*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.*

**Assessments:**

During a formative or summative assessment, the candidate must demonstrate the ability to:

* acquire adequate ultrasound images of all the appropriate anatomical structures;
* identify any relevant artefacts or pathology present during real time scanning and/or on recorded scans and/or hard copies of scans;
* recognise an inadequate scan; and
* demonstrate an understanding of the indications and limitations of ultrasound examination for the condition in question.
* demonstrate appropriate machine care, image labeling and documentation of their findings; and
* integrate their findings into the overall clinical picture and generate appropriate treatment recommendations if appropriate.

**Formative Assessment: (at least 2 required)**

* The purpose of the formative assessments is to directly supervise the candidate performing an ultrasound examination in order to provide feedback and guidance for ongoing self-directed learning.
* The supervisor may prompt, guide and give feedback during the assessment.
* The first formative assessment should be completed soon after commencing scanning in any given modality. The second one should occur at a later stage, at least one week apart, and not on the same day as the summative assessment.

**Summative Assessment: (at least 1 required)**

* The purpose of the summative assessment is to directly supervise the candidate performing an ultrasound examination in order to determine competence.
* The supervisor should provide minimal (if any) prompting, guidance or feedback during the examination.
* The summative assessment should be completed after at least 75% completion of the logbook and can be counted towards the logbook.
* This assessment may be undertaken simultaneously as a Direct Observation of Procedural Skills (DOPS) assessment by ACEM trainees.

# Formative and Summative Assessment Form – eFAST

|  |  |  |
| --- | --- | --- |
| **Hospital name:** | **Candidate First Name:** | **Assessor First Name:** |
| **Date:** | **Candidate Last Name:** | **Assessor Last Name:** |
| **Formative Assessment □****Summative Assessment □** | **Overall: Competent / Not yet competent****(Circle one)** |  |
| **Assessor comments:** |

**EFAST ASSESSMENT**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Component** | **Criteria** | **Not yet competent** | **Competent** | **Assessor notes** |
| **Relevant Clinical Information**Able to explain indication(s) and clinical question(s) | Unstable trauma patient:Is there free fluid in pleural/ pericardial/ peritoneal space? Is there absent pleural slide?Unstable patient and suspected ectopic pregnancy (peritoneal component only)Is there free fluid in peritoneal space? |  |  |  |
| **Preparation** | Verbal Informed Consent (focused scan only) |  |  |  |
| Machine prepared (cleaned, battery charged/plugged in)Suitable positioning: supine patient, appropriate machine placement Patient privacy & dignity maintained |  |  |  |
| **Practical Aspects**Uses machine controls appropriately | Patient demographics (3 identifiers e.g. medical record number, Full Name, DOB)Choice of appropriate transducer & presetOptimisation e.g., Depth, gain, frequency, focus (if available)Image labelling RUQ/LUQ/Pelvis Long and trans/SC cardiac/R and L lung |  |  |  |
| **Image Acquisition**Captures adequate minimum image set.Cineloops preferred, may need more than one loop per area. | **Chest** Captures the least dependent point on the thorax to detect pleural sliding (exact location will be affected by the patient’s position).Images in at least two rib spaces (+/- M mode) on each side. Images should be labelled at least ‘R’ or ‘L’. |  |  |  |
|  | **RUQ** Base of lung / diaphragm Hepatorenal angle / Morrison’s PouchLiver Tip Paracolic gutter |  |  |  |
|  | **LUQ** * Base of lung / diaphragm
* Sub-diaphragmatic space
* Spleno-renal interface
* Splenic tip
* Paracolic gutter
 |  |  |  |
|  | **Pericardium** Any cardiac window, typically sub-xiphoid. Images to include most dependant portion of pericardium.  |  |  |  |
|  | **Pelvis**Longitudinal: From the pubic symphysis to *past* the dome of the bladderTransverse: Female: Rectouterine spaceMale: Rectovesical space Scans through area between iliac vessels |  |  |  |
| **Artefacts**Able to recognise normal and anormal anatomy and common artefactsNote: assessor may need to use library images of pathology e.g. TPA (thepocusatlas.com) | Mirror image |  |  |  |
| Edge artefact |  |  |  |
| Scatter (from air in lung / bowel) |  |  |  |
| Acoustic shadowing  |  |  |  |
| Acoustic enhancement (from fluid) |  |  |  |
| **Interpretation**Able to explain limitations and pitfalls | Unable to rule out injury to bowel or solid organs, or retroperitoneal haemorrhage. Cannot differentiate between different types of fluid.  |  |  |  |
| **Clinical Integration** | Appropriately integrates PoCUS findings with remainder of clinical assessment (history, examination, investigations).Able to explain how a positive/negative scan will affect patient management. |  |  |  |
| **Documentation**Completes minimum documentation in clinical record (using institution’s template if available) | Documentation should address the following: IndicationFocused question(s) addressed Findings/ Adequacy of imagesImpression / Clinical recommendationOperator name, role (eg FACEM, trainee)Operator credentialed in this modality Y/N |  |  |  |
| **Machine care** | Ends the examination on the machineWipes off excess gel and cleans probe and machine appropriatelyReturns machine to storage area and places on charge |  |  |  |