Guideline: Use of Limited Bedside Ultrasound in the ED

Purpose

This guideline relates to the use of limited bedside ultrasound in the Emergency Department.

Scope of Use

This applies to all medical professionals using bedside ultrasound in the emergency department.

Guideline

Only personnel trained in use and care of the ultrasound machine are allowed to use the device.

- 1. The user will have completed an ultrasound course.
- 2. They have undertaken a teaching session on the use of the individual machines
- 3. Machines are not to leave the emergency department.
- 4. Non ED doctors who meet the above criteria may occasionally use the machines but must always seek express permission from the supervising ED SMO and no one else.

Documentation:

There are 2 types of exams done with the ultrasound machine.

1) Procedural ultrasound.

Procedural ultrasound is done to verify anatomy and physiology. Examples are verification of vascular structures, or fluid filled structures, i.e., the bladder or free fluid in the chest cavity, abdominal cavity or subcutaneous fluid.

When doing a procedure with ultrasound, it will be documented in the notes that ultrasound was used for location and guidance.

2) Diagnostic Ultrasound

There are three types of diagnostic ultrasound.

a) Credentialed Ultrasound.

(See <u>ACEM policy 21</u> and <u>ACEM policy 22</u> (ACEM recognizes FAST, E-FAST, AAA, and ECHO)

A person who has undergone the college credentialing process or been credentialed by a certifying body and approved by the Clinical Leader performs these studies

Full documentation and images will be saved in the machine. Images are interpreted, and may be used to influence clinical management. The <u>EDUS documentation template</u> is completed and placed in the patient's chart.

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b) Uncredentialed Ultrasound

A person who has completed an ultrasound course in a particular study, but has not yet been credentialed does an un-credentialed ultrasound. The study should be performed in real time with a credentialed member of the staff, or immediately reviewed by the consultant if possible.

Documentation on the <u>EDUS documentation template</u> in the chart, states that this is an un-credentialed study and therefore cannot be reported until the images are verified by a credentialed sonologist.

The physician should have treatment plan that is not based on their ultrasound finding. This study does not meet the standards of a credentialed ultrasonographer.

If there is an unexpected finding, such as an Aortic Aneurysm or free fluid that was not anticipated, a confirmatory test, i.e. Ultrasound or CT, will be arranged.

The patient is informed that this is an un-credentialed exam and was done for clinical purposes only, and he/she may need a formal radiology scan.

Selected images will be saved to the computer. A record of the trainees interpretation should be penned onto a EDUS logbook form and the completed form placed in the forms box at the ultrasound machine station.

c) Educational Ultrasound

After verbal and or written consent is obtained from the patient, an ultrasound exam will be done for educational and or training purpose only. The patient will be informed of the reason for the ultrasound.

If an USS is done for training purposes (and not reviewed by a credentialed ED SONOGRAPHER in real time) the fact the USS was performed is documented in the clinical notes but the information should not be used to make clinical decisions.

If there is thought to be significant clinical findings then a formal radiology ultrasound will be arranged.

Care and Cleaning after use

IF THERE IS A POSSIBILITY OF BODY FLUIDS COMING IN CONTACT WITH THE PROBES, THE APPROPRIATE COVER WILL BE PLACED TO PROTECT THE PROBE.

The probes will be cleaned per manufacturer's protocol.

The user will replace ultrasound gel if none remains, and the machine returned to its designated location.

Cords must be prevented from dragging on the floor or snaring around the machines wheels by being appropriately draped over the cord hooks.

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Users must attend a session on how to clean and care for the machines.

Associated Documents

Other documents relevant to this guideline are listed below:

NZ Legislation	None	
CMDHB Clinical Board Policies	None	
NZ Standards	None	
Organisational Procedures or Policies	None	
Other related documents	ACEM policy 21, ACEM policy 22	

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