

## SAQ 12

ACEM's Policy on the Use of Focused Ultrasound in Emergency Medicine (February 2016) supports the use of ultrasound imaging by emergency physicians for specific *critical care indications*.

a. Other than Focused Abdominal Sonography in Trauma and Bedside Echocardiography in life support, list four (4) specific critical care indications. (4)

1. AAA with shock
2. Vascular access
3. Free pelvic fluid in ruptured ectopic pregnancy
4. DVT in massive PE

**Also accepted: Lung scan as part of E-FAST, lung scan for suspected tension PTx, lung scan for acute pulmonary oedema, hydronephrosis in urosepsis, IVC caliber assessment in shock.**

### Examiner's Feedback

- Reading and answering the question carefully is paramount. It's pointless being a genius if you do not provide what is specifically being sought.
- The question stated "other than FAST or echo...". Means that answers incorporating the 4 views of FAST or pericardial/cardiac assessment were not accepted. However, additional views as part of EFAST (lung and pleural) were accepted.
- It also stated "specific critical care indications". Answers without specifics for critical care situations were not accepted.
- Practise writing only a few words, but with words that count! Your few words should convey specificity and precision. Key phrases and buzzwords are often very useful.
- Speaking of writing, illegible handwriting is a great tragedy for those whose answers are actually correct. If / when you're proficient at writing few-but-meaningful words (see above), the tendency to rush is minimised. This in turn will hopefully allow you to write more legibly, even late in the exam.
- Common acronyms in context (eg "AAA" in this question) are acceptable. Be careful using uncommon acronyms or those way out of context. If in doubt, spell it out.

You are tasked with establishing a training program for bedside ultrasound in your department. Your program will incorporate assessment of learners' competence.

b. List two (2) tools you may use, to assess competence in an ultrasound skill. (2)

1. Workplace based assessment (WBA), using actual patient
2. Objective structured clinical exam (OSCE) using simulated patient

**Also accepted: Proctored review of stored images, cross table *viva voce* exam\*, written exam\*, online assessment\*.**

### Examiner's Feedback

- The asterisked tools above assess knowledge more than competence, but are accepted.
- This question asked about assessment tools. Non-specific answers such as "number of observed scans" or "qualified assessor" without qualification are not answering the question (we're not here to cast aspersions on assessors by calling them tools!).
- Answers needed to be sufficiently specific. Some candidates wrote "logbook" on one line, and "image review" on the other. Each is fine, but mean the same thing. There is no point keeping a logbook unless the log is somehow validated. Therefore, only 1 out of 2 marks was scored.

c. For each of your listed assessment tools in part b, state one advantage and one disadvantage. Do NOT include financial considerations. (4)

	Advantage	Disadvantage
WBA	Assessor can verify student's skill in real time or via saved images.	Some true positive scans (eg AAA) are rare. Resource-intensive.
OSCE	Pathology is standardized and repeatable.	Limited validity; alone insufficient to assess competence.
Proctored Image Review	Time-efficient. Many cases assessed in short time.	Requires diligence and reliable technology. Operator dexterity not assessed.
Viva Voce	Time-efficient, convenient, relatively resource non-intensive.	Limited to competency in machine use, rather than application to patient.
Written Exam	Convenient. Used on many students simultaneously.	Limited to assessing theoretical knowledge, more than competence.

#### Examiner's Feedback

- This was mostly done well. At least nobody wrote "cheap" or "expensive".
- Difficult to do well in this question unless the preceding question was answered. Potentially damaging, as it scores 4 marks overall.
- Hopefully, such inter-dependent questions are rare in the real exam. Regardless, this is one of many good reasons to **read the whole SAQ before attempting the first question**. This allows appreciation of context, avoidance of repetition, planning, and appreciation of where to prioritise limited time/effort.

d. According to ACEM's *Policy on Credentialing for Focused Echocardiography in Life Support (February 2016)*, list two (2) requirements of **this individual clinician** for maintenance of recognized competence. (2)

1. Currency of practice. (ACEM recommends 25 examinations per 2 years or refresher workshop.)

2. Formal continuous professional development (CPD) compliance. (ACEM recommends 4 hours annually.)

#### Examiner's Feedback

- Woops, one error from exam administrators. The original version of this question referred to a clinician who was already competent in ultrasound. This part was deleted (inadvertently or deliberately) without alteration of the remaining question, making the phrase "this individual clinician" (highlighted above) nonsensical. Sorry about that.
- Nonetheless, thankfully the whole question still made sense, and no candidate appeared to be unfairly compromised.
- Only few words need to score for this. Answers like "CPD" and "refresher courses" were accepted. The bits in parentheses above are explainers, and not essential for point-scoring.
- It's evident that while knowing the relevant ACEM policy would certainly help your answer, it's not essential. Most of you used common sense and/or real-life experience to answer the question well. As long as you were specific and precise!

**GOOD LUCK FOR THE REAL EXAM!**

Don Liew, May 2018

#### References

- ACEM's *Policy on the Use of Focused Ultrasound in Emergency Medicine*, February 2016  
[https://acem.org.au/getmedia/000b84ee-378f-4b65-a9a7-c174651c2542/Feb\\_16\\_P21\\_Use\\_of\\_Focussed\\_US\\_in\\_EM.aspx](https://acem.org.au/getmedia/000b84ee-378f-4b65-a9a7-c174651c2542/Feb_16_P21_Use_of_Focussed_US_in_EM.aspx)  
 Accessed 14 March 2018
- Cameron 4<sup>th</sup> ed, p 803

#### Standard Setting

Minimum standard:

- Part A: 2 out of 4
- Part B: 2 out of 2
- Part C: 2 out of 4
- Part D: 1 out of 2

Therefore, **pass mark for this SAQ is 7/12.**