIC 3004
Australia

e central@emugs.org

emugs.org