



Review of CASE Requirements for the Accreditation of Musculoskeletal Ultrasound Courses

The central purpose of CASE is to provide assurance that ultrasound trainees completing an accredited course are safe, competent and have a clear and confident understanding of their scope of practice. This is at the heart of why CASE exists. We therefore need to ensure that our understanding of these requirements aligns with current and emerging service needs, and that this is reflected in our accreditation requirements. The accreditation process also needs to be rigorous, transparent, attuned to evolving practice and supportive of innovation.

For career sonographers training in applications such as general medical and obstetrics, there is a long established and clearly defined understanding of the scope of practice required and how this can be evidenced through accredited training. However, trainees in musculoskeletal (MSK) ultrasound are drawn from diverse professional groups with widely differing scope of intended practice. This has led to wide variation between proposed courses, poorly defined (or unrealistic) intended learning outcomes and significant debate around the intersection between focused courses and accredited postgraduate awards. This makes it difficult for both trainees and prospective employers to interpret the breadth of MSK practice that can be expected from and supported by existing courses.

To enable CASE to respond to this complex emerging landscape, an MSK expert group was established to review current accredited courses and to clarify the requirements of future accredited course provision. From this extensive review, the following position statements have been developed to clarify what CASE require of an accredited MSK ultrasound course. The statements will guide programme teams seeking accreditation and should ensure a consistent approach to accreditation decisions.

CASE MSK Review Proposal Statements (April 2023)

Position Statement 1: Applicants should be aligned with an appropriate professional body and have an appropriate amount and type of pre-existing experience in a clinical musculoskeletal or ultrasound specialism.

Rationale: This proposal maintains that applicants into a PgC MSK US course must have appropriate clinical MSK or ultrasound experience, but recognises that the level/quality of experience is not directly related to time (ie. some professionals could be clinically skilled/experienced in MSK or ultrasound practice <12 months and others may have >12 months of experience without appropriate knowledge/skills. This is a similar argument for a student competent in US after 10 scans vs a student not yet competent in US following 100

scans). This proposal also maintains the need for students undertaking MSK US courses to be health professionals aligned with an appropriate professional body (inclusive of AHPs, medical professionals). MSK is not currently an option for direct entry US courses, at undergraduate level.

Position Statement 2: As part of a CASE accredited course, students should undertake a portfolio of practice/learning and demonstrate competency in the areas that clearly align with their subsequent breadth/remit of ultrasound scanning following completion of the course.

Rationale: This proposal emphasises the need for students on MSK US courses to complete and maintain a portfolio/evidence log to:

- agree a learning contract between student, mentor and awarding institution, about a clearly defined individual breadth/remit of MSK US practice, for use in practice when training & post qualification (where the portfolio is presented to mentors and employers)
- evidence appropriate scanning experience & learning, aligned to this full breadth/remit of practice (inclusive of documented scans (quality appraised by mentor), scan hours ± reflective practice/case reports)
- evidence the student's clinical competency to scan out in practice following completion of the course, where the portfolio must include evidence of successfully completed clinical competency assessments. These assessments must include unseen patient exams, where student competency is assessed and signed off across the full breadth/remit of their defined US practice.

Position Statement 3: CASE advocate that the learner presents their portfolio of practice/learning and competency assessments to their employer (or regulator, as appropriate) as evidence of their initial practice.

Rationale: On discussion, we learned that it is not usually possible for HEI's to specify different MSK anatomical areas/regions on exit awards for individual students. Therefore, this proposal highlights the need for the health professional qualified in MSK US to present to their employer: 1) evidence of their exit award and 2) their portfolio of practice, with evidence of the breadth/remit of US practice they can competently scan within. CASE recognise that this proposal requires more employer education/support about the need for MSK US professionals to produce this evidence. As a mechanism towards preceptorship, this will ensure patient/sonographer safety through appropriate referrals and scan lists. This portfolio can also be used in evidence of practice for professional bodies and regulators.

Position Statement 4: Student scans must be directly supervised by an appropriate mentor, who has appropriate qualifications and experience (ie. PgC qualification and a minimum of 2*-years post qualification experience or level 2 Radiology) in MSK US, aligned with the student's breadth/remit of practice, as defined in their portfolio. (*Where there is a significant shortage of available mentors, qualified staff with a minimum of 1 year post qualification experience may act as the local mentor if at least one other member of the supervisory team meets the minimum requirement of 2 years' experience.)

Rationale: This proposal is intended to define an appropriate MSK US mentor for the trainee student. This ensures that the mentor has a breadth/remit of practice aligned to that of the student, with appropriate experience, qualifications and clinical competency. This proposal also aligns to the existing CASE proposal statement related to independent scanning. In relation to this statement, please see following principles:

- Mentor supervision of independent student scans/decision making, until the final (or interim) award is ratified by the university examination board, is a cornerstone of US practice (applicable to all remits of US and not exclusive to MSK)
- These scans must include scanning of a range of MSK pathologies aligned to the student's breadth/scope of practice, as defined/agreed in the learning contract
- Whilst students may undertake scans with healthy volunteers in simulation based training (fundamental to learning of healthy sono-anatomy), these should not be included in the scan log/numbers of the portfolio. The portfolio should be reflective of patient cases only.

Position Statement 5: Aligning with the subsequent scope of musculoskeletal ultrasound practice, appropriate learning and formal assessment(s) (usually at level 7 or equivalent Masters level) must be successfully completed for professional issues, science, physics and technology

Rationale: This proposal maintains the need for students to successfully complete a physics module, with learning and assessment at an appropriate level. The level is not named here, as could differ between levels 6 or 7 (or equivalent levels outside of England) depending on whether the MSK course is at a focused or postgraduate level (direct entry at undergraduate level not yet possible for MSK US). This proposal also acknowledges that all physics learning and assessment must be appropriate to the learner's breadth/remit of MSK US practice.

On behalf of CASE Committee, I would like to thank the MSK review team for their input. This has been an extensive and in-depth piece of work that will provide clarity and direction for future CASE activity. This will clarify not only our approach to accreditation of MSK awards but will also inform ongoing discussion around the training and education needs of an expanding group of specialist ultrasound users.



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