

Ultrasound Workforce UK Census 2019

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1 Executive summary

In May and June 2019, the Society and College of Radiographers (SCoR) surveyed ultrasound providers in the United Kingdom. The aim of the census was to obtain data on the number of sonographers employed, the number of vacancies and details of the workforce structure. An online questionnaire was responded to by 70 ultrasound providers employing sonographers. This report presents the results of this census and compares them to a similar survey carried out in 2014¹ and a census of the wider diagnostic radiography workforce as at 1 November 2018². The following bullet points highlight the main findings:

- The organisations responding to the census have an average of 14.3 whole time equivalent (WTE) sonographer establishment posts.
- Nearly half of the English respondents (45%) undertake ultrasound work under the Any Qualified Provider (AQP) provision. This compares to 33% at the time of the 2014 survey.
- The sonographer vacancy rate across the respondents is 12.6%. This compares to a vacancy rate of 18.1% in the 2014 survey. The main reason for the shortage is an inability to recruit suitable applicants.
- The sonographer absence rate across the respondents is 6.3%. The main reason for absence is paternity or maternity leave. This compares to an absence rate of 9.0% reported in the 2014 survey.
- Around half of sonographers (47%) in the responding organisations work full time. This has increased from 35% at the time of the 2014 survey.
- The majority of sonographers are employed at Agenda for Change (AfC) band 7.
- Nearly half (47%) of the respondents' sonographer workforce is aged 40 years or younger. This compares to 35% aged 40 years or younger in the 2014 survey.
- The percentage of sonographers due to retire from the respondents' organisations in the coming twelve months is 4.6%. This compares to the 1.9% in the wider diagnostic radiography workforce census who are expected to retire in the twelve months from 1 November 2018.
- Over three-quarters of respondents (78%) have at least one trainee sonographer due to qualify in the next twelve months. This compares with 63% of respondents in the 2014 survey. Most respondents place their trainees on AfC band 6.
- Similar to the 2014 survey results, 76% of respondents only have sonographers working who are registered with a statutory regulatory body; 65% of respondents say their organisation insists their sonographers hold statutory registration.
- The most frequently selected reason for sonographers leaving their posts in the last 12 months is retirement. Sonographers are more likely than the wider diagnostic radiography workforce to leave their posts to work in health services other than sonography; for a higher salary elsewhere; or to undertake agency work.
- Nearly half of respondents (48%) employ agency or locum sonographers regularly or frequently (on more than two days a month). This is an increase on the 36% who reported in the 2014 survey that they employed agency or locum sonographers regularly or frequently.
- Three-quarters of respondents have sonographers who work additional hours (above contractual hours) at least one day a month to meet demand. This has risen from 65% at the time of the 2014 survey.

- Of the 61 respondents to the extended working question, 51 (84%) provide extended working day or weekend working. This compares to 59% in the 2014 survey.
- Around a third of respondents (35%) have sonographers who undertook their core ultrasound training overseas. Countries of core training cited by four or more respondents are Australia, Canada, India, Nigeria, South Africa and the USA.
- Respondents were asked for details of any ultrasound examinations, interventions or other activities that their department undertakes that they feel extends the scope of practice of sonographers or that they would like to bring to the attention of others. The responses given most frequently are musculoskeletal joint injections (five respondents) and head and neck fineneedle aspirations (four respondents).
- Respondents were asked to comment on sonographer recruitment and retention or sonographer workforce issues in general. Difficulty recruiting is raised as the most frequent issue. Other common themes are lack of resources for training, use of agency/locum sonographers, sonographer pay, competition for staff and location issues.

2 Introduction

This report presents an analysis of an online census of the ultrasound workforce in the UK by SCoR in May and June 2019. The census was targeted at ultrasound managers in England, the Channel Islands, the Isle of Man, Northern Ireland, Scotland and Wales, in the National Health Service (NHS) and other healthcare sectors. The aim of the census was to obtain data on the number of sonographers employed, the number of vacancies and details of the workforce structure. The results of this census will inform the work of professional bodies, workforce planners and commissioners/providers of radiography education.

3 Methodology

The 2019 ultrasound workforce census captures data about sonographers working in the United Kingdom. Ultrasound managers were asked to answer the census on behalf of all ultrasound services provided by their organisation. Respondents were asked:

- Their contact details and details of the workplaces on behalf of which they were responding
- Sonographer establishment and employment figures WTE
- Vacancy figures WTE
- Long-term absence figures WTE and headcount
- Nature of part-time work headcount
- AfC banding headcount
- Age distribution headcount
- Numbers due to retire in the coming twelve months headcount
- Number of current and planned trainees headcount and AfC banding
- Number and contract type of sonographers not registered with the Health and Care Professions Council (HCPC) or Nursing and Midwifery Council (NMC)
- Registration policy within their organisation
- Reasons for sonographers leaving their posts
- Use of agency or locum sonographers
- Additional working hours and extended working days
- Country where sonographers undertook their core training
- Scope of practice details
- Recruitment and retention issues

An email containing a link to an online questionnaire was sent to 154 lead ultrasound practitioners asking them to answer the questionnaire on behalf of their organisation. The census was also promoted through the SCoR website, social media and email newsletters, and via partner organisations.

Data collection was carried out in May and June 2019, and 70 ultrasound providers employing sonographers responded to the census. This number excludes ten duplicate responses.

Not all of the questions were mandatory. Thus, different questions may have different response rates. This is indicated by the 'n' number under each figure.

Where appropriate, results are compared to similar ultrasound workforce surveys from 2009³, 2011⁴ and 2014¹ and to a census of the diagnostic radiography workforce as at 1 November 2018².

A link to the full set of questions for the 2019 census is provided in the downloads section.

The data does not include consultant radiologist-led ultrasound departments with no sonographers.

4 Profile of respondents

Of the 70 census respondents, 65 (93%) are NHS health boards or trusts. The remainder comprise two self-employed/small company providers; one government-run (but not NHS) provider; one independent/private hospital; and one NHS-commissioned limited company.

The breakdown by geographical region is:

- Seven respondents from England inside the M25 ring
- Fifty respondents from England outside the M25 ring
- Two respondents from the Isle of Man or Channel Islands
- Two respondents from Northern Ireland
- Six respondents from Scotland
- Three respondents from Wales

Respondents were asked whether there are any specific problems in their own geographical area. Themes raised by four or more respondents are:

- Rural location (seven respondents)
- Dispersed sites over large area (five respondents)
- High cost of living (five respondents)
- Remote location (five respondents)
- Urban location (four respondents)
- Sonographer shortages (four respondents)

Across the 68 respondents to the sonographer establishment workforce size question, there are a total of 973.4 WTE sonographer establishment posts. This gives an average per respondent of 14.3 WTE. The size ranges from the smallest responding organisation with 1.5 WTE to the largest with 46.0 WTE.

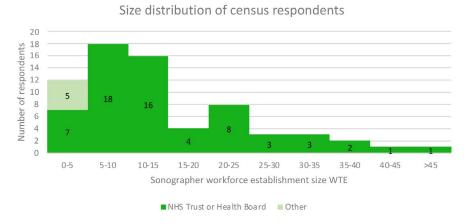


Figure 1 Sonographer workforce WTE size distribution of respondents (n=68)

Of the 55 respondents to the question on AQP provision in England, 25 (45%) undertake ultrasound work under AQP. This compares to 33% at the time of the 2014 survey.

5 Vacancy rate

Of the 68 respondents to this question, 52 (76%) report unfilled sonographer posts in their organisation.

The sonographer vacancy rate across the 68 respondents is 12.6%. (The vacancy rate is calculated as the number of WTE unfilled posts as a percentage of the WTE establishment figure.) Vacancy rates in previous surveys were 11.7% in 2009, 10.9% in 2011 and 18.1% in 2014. For comparison, the vacancy rate in the wider diagnostic radiography workforce is 9.0% (as of 1 November 2018).

Figure 2 illustrates that the main reason for vacancies is that organisations are unable to recruit suitable applicants. Figure 3 shows the vacancy rate by geographical area of the UK; due to the low number of responses from some geographical areas, these figures may not be representative of the vacancy rates of all ultrasound providers in these locations.



Figure 2 Vacancy rate by reason for vacancy (n=68)



Figure 3 Vacancy rate by geographical area (n=68)

6 Reasons for absence

Of the 60 respondents, 32 (53%) report sonographers in post who are absent long term.

The sonographer absence rate across those 60 organisations is 6.3%. (The absence rate is calculated using the number of WTE absent sonographers as a percentage of the WTE establishment figure.)

This compares to an absence rate of 9.0% reported in the 2014 survey.

The main reason for absence is maternity or paternity leave.

Number of absent sonographers by reason for absence

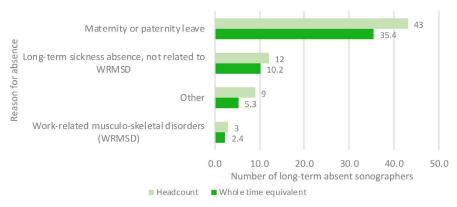


Figure 4 Number of long-term absent sonographers by reason for absence (n=60)

7 Full or part time

Around half of sonographers (47%) in the responding organisations work full time. This has increased from 35% at the time of the 2014 survey.

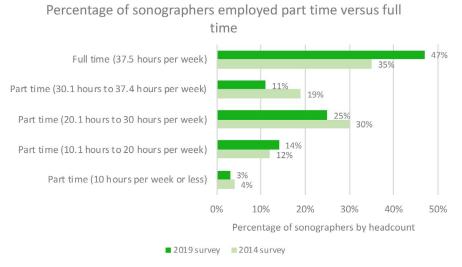


Figure 5 Percentage of sonographers employed part tim versus full time (n=68)

8 Agenda for Change (AfC) banding

Themajority of sonographers are employed at AfC band 7.

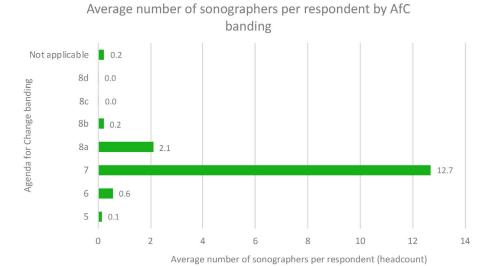


Figure 6 Average number of sonographers (headcount) per respondent by Agenda for Change banding (n=62)

Of the 63 respondents to the question about 'split' AfC bandings, 10 (16%) have sonographers on 'split' AfC bandings for different aspects of their wider work for their organisation. The reasons given include:

- Different banding for training portion of time
- Different banding for portion of time spent on management/leadership duties
- Job sharing

9 Age distribution

Across the 66 responding organisations, 47% of the sonographer workforce is aged 40 years or younger. This compares to 35% aged 40 years or younger in the 2014 survey.

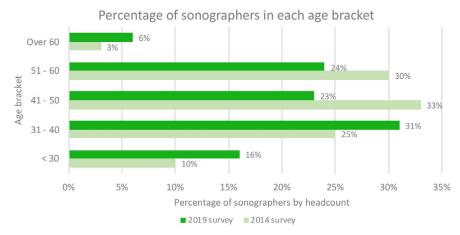


Figure 7 Percentage of sonographers by age group (n=66)

The percentage of sonographers due to retire from the respondents' organisations in the coming twelve months is 4.6% by headcount. This compares to the 1.9% in the wider diagnostic radiography workforce census who are expected to retire in the twelve months from 1 November 2018².

10 Trainee sonographers

Of the 64 respondents to this question, 50 (78%) have at least one trainee sonographer due to qualify in the next twelve months. This compares with 63% of respondents in the 2014 survey.

A total of 99 trainee sonographers are due to qualify in the next twelve months across the 64 organisations. This is an average of 1.5 trainee sonographers per respondent.

Of the responding organisations, 26 count the trainees in their current qualified staffing establishment and 45 are planning to have trainee sonographers start training with them in the next twelve months. A total of 61 trainee places are planned, of which 33 places are confirmed.

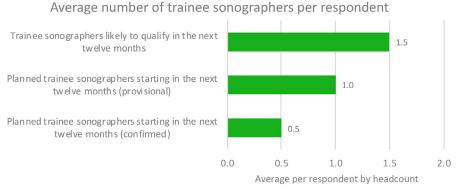


Figure 8 Average number of trainee sonographers per respondent (n=64)

Most respondents place their trainees on AfC band 6.



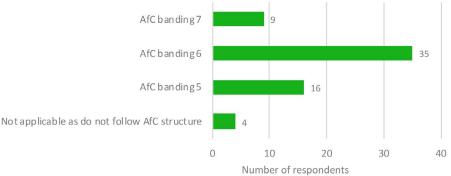


Figure 9 AfC banding on which trainee sonographers are usually placed by number of respondents (n=60)

In the free-text comments, respondents raised the following points relating to the AfC banding of trainees:

- Use AfC Annex 21⁵ formally known as Annex U (six respondents)
- Progression is staged (four respondents)
- Trainees stay on their current banding (three respondents)
- Trainees are full- or part-time students (two respondents)
- Have preceptorship period (two respondents)

Respondents were asked for any additional comments on their local circumstances with respect to sonographer recruitment, education and

training. Comments were made by 33 respondents; themes mentioned by three or more respondents are listed below with an illustrative comment:

- Internal training programmes (18 respondents): "Five Health Education England funded training positions are recruited each year. However, for the last couple of years we have taken on two self-funding trainees. So, total of seven new ultrasound trainees per year. Plus, we have additional upskilling sonographer training to provide for. Usually three sonographers convert their postgraduate certificate to postgraduate diploma.
- Recruitment is difficult (twelve respondents): "Very difficult to recruit
 as not much movement of sonographers within the Merseyside region.
 We tend to only find qualified staff (not trained by ourselves) if they are
 relocating."
- Lack of resources for training (five respondents): "Small department which would love to train more staff. But we have such a small permanent team that we cannot facilitate training more than one student."
- Recruitment is difficult due to location (four respondents):
 "Recruitment challenging due to long travel required to reach a North London trust."
- **Direct entry students** (four respondents): "Trained a direct entry ultrasound student who chose not to be employed in our trust but after qualifying took a post in another trust due to [it being] nearer to home."
- Sonographers leave once qualified (four respondents): "High cost of living. Staff are following the money and being recruited by other organisations."
- Training because recruiting qualified sonographers is so difficult (three respondents): "We cannot recruit qualified sonographers so now train our own (five sonographers trained in-house over the last few years). Management are very supportive of our on-going training programme."
- Impact of diagnostic radiographer shortage (three respondents): "We are finding our traditional process of offering training to staff from the general radiography staff group is no longer feasible due to a shortage of radiographers and increasing vacancies within that staff group."

11 Registration with statutory regulatory body

Of the 63 respondents to this question, 15 (24%) have sonographers working who are not registered with a statutory regulatory body (HCPC or NMC). They employ 36 staff in total (headcount) who are not registered with a statutory regulatory body. They are largely permanent staff, with fewer than six agency staff included in the total.

Similar to the 2014 survey results, 76% of respondents only have sonographers working who are registered with a statutory regulatory body; 65% of respondents say their organisation insists their sonographers hold statutory registration.

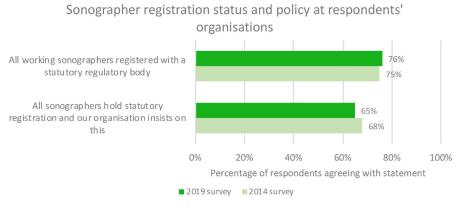


Figure 10 Sonographer registration status and policy at respondents' organisations (n=63)

12 Reasons for leaving posts

The most frequently selected reason for sonographers leaving their posts in the last twelve months is retirement.

Figure 11 compares the reasons sonographers leave their posts with the reasons diagnostic radiographers leave their posts. The diagnostic radiographer data comes from the College of Radiographers' census of the diagnostic radiography workforce as at 1 November 2018². Organisations responding to that census tend to have a larger workforce and therefore have more staff members leaving for all reasons. This largely explains the higher percentages of diagnostic radiography workforce members leaving for retirement, personal reasons and promotion in other organisation. Note that "Promotion within organisation" was not an answer option in the diagnostic radiography workforce census.

In relative terms, sonographers are more likely than the wider diagnostic radiography workforce to leave their posts for "Other" reasons; to work in health services other than sonography; for a higher salary elsewhere; or to undertake agency work.

Reasons for sonographers/diagnostic radiography workforce members leaving their posts in the last twelve months

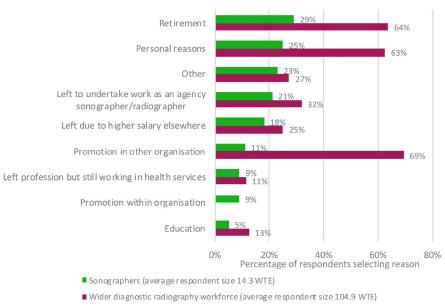


Figure 11 Reasons for sonographers leaving their posts in the last 12 months compared with the wider diagnostic radiography workforce (n=56)

In the "Other" category, respondents gave the following reasons for sonographers leaving their posts:

- Sonographer newly qualified in musculoskeletal was not given support by radiologists within the trust and has moved locally where support is provided
- Emigration
- Working for AQP company
- Reduction of hours to work for AQP locally
- Relocation for family reasons
- Moved house closer to another trust
- Relocation
- Career break to work abroad
- Nearer to home set up own business work/life balance
- Disciplinary
- To work as an applications specialist
- Was [registered with the] Nursing and Midwifery Council, but now solely sonographer so unable to maintain registration
- Most leave to be locums

13 Agency workers

Of the 66 respondents to this question, 32 (48%) employ agency or locum sonographers regularly or frequently (on more than two days a month). This is an increase over the 36% who reported in the 2014 survey employing agency or locum sonographers regularly or frequently.

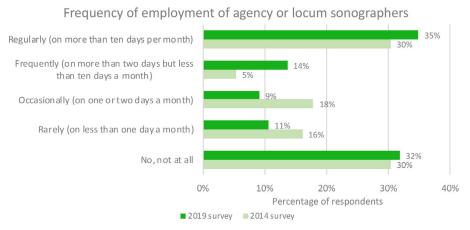


Figure 12 Frequency of employment of agency or locum sonographers (n=66)

14 Additional hours

Of the 65 respondents, 49 (75%) have sonographers who work additional hours (above contractual hours) at least one day a month to meet demand. This has risen from 65% at the time of the 2014 survey.

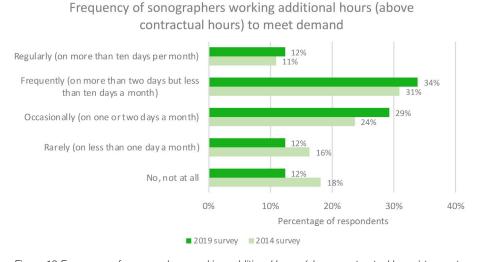


Figure 13 Frequency of sonographers working additional hours (above contractual hours) to meet demand (n=65)

15 Extended working

Of the 61 respondents to this question, 51 (84%) provide extended working day or weekend working. This compares to 59% in the 2014 survey.

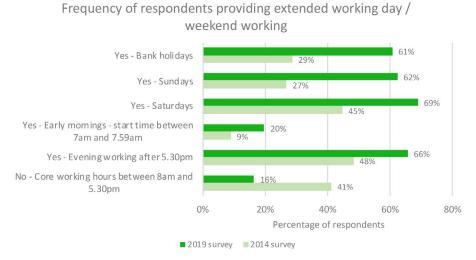


Figure 14 Frequency of respondents providing extended working day or weekend working (n=61)

Respondents added the following details in the free-text field for this question:

- Core working hours are 8am to 6pm (four respondents)
- Extended working is occasional, ad hoc and/or voluntary (four respondents)
- Provide cover/on-call service outside core hours (two respondents)
- One staff member has different working hours (two respondents)
- Looking to extend hours, working practices being looked at (one respondent)

16 Country of core training

Of the 66 respondents to this question, 23 (35%) have sonographers who undertook their core ultrasound training overseas. The countries in which these sonographers undertook their training are given in figure 15.

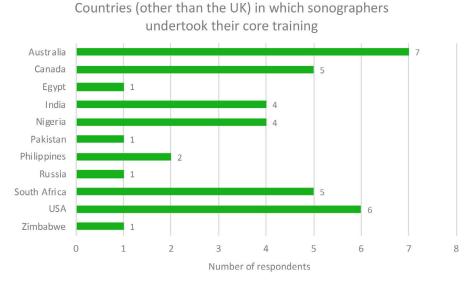


Figure 15 Countries (other than the UK) in which sonographers undertook their core training (n=66)

This question has been modified since the 2014 survey when we asked if respondents had any sonographers working in their department who were not UK citizens. In response to that question in 2014, 10 departments (18% of respondents) had sonographers working who were not UK citizens. The countries these sonographers came from included Australia, Canada, Egypt, Iran, Nigeria, Pakistan, Uganda, USA and Zimbabwe.

17 Scope of practice

Respondents were asked for details of any ultrasound examinations, interventions or other activities their department undertakes that they feel extends the scope of practice of sonographers or that they would like to bring to the attention of others. The following list summarises the activities given in the 16 responses:

- Musculoskeletal joint injections (five respondents)
- Head and neck fine-needle aspirations (four respondents)
- Head and neck core biopsies (two respondents)
- Ascitic draining/paracentesis (two respondents)
- Audit continuing professional development sessions (one respondent)
- Breast fine-needle aspirations (one respondent)
- Clinical governance meetings (one respondent)
- Cranial (one respondent)
- Early pregnancy and gynaecology unit (one respondent)
- Elastography (one respondent)
- Endoanal ultrasound (one respondent)
- Fetal medicine level obstetric scans (one respondent)
- Head and neck intervention (one respondent)
- Sonographer-led hysterosalpingo contrast sonography (HyCoSy) service (one respondent is about to introduce this)
- Liver contrast-enhanced ultrasound (CEUS) (one respondent)
- Liver elastography (one respondent)
- Obstetrics (dating, anomaly, growth) (one respondent)
- On-call service (non-obstetric) for medical and surgical out-of-hours emergencies (one respondent)
- Prostate biopsies (one respondent)
- Soft tissue steroid injections (one respondent)
- Thoracentesis (one respondent)
- Vascular (one respondent)

18 General comments

At the end of the questionnaire, respondents were asked to comment on sonographer recruitment and retention or sonographer workforce issues in general. Themes mentioned by three or more respondents are given below with the number of respondents in brackets after the theme and an illustrative comment:

- **Difficult to recruit sonographers** (17 respondents): "Have advertised current part-time (0.6 FTE) post 19 times over the past 17 months with only one suitable applicant who took a post elsewhere."
- Lack of resources for training (seven respondents): "We should be able to offer better support, training, etc, in order to attract new staff. But the limited funding within the NHS for courses and personal development means we are unable to offer this as an incentive."
- Use of agency/locum sonographers (six respondents): "Heavy reliance on locum provision which is problematic as a lot of newly qualified sonographers in the area move to work for these agencies."
- Sonographer pay is insufficient (six respondents): "Core/permanent workforce are generally feeling overworked and undervalued, especially as they are regularly working as hard as sonographers in the next room who are being paid locum rates."
- **Competition for staff** (six respondents): "Not enough sonographers as baseline, we seem to be constantly stealing staff from other trusts."
- **Location issues** (five respondents): "Very difficult to find sonographers and even more difficult to find those who are willing/able to work in remote/isolated community locations"
- **More training required** (four respondents): "More trainee posts required nationally."
- **Non-pay incentives required** (four respondents): "Need to be able to attract sonographers by offering musculoskeletal training and a clinical placement/support from radiologists."
- Recruitment and retention premia (four respondents): "We now have a recruitment and retention payment in place that has brought us in line with surrounding trusts."
- **Difficult to retain sonographers** (four respondents): "For the last 2 years we have had a 20% turnover in staffing mostly due to retirement, maternity leave or staff leaving for better pay (at band 8A elsewhere for musculoskeletal practice)."
- Training because recruiting qualified sonographers is so difficult (four respondents): "Have found that training sonographers is the only way to recruit but obviously this does not solve staffing issues in the short term."
- Sonographer AfC banding is insufficient (three respondents): "Sonographers are not graded appropriately: should be [AfC band] 8a for level of autonomy and responsibility. This may prevent staff leaving to work for agencies."
- **Sonographers retiring** (three respondents): "As more sonographers are approaching retirement it is worrying that trusts have not been proactive in timely training, and still the demand for services increases."
- Second jobs (three respondents): "We offer an enhanced bank rate to
 try to compete with other providers to encourage sonographers to work
 additional hours for us rather than for agency, etc (especially for those
 returning from maternity leave on reduced hours who want more flexibility
 with working)."
- **Parental leave** (three respondents): "Whilst we are fully staffed the impact of long-term sick and maternity leave cannot be underestimated."

19 References

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20 Downloads

The questionnaire was designed by Nigel Thomson (SCoR Professional Officer for Ultrasound) and is accessible from:

https://www.sor.org/learning/document-library?title=Ultrasound+Workforce

SCoR Ultrasound Workforce Census questionnaire (PDF)



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