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Recruiting international sonographers and those without a CASE accredited award

British Medical Ultrasound Society and Society of Radiographers

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1. Introduction

The UK is experiencing a chronic shortage of sonographers. With increasing demand for ultrasound services and an ageing workforce, the situation is likely to get worse. In recent years there have been several new educational initiatives that aim to increase the numbers of qualified sonographers safely while at the same time not depleting the radiographer workforce. Initiatives have included four-year radiography degree programmes, BSc (Hons) and apprenticeship courses, and direct entry MSc courses. Such initiatives are welcome, but additional opportunities need to be explored if numbers are to significantly increase in the near future.

Aligned with current NHS strategies, solutions may include recruiting trained sonographers from abroad^{1,2} and recruiting other ultrasound practitioners who do not hold a Consortium for the Accreditation of Sonographic Education (CASE) accredited qualification, such as medical physicians and UK-qualified sonographers on non-CASE accredited programmes. For brevity, this cohort will be described from now on in this report as '*sonographers without a CASE accredited award*'. Some UK NHS managers have already recruited or tried to recruit from this group, but little is known about their experiences. Anecdotally, managers have reported mixed results, and some have indicated that both they and their new staff could have benefitted from more support during the recruitment process and immediately after appointment.

If more sonographers without a CASE accredited award are to be employed and successfully integrated into the UK ultrasound workforce, there needs to be a better understanding of the current recruitment process and the level of support for the successful candidate, and a better understanding of what knowledge and skills they possess. A questionnaire was therefore designed to explore these issues and to provide information regarding the following four aims:

- To investigate current recruitment methods that work well
- To investigate if additional help is needed by managers to aid future recruitment
- To investigate managers' perspectives on how well those without CASE accredited awards integrate into the ultrasound department
- To identify what additional help, if any, these recruits might need for a smoother transition

If areas to improve the recruitment process are identified, it is anticipated that key stakeholders in ultrasound would seek to work together to bridge these gaps, thereby supporting managers, increasing the retention and satisfaction of recruits, improving the consistency of service delivery, and ultimately keeping patients safe.

2. Method

Using SurveyMonkey™, a questionnaire to address the aims was devised by the British Medical Ultrasound Society (BMUS) and the Society of Radiographers (SoR). It was approved by NHS England's legal department as being fair, appropriate and non-discriminatory. It was sense checked and piloted by a convenience sample and, once refined, was live for approximately seven weeks from 10 November to 31 December 2023.

Ethical approval was not required for this service evaluation and the promotional material and survey itself contained a contact for further information if needed. The survey link was promoted on the BMUS and SoR websites and social media outlets. No incentives were offered to complete the survey, and participants could withdraw at any point.

3. Results

In total, 195 responses were obtained and 61 were excluded since no useful information was provided by the participant; thus, 134 responses remained for analysis. Participants in Scotland, Wales and Northern Ireland accounted for 21% of survey respondents. Responses from England accounted for 73% and 6% were 'other', including British Overseas Territories, Republic of Ireland and the Channel Isles (Figure 1).

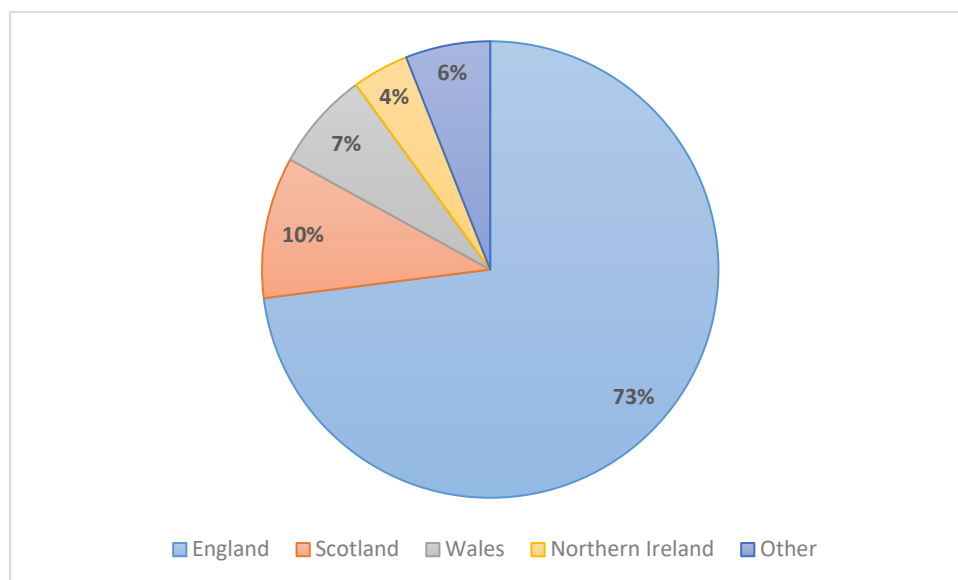


Figure 1: Percentage responses according to country

The job titles of those completing the survey varied, but were commonly Ultrasound Manager, Radiology Manager, Deputy Manager, Lead Sonographer, Director of Ultrasound, Clinical Director, Clinical Lead and Consultant Sonographer.

Just over half (51%) of participants were responsible for up to 10 ultrasound rooms and 35% had responsibility for 11 to 20 rooms. The vast majority stated that they were short staffed, with only 17% claiming to carry no vacancies. Many (40%) used locums all the time and almost all trained students regularly.

3.1 Reasons for not attempting to recruit those without CASE accredited awards

Although most participants said they had experience of trying to recruit ultrasound practitioners without a CASE accredited qualification, 37% said they had never done so. Common reasons given for why such recruitment had not been attempted included:

- Never needed to (33%)
- Not sure how to match qualifications (31%)
- Not sure about candidates' ability to report to UK standards (61%)

Note: Combined percentages exceed 100 since participants were allowed to choose more than one reason.

Additional reasons included the opinion that Fetal Anomaly Screening Programme (FASP) requirements for obstetric ultrasound screening and diagnostic examinations were a deterrent, and previous poor experiences of working with internationally trained radiographers and sonographers, which had served to 'put off' the respondent from attempting to recruit from these cohorts.

3.2 Support for recruitment

Just under half (49%) said they had help from their local human resources department when it came to international recruitment. Nearly 21% said they had an international recruitment team within the hospital, but almost a third (32%) said they had no support at all. One participant said that their Trust used a third-party agency to source international recruits. When asked if any local processes had been developed to support this type of recruitment, most (57%) said 'no', 15% were unsure and 28% said 'yes'. The locally developed processes related mostly to post-employment strategies and included:

- Recruits being doubled up until deemed competent by band 8a staff
- Practical exam at interview
- Image review at interview
- Year-long preceptorship period
- Tailored induction
- Recruiting at Agenda for Change pay band 6 and offering support until reporting and scanning standards met local requirements, then promoting the individual to band 7
- Offering support based on the [BMUS Preceptorship and Capability Framework for Sonographers guidance](#)

The majority (71%) said they had a probationary period for all new sonographers, but 7% said they had one only for international new starters and 22% said they had no probationary period at all.

Participants were then asked about their first experience of recruiting sonographers without a CASE accredited award. In total, 80% had successfully recruited at least one, but 20% had been unsuccessful. The professional background of the potential new recruits was:

- Sonographer (40%)
- Radiographer (43%)
- Medical doctor (12%)
- Other responses (4%) (a mix of the above three options)

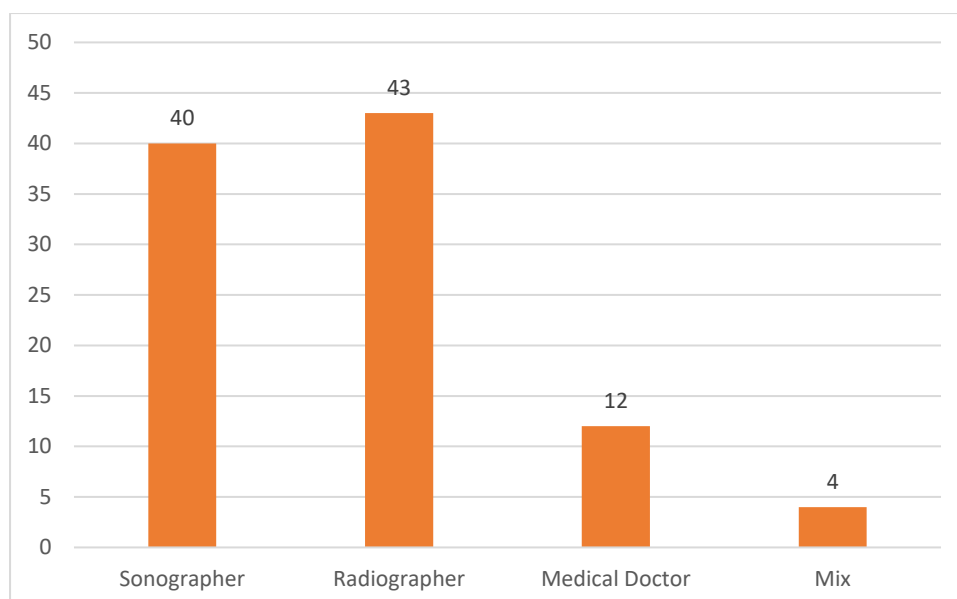


Figure 2: Professional background of those applying for sonographer posts (%)

3.3 Geographical location

Employees had been recruited from 26 different countries. The top two most popular countries were Nigeria and Pakistan. Smaller numbers of practitioners came from Uganda, South Africa, India and the Philippines. Four sonographers were recruited from England/the UK from non-CASE accredited programmes.

Four or fewer recruits were associated with the following countries (listed in alphabetical order): Argentina, Australia, Bulgaria, Canada, China, Egypt, Ghana, Italy, Latvia, Malaysia, New Zealand, Poland, Saudi Arabia, Syria, Trinidad, USA, Zimbabwe. By citing 'Africa' as the country of origin, three participants were non-specific.

3.4 English language skills

Less than half (43%) of the recruits had English as their first language. Although the majority (57%) did, a large percentage (43%) of respondents did not test English proficiency during the recruitment process, despite [UK Government advice](#) on which countries do not require a test of English language proficiency.

3.5 Qualifications

Participants were asked about how they assessed the recruits' qualifications. Methods were very variable. Over a fifth (22%) did not attempt to assess them, 28% used UK ENIC (European National Information Centre) and others contacted the institute that issued the award, or sought advice from CASE or from a UK university.

3.6 Communication skills

Regarding communication skills, most (93%) tested these during a face-to-face or online interview. Some (13%) provided written tasks prior to employment and 4% did not test communication skills at all. Note: Participants were allowed to choose multiple assessment methods, so figures exceed 100%.

3.7 Technical ability

Regarding technical ability, 48% of participants said this was tested face to face using an ultrasound machine and 16% said it was assessed virtually, either online or via a video recording. Only 3% said they used a simulator. Image reading was part of the assessment according to 33% of respondents, and 36% relied on referees' testimonies. Again, a mix of methods was used, although 18% said they did not assess the candidate's technical skills at all.

3.8 Integration

Via free text, participants were asked what strategies were used to help integrate the new recruit into the department. By far the two most popular methods were 'buddying up' and/or direct supervision with other staff, and/or a structured preceptorship programme. Other strategies included enrolment on a CASE accredited course, local induction and audit. One participant said that no strategies were used, and a few said that there was no difference in the way recruits were integrated into the department whether they were from the UK or from overseas, and whether or not they had a CASE accredited qualification.

When participants were asked to describe their experiences of recruiting a second sonographer without a CASE accredited award, the findings were very similar. For example, candidates were sonographers, radiographers or medical physicians by background, from the same countries listed already, and most participants (90%) tested communication skills face to face at interview, and 51% tested technical ability using an ultrasound machine.

3.9 Unsuccessful appointments

The questionnaire explored the reasons behind unsuccessful appointments, i.e. sonographers without a CASE accredited award who were deemed by participants as unsuitable to employ. Decisions were usually multifactorial, but the four most common reasons given were as follows.

Clinical interpretation skills not of the standard required	47%
Report writing not of the standard required	42%
Technical skills did not meet departmental needs/standards	40%
Unable to map their qualification to CASE standards	40%

The questionnaire did not ask respondents to apply their answers to further details about the individual candidate, such as professional background, English language proficiency or country of training, so it remains unknown whether specific groups were more or less likely to gain employment.

3.10 Support for managers and recruits

Participants were asked if they would be more likely to recruit sonographers without a CASE accredited award if a UK bridging qualification was available during the appointee's preceptorship period, on which they could be enrolled depending on their needs/knowledge gaps identified prior to employment. The majority (68%) said 'yes', 13% said 'no' and 19% were undecided.

The participants were offered 17 topics (Appendix A) that might be suitable for inclusion in a bridging qualification and were asked to select a maximum of five topics that they considered most important. They were also asked whether they would like to see learning material developed, assessment tools developed, or both (Figure 3).

All 17 options offered were popular, but the ones that were desired most as **educational resources** were:

- UK healthcare delivery and expectations (n = 44)
- Enhanced communication skills (including explaining unexpected or complex findings) (n = 41)
- FASP requirements (n = 41)

Regarding assessment tools, the topics that participants felt needed **assessing** most were:

- UK healthcare delivery and expectations (n = 48)
- Written communication skills (report writing) (n = 47)
- Enhanced communication skills (including explaining unexpected or complex findings) (n = 46)

Image acquisition and FASP followed closely behind the top three, with 43 and 42 votes, respectively.

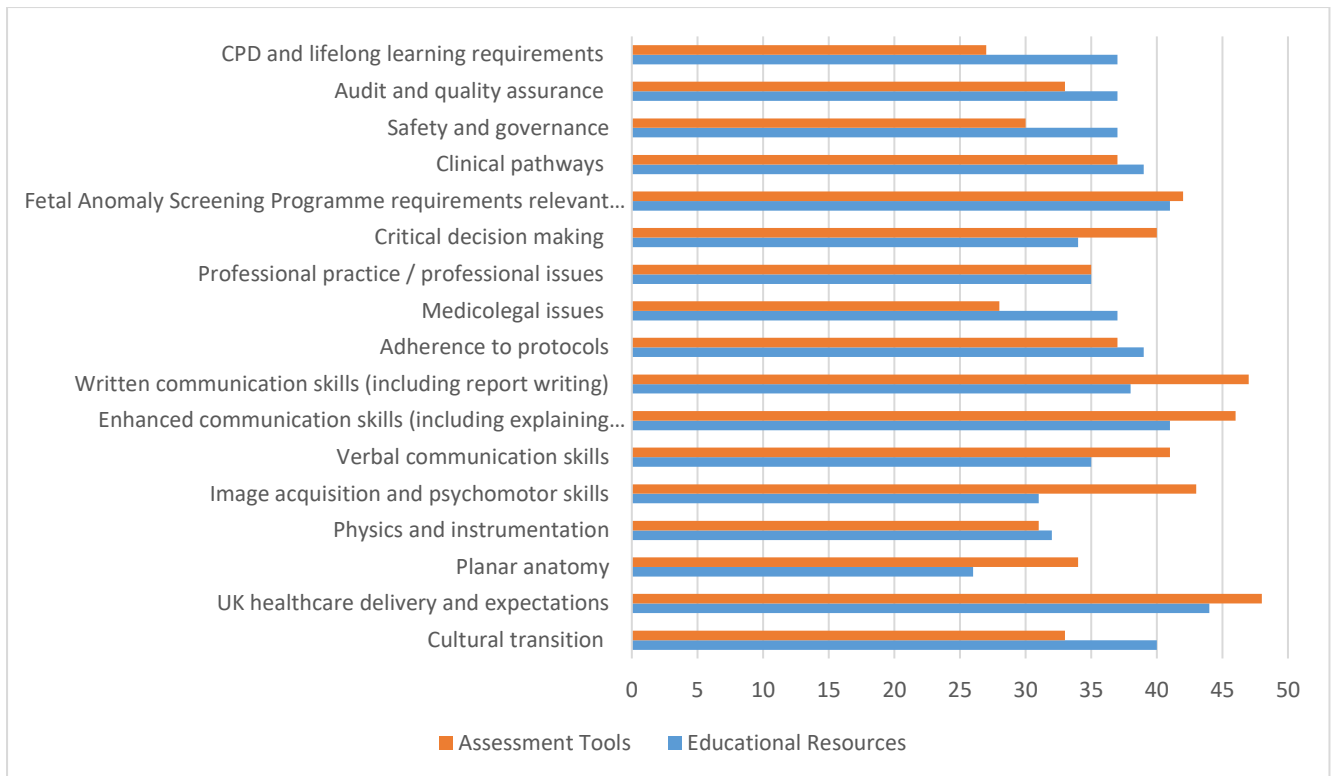


Figure 3: Educational and assessment tools that respondents considered would assist them when employing sonographers without a CASE accredited award

Note:

Fetal Anomaly Screening Programme requirements relevant to the country, e.g. FASP (England)
 Enhanced communication skills (including explaining unexpected or complex findings)

3.11 Integration experiences to date

Survey respondents were asked to describe how their recruits were fitting in to the department. In total, 22% said they did not have any recruits, 32% said they were an asset and 46% said the recruits still needed support. The most common explanations for why the recruits continued to need support were that they were within their preceptorship period or required help with report writing. However, some had been in post longer and were viewed as not being up to the UK expected standard. Some example quotations include:

‘Our Sonographer has only been with us for 1 month, so still undergoing preceptorship, but is currently integrating well into our small team. They have already had experience in private practice in the UK.’

‘Clinical skills are below expected level. Report writing not up to standard.’

‘Unfortunately, our individual was dismissed due to poor conduct professionally and poor attitude without a willingness to learn or integrate into an NHS care system.’

When asked what went well during the recruitment process, responses relating to previous experience and/or tests given to the candidate during or prior to interview were frequently mentioned. These tests may have been on report writing, or questions on a given clinical scenario, or a practical scanning procedure.

'Good experience of practical element of interview – shows practical and communication skills with patients, which really helped with the selection.'

'Lots of support for the individual for relocation, housing support, preceptorship to help develop the individual. A reporting-style assessment was performed to identify gaps in knowledge and highlight where support needed to be provided to develop the individual.'

'Using a clinical scenario question to help understand the level of competency.'

When asked what could have gone better during the recruitment process, it was clear that many participants felt at a disadvantage through not being able to interview the candidate face to face. With hindsight, they wished the recruitment process had been more robust:

'It was quite a lonely journey with limited understanding of the situation from the recruitment team, HR, even managers, whose main concern seems to be getting scans done, without considering quality, so I felt I had been left to it, knowing that if it didn't work the responsibility would be fall on me.'

'No practical assessment. Unable to be assured that the Sonographer can work autonomously to UK standards. Communication barriers. No assessment of English language skills.'

'Communication with international recruits is difficult for interviewing and determining competency.'

'As they were not local to the area or city we would ideally like to assess a live scan component before we recruit.'

At the end of the questionnaire, participants were invited to share any 'lessons learnt' during the process of recruiting staff from overseas and/or without CASE accredited qualifications. Emerging themes included:

- A realisation that, after appointment, many recruits were ill-prepared for UK NHS ultrasound service delivery
- A realisation that there is no reliable way to match overseas qualifications with ones obtained in the UK
- A view that all sonographers must be assessed practically before appointment, especially since not all non-CASE accredited awards involve a competence assessment, which is an expectation of CASE accredited programmes³
- A view that all sonographers, regardless of background, need careful vetting before employment due to the high level of responsibility placed on UK sonographers
- A belief that recruits from some countries were more versatile and educated than UK sonographers with CASE accredited qualifications and therefore enhanced the workforce and helped further develop UK-trained sonographers
- A recommendation that at least six months' support should be available to international recruits
- A desire for a more standardised way to recruit and support international individuals, to benefit both employer and employee

4. Discussion

The survey revealed several important aspects of the recruitment of sonographers without a CASE accredited award that were previously unknown or largely anecdotal. To our knowledge, this investigation is the first of its kind. Most participants reported successful attempts at international recruitment, and this is reassuring in view of current NHS international recruitment drives and the fact that only 17% stated that their departments were fully staffed.

The information provided by the participants has highlighted examples of best practice that can be shared, while also identifying areas that need more standardised and enhanced support for both ultrasound managers and recruits.

4.1 Ultrasound managers

From the comments provided, it is apparent that many ultrasound managers were inexperienced when attempting to recruit internationally. This is understandable, since international recruitment of sonographers remains a relatively uncommon and little explored activity compared, for example, with international recruitment of nursing staff.^{4,5,6} Furthermore, 32% of those surveyed claimed to lack support from within their Trusts or Health Boards, making them feel isolated and personally responsible if there are issues with integration into the department. Feelings of this sort may hinder attempts at recruitment of sonographers without a CASE accredited award and therefore need to be addressed.

Despite advice from CASE⁷ on equivalence, and the services of [UK ENIC](#) that try to match the academic level of internationally obtained qualifications with UK levels, there is still no standardised, reliable method to evaluate curriculum depth, content and assessment methods, if any, for ultrasound qualifications gained outside the UK. While this was a significant concern for some managers, others had not considered the need to assess qualifications, perhaps through a lack of awareness, a misassumption that ultrasound qualifications are equal, or possibly pressure to recruit without an emphasis on competence and level of experience. It must be a priority, therefore, to ensure managers are aware of variations in non-CASE accredited ultrasound programmes until a reliable method to map qualifications has been devised.

The process used by managers to recruit was inconsistent across Trusts and Health Boards. For example, where English was not the candidates' first language, 43% of managers did not attempt to seek an English language proficiency test. Also, 22% of those surveyed said they did not assess qualifications and 18% said no assessment of technical ability was made. These types of omissions may lead to integration issues within the department and may compromise patient safety. Therefore, one of the first outcomes from this work is the development of a simple recruitment tool kit for managers.

As one participant said:

'We need guidance from professional bodies on what to look for.'

The tool kit will provide an essential checklist for managers to follow as they seek to identify candidates who may be suitable for employment in UK ultrasound departments. Details of assessing, for example, communication skills, length of ultrasound course completed, final competency assessment method (if any), academic level, and clinical and reporting experience since qualifying will be listed.

4.2 Recruits

From the comments provided by respondents, it is clear that the recruits themselves have wildly differing experiences when newly appointed. Some integrate quickly and easily while others are still receiving support after more than two years. It is also noted that some recruits are very well supported within a structured preceptorship while others have nothing specific to support their skills development and confidence to meet local standards.

When describing areas where recruits needed more support, managers most often cited report writing. Few countries have sonographers that practise autonomous reporting, in that the final report is not overseen or approved by a physician.^{8,9,10,11} However, most international sonographers are trained to produce a preliminary report of their findings, whether it is via a template/proforma or free text. It is, therefore, essential that those responsible for recruiting sonographers have robust processes in place that seek to test interpretation skills and written skills prior to giving an offer of employment. UK sonographers are expected to produce 'actionable reports'¹² and international recruits must do the same for consistency and patient safety. Support is often required to help with the transition.

The survey results indicated that there may sometimes be a mismatch between what recruits and managers are expecting and what they actually experience once the person is in post. Sometimes recruits have attended training in ultrasound in their home country for as little as three weeks, so these individuals are not prepared for the level of practice associated with a UK sonographer. Such appointments lead to increased risk of patient harm, and increased stress and anxiety for the manager and recruit. The wider ultrasound team may also be affected through increased tensions and reduced morale, as illustrated by these comments:

'We had to pay somebody band 7 for eight months whilst they caught up and it created a lot of bad feeling with the other band 7s. The department felt lumbered with a sonographer that could not be left on their own to scan.'

'Strained relationships with UK staff when overseas staff appeared to be getting preference for formal university courses in order to improve their knowledge and skills. Also this often meant that radiographers wanting to start ultrasound training were not able to do so due to limited training spaces and funding. In some instances this led to radiographers leaving the Trust to obtain training places elsewhere.'

In other cases, according to managers, recruits have knowingly falsified or overstated their abilities in their CVs and during interview, only for these shortcomings to quickly become evident after appointment. Again, pre-interview checks to inform short-listing and a robust interview process must be in place.

There were many examples of international recruits impacting positively by bringing cultural diversity, new skills and new areas of clinical expertise to departments:

'...they have made an impact to service capacity. It has the added benefit of introducing slightly different cultures and experiences to the team and has helped CASE accredited PG [postgraduate] sonographers develop their own leadership and mentoring skills. It is good prep for the eventual qualification of the undergraduate sonographers we have taken on.'

Some of those surveyed commented that, compared with educational programmes in some countries, such as Australia and New Zealand, UK programmes are narrower in scope and UK

sonographers may be less flexible and versatile. These managers spoke of how their new recruits enhanced their existing workforce and readily assisted with practical training.

'UK-trained sonographers tend to be very modular in their scope of practice and I have found that international staff that are very broadly qualified have actually increased the skill-set of our CASE accredited staff.'

4.3 Bridging material

From this survey, the majority (68%) of participants stated that the development of some national bridging material to support their new recruits might make them more likely to attempt to recruit those without a CASE accredited award. The most popular topic, and the one for which they wanted both learning and assessment elements, was 'UK healthcare delivery and expectations'. It is anticipated that recruits could enrol on all or some parts of such a bridging module, depending on their knowledge and skills gaps identified at interview or during their preceptorship period. Opportunities to collaborate in order to develop these resources should be explored.

Another area of UK practice that participants frequently identified as a barrier for some of their recruits was the performance of obstetric ultrasound examinations. Currently, the NHS FASP states that all practitioners providing NHS obstetric screening and diagnostic scans should hold, as a minimum:¹³

- Certificate or Diploma in Medical Ultrasound (CMU/DMU) of the College of Radiographers (CoR)
- Post Graduate Certificate in Medical Ultrasound (PgCert) approved and validated by a higher institute of education and accredited by the Consortium for the Accreditation of Sonographic Education (CASE) or equivalent; the qualification should be relevant to obstetric ultrasound practice
- Royal College of Obstetricians and Gynaecologists (RCOG)/Royal College of Radiologists (RCR) Diploma in Obstetric Ultrasound, Advanced Training Skills Module (ATSM) or Subspecialty Training in Maternal Fetal Medicine

In view of the difficulty in establishing equivalence, many managers are enrolling international recruits onto a UK postgraduate CASE accredited obstetric module, regardless of the practitioner's ability, experience or qualification. If focused obstetric bridging material were developed at level 7, it may save time and resources and expedite the recruit's contribution to the department. Ultrasound departments recruiting graduates from new UK BSc programmes will face the same barrier, and level 7 obstetric bridging material would therefore be equally appropriate for these professionals to complete.

4.4 Strengths

The survey comprised closed and open questions, thus allowing rich quantitative and qualitative data to be gathered. It was promoted by both the SoR and BMUS, thus ensuring that many ultrasound managers would have the chance to participate. The survey was unbiased in that it sought information related to recruitment experiences whether positive, negative or neither. It also sought information from managers who had never recruited from the cohort in question in order to explore barriers as well as experiences.

4.5 Limitations

Participants were self-selecting, so it may be that only those with experiences at the more extreme ends of the recruitment spectrum felt compelled to take part; thus, the results may not be generalisable. That said, there were many respondents who did not elaborate with free text but just

explained the processes in place at their Trust or Health Board for the recruitment of sonographers without a CASE accredited award. This may imply that their experiences were unremarkable.

For those participants who had tried to recruit but failed to appoint, we ascertained the reasons why the candidate was considered unsuitable, but we did not link these candidates with their qualifications or country of training. This omission means that any trend relating to unsuccessful candidates from a particular country or background remains unknown and has potential for further studies.

4.6 Recommendations

The experiences of managers were sought in relation to both the managers themselves and their recruits. Their insights were valuable. However, a further investigation targeting recruits directly is recommended to explore their personal perspectives. This may elicit further issues that could be addressed to improve their integration into the UK workforce.

It was evident that many managers need support during the process of international recruitment and a recruitment tool kit for managers will be produced. It would be of value to measure the impact of the tool kit by surveying managers' recruitment experiences again after an appropriate interval.

5. Conclusion

There is no standardised method of recruitment or integration of sonographers without a CASE accredited award. Managers' experiences differ considerably, and many appear to have little support. The abilities of recruits are mixed. Some recruits appear better trained and more versatile than the UK workforce. Others need extensive support, and often this is not realised until after they are employed.

The development of bridging material aimed at new employees and a recruitment tool kit aimed at managers may serve to mitigate some of the issues highlighted in the survey. In the meantime, it is essential that all candidates applying for a UK sonographer post undergo a robust and detailed recruitment process and, on appointment, are provided with a comprehensive preceptorship programme.

6. References

1. NHS. 2020. We are the NHS: People Plan for 2020/21. Available: <https://www.england.nhs.uk/wp-content/uploads/2020/07/We-Are-The-NHS-Action-For-All-Of-Us-FINAL-March-21.pdf> (Accessed 8 August 2024)
2. NHS. 2019. The NHS Long Term Plan. Available: <https://www.longtermplan.nhs.uk/wp-content/uploads/2019/08/nhs-long-term-plan-version-1.2.pdf> (Accessed 8 August 2024)
3. Consortium for the Accreditation of Sonographic Education. 2020. CASE Validation and Accreditation Handbook. Available: <https://www.case-uk.org/handbook/> (Accessed 8 August 2024)
4. Batata, A. 2005. International nurse recruitment and NHS vacancies: a cross-sectional analysis. *Globalization and Health*, 1, 7. <https://doi.org/10.1186/1744-8603-1-7>
5. Nuffield Trust. 2021. Recruitment of nurses from overseas: Exploring the factors affecting levels of international recruitment. Available: <https://www.nuffieldtrust.org.uk/sites/default/files/2021-11/recruitment-of-nurses-drivers-web2.pdf> (Accessed 8 August 2024)
6. Phiri, P., Sajid, S., Baykoca, A. *et al.* 2022. International recruitment of mental health nurses to the national health service: a challenge for the UK. *BMC Nursing*, 21, 355. <https://doi.org/10.1186/s12912-022-01128-1>
7. Consortium for the Accreditation of Sonographic Education. 2023. CASE programme equivalence. Available: <https://www.case-uk.org/information/position-statements/case-equivalence/> (Accessed 8 August 2024)
8. Harrison, G., Kraus, B., Martins Dos Santos, R., Noij-Rijkes, S., Pedersen, M.R.V. 2021. The role of radiographers in ultrasound: A survey of the national societies within the European Federation of Radiographer Societies (EFRS). *Radiography*, 27 (3): 761–767. <https://doi.org/10.1016/j.radi.2021.02.003>
9. Pedersen, M.R.V., Kraus, B., Santos, R., Harrison, G. 2022. Radiographers' individual perspectives on sonography - A survey of European Federation of Radiographer Societies (EFRS). *Radiography*, 28 (1): 31–38. <https://doi.org/10.1016/j.radi.2021.07.018>
10. Miles, N., Cowling, C., Lawson, C. 2022. The role of the sonographer - An investigation into the scope of practice for the sonographer internationally. *Radiography*, 28 (1), 39–47. <https://doi.org/10.1016/j.radi.2021.07.017>
11. Kraus, B., Harrison, G., Santos, R., Vils Pedersen, M.R. 2024. Ultrasound education across European Federation of Radiographers Societies (EFRS) countries: Similarities and differences. *Radiography*, 30 (3), 715–722. <https://doi.org/10.1016/j.radi.2024.01.024>

12. Royal College of Radiologists. 2018. Standards for interpretation and reporting of imaging investigations, 2nd Ed. Available: <https://www.rcr.ac.uk/our-services/all-our-publications/clinical-radiology-publications/standards-for-interpretation-and-reporting-of-imaging-investigations-second-edition/> (Accessed 8 August 2024)
13. NHS England. 2024. Education and training. Available: <https://www.gov.uk/government/publications/fetal-anomaly-screening-programme-handbook/education-and-training> (Accessed 8 August 2024)

7. Acknowledgements

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Appendix A: Suggested topics for supporting the transition

Titles of 17 suggested topics for which educational resources and/or assessment tools might be developed to support departments employing sonographers without a CASE accredited award. Survey participants were asked to choose only their top five.

- Cultural transition
- UK healthcare delivery and expectations
- Planar anatomy
- Physics and instrumentation
- Image acquisition and psychomotor skills
- Verbal communication skills
- Enhanced communication skills (including explaining unexpected or complex findings)
- Written communication skills (including report writing)
- Adherence to protocols
- Medico-legal issues
- Professional practice/professional issues
- Critical decision making
- Fetal Anomaly Screening Programme requirements relevant to the country e.g. FASP (England)
- Clinical pathways
- Safety and governance
- Audit and quality assurance
- Continuing professional development (CPD) and lifelong learning