Resumption of clinical training in ultrasound during the COVID-19 Pandemic.

Clinical training in medical ultrasound remains at the cornerstone of effective and safe delivery of diagnostic ultrasound services. Phase 1 of the COVID-19 pandemic rightly resulted in strict controls over access to clinical training in ultrasound [1], with the need to minimise the number of practitioners in contact with individual patients together with minimisation of patient contact time.

As the UK moves into Phase 2 of the pandemic[2], the balance of risks during ultrasound training require refinement. The risks of COVID-19 to individual trainees, trainers and patients need to be balanced against the risks of not having sufficient suitably trained staff to maintain an ultrasound service in the medium to longer term.

The UK government has accepted that coronavirus will continue to be present in the community in the longer term[2]. It is therefore important to develop strategies to balance training needs in diagnostic ultrasound with the overarching requirement to keep individual members of staff, trainees and patients safe. Maintaining high quality of ultrasound training is also crucial.

BMUS accepts that individual ultrasound units vary greatly in their size, layout, staffing and skills-mix. In addition, it is likely that community prevalence of Coronavirus will vary between regions and also will be subject to change in individual regions over time.

This requires individual ultrasound units and training establishments to develop a bespoke and risk assessed approach to resuming training. BMUS has developed the following principles which are intended to assist ultrasound units and training establishments in deciding whether, and how to resume practical clinical training in ultrasound.

- Trainees should feel safe and supported during training. They should be able to opt out of practical training if they feel that they are being placed at unnecessary risk. There should be a mechanism for trainees to discuss their concerns without fear of judgement or negative consequences.

- Similarly, trainers should have the opportunity to raise concerns over safety and infection control issues where these arise. Such concerns should be taken seriously and treated sensitively.

- In general, less experienced trainees should only scan patients in whom the risk of COVID-19 is low and patients who have not been shielding. It may be appropriate for more experienced trainees to develop their skills in patients who may be immunosuppressed (for example patients with organ transplants) where such clinical skills are required in the short-term future.

- All staff and trainees should have access to adequate PPE together with training in its effective use[3]. Testing for COVID-19 should be available for trainees as well as qualified staff members if required.
• Patients should give their consent to have their ultrasound performed by a trainee.

• Patient contact time should be limited. This may require changes to the way that training is delivered. For example, newer trainees might undertake a short, focussed examination of a particular structure or organ rather than the entire examination. The length of time given for a trainee to scan any individual patient should be agreed at department level.

• In general, practical training should be delivered by more experienced staff members in order for trainees to maximise learning opportunities while keeping contact time as short as possible.

**Training Establishments/Skills centres.**

• Ultrasound simulators are an excellent method of introducing newer trainees to the practicalities of ultrasound and their use is to be encouraged. Social distancing between trainees should apply as per PHE guidelines.

• Use of healthy volunteers for ultrasound training should be carefully risk-assessed. Special consideration should be given to obtaining informed consent from volunteers, including safeguards to prevent volunteers from being coerced into participation. PPE should be available together with training in its correct use for both volunteer and trainee.

• Using patients in skills centres may be acceptable providing that the training centre follows the principles above.

BMUS has produced this guidance in response to changing circumstances. It amends, but does not supersede previous guidance produced by BMUS[1]. It will be subject to review as circumstances evolve.

**References**


5. Association of American Medical Colleges. Guidance on Medical Students’ Participation in Direct Patient Contact Activities. 2020 [cited 2020 07/06/2020];