SCoR
THE SOCIETY & COLLEGE OF RADIOGRAPHERS

Ultrasound examination times and appointments

Third edition
January 2020

Quartz House
207 Providence Square
Mill Street
London SE1 2EW

020 7740 7200
info@sor.org

www.sor.org

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Introduction

The Society and College of Radiographers (SCoR) is aware that sonographers working for some NHS trusts, health boards or other imaging service providers are coming under increasing pressure to reduce the time allowed for ultrasound examination appointments. In addition, there have also been instances when extra appointments have been added prospectively to a booked list as a way of compensating for patients who do not attend (DNA).

SCoR policy

A sonographer has a professional responsibility to ensure that the time allocated for an examination is sufficient for it to be carried out and reported safely and competently, with critical and urgent findings dealt with appropriately. This is vital for safe patient management.

It is not acceptable in terms of patient safety or staff safety to attempt to manage or compensate for possible DNAs by prospectively overbooking an ultrasound list. If there is a significant DNA problem, it should be addressed as indicated in the guidance below.

SCoR guidance

Ultrasound examination times

The SCoR is often asked how much time should be allowed for an ultrasound appointment. This question arises most frequently in relation to requests for 'general abdominal' ultrasound examinations.

It is difficult to give a simple answer as there are so many varying factors that can affect how long a 'general abdominal' ultrasound examination will take. These include the nature of the local protocols for such examinations, departmental resources, referral source, patient mobility, whether pre- and post-micturition scans are required and the general support available for the scanning session (see Appendix 1). How long a particular work intensity can and should be maintained is also an important consideration. The experience of the sonographer is also a factor, and newly qualified sonographers will need longer than experienced staff. Additional time will be required if the sonographer is to teach trainees effectively; some providers have successfully introduced dedicated training lists to help facilitate this.

It is recommended that where there is concern about the time allocated for ultrasound appointments a valid and agreed assessment of ultrasound examination times is undertaken. This should take into consideration the above requirements and the nature, range and scope of examinations carried out in a standard list for the department concerned. All aspects of the examination

should be included, from the initial patient greeting and consent through to the completion of the final verified report. This should enable reasonable and sustainable examination times to be established in the light of given local circumstances, including the health and safety considerations relating to sonographer well-being, the risk of work-related musculoskeletal disorders (WRMSD) and ensuring patient safety. NHS Improvement (now NHS England and NHS Improvement) has previously published a method of assessing examination times in radiology, which, although now archived, can still be accessed and can be adapted for ultrasound. Details are provided in Appendix 3.

In the absence of a valid and agreed assessment of examination times for general medical ultrasound examinations that fully takes into account the local circumstances, the SCoR advises that a minimum of 20 minutes per examination is allocated.

NHS England publishes service specifications for commissioners relating to fetal anomaly screening. The relevant service specifications are numbers 16 (combined test)[1] and 17[2] (18w to 20w 6d fetal anomaly scan)

Section 2.1 of service specification 16 reads: "To complete the ultrasound component of this screening strategy, the scan appointment should allocate time to incorporate pre-scan information giving, the ultrasound examination, post-scan information giving and reporting. The time allocation for appointments to meet these requirements is a minimum of twenty (20) minutes."

Section 2.1 of service specification 17 advises: "The ultrasound scan appointment should incorporate pre-scan information giving, the ultrasound examination, post-scan information giving and reporting. The time allocation for appointments to meet these requirements for a singleton pregnancy is a minimum of thirty (30) minutes and for a multiple pregnancy is forty five (45) minutes."

The National Institute for Health and Care Excellence (NICE) has published recommendations for multiple pregnancy (growth) ultrasound examinations. According to Section 1.4.1[2] of NICE guideline NG137, Twin and triplet pregnancy (2019)[3], 30 minutes is recommended.

The Public Health England Abdominal Aortic Aneurysm Screening Programme has guidance on clinic booking times and overall session numbers in its standard operating procedures[4]. This suggests that screening clinics are scheduled to last three to four hours and appointment slots are usually allocated at five or ten-minute intervals with a short break mid-session. There should be two staff to cover each clinic. Generally 15–18 men would be seen over three hours. However, the number should be reduced if there are newly qualified screening technicians who are gaining experience, more than five surveillance subjects are to be included or it is a new screening location.

The SCoR expects the above service specifications and recommendations to be adhered to.

One of the factors that can affect appointment times allowed by providers for ultrasound examinations is the NHS standard tariff[5]. This has only two codes relating to payment to the provider organisation – either an examination of 20 minutes or less, or one of more than 20 minutes. 'Any qualified provider' (AQP) contracts will specify increases in tariff arising from local market forces and innovative service delivery as well as any other local variations that apply.

The role of the sonographer is, of course, much wider than undertaking ultrasound examinations and includes the daily management of the ultrasound sessions, reviewing requests, clinical audit (including screening support sonographer duties where applicable), participation in multi-disciplinary team meetings, reporting discrepancy meetings, service development, contributing to research, and teaching. These activities, as well as the scanning itself, need to be included in the workplan of each sonographer, and they will all impact on the scheduling of appointments.

The timings for ultrasound examinations and the workplans for sonographers also need consideration in relation to the safety of the workforce. There are significant implications for the health and safety of the sonographer workforce if examination times are reduced without assessment of the risks to the workforce of developing or exacerbating work-related musculoskeletal disorders[6].

Doubling up appointment slots

Where an ultrasound service is experiencing a problem with patients not attending their appointments, it should be managed using other methods, such as choice of booking for a patient at a time convenient for them, pre-appointment telephone calls or reminder text messaging. These have been shown to be successful in considerably minimising DNAs and, as a result, patients arriving for their appointments are not penalised by having to wait to be seen because of prospective overbooking of appointments. The latter can lead to complaints, adding to the stresses involved in managing the overbooked list. Routine overbooking also makes it more difficult to examine patients who may be referred urgently at short notice and who sonographers need to accommodate.

Advice has previously been available from NHS Improvement (now NHS England and NHS Improvement) on how radiology services (including ultrasound) can be designed and managed to deliver high-quality and efficient services, avoid a mismatch between capacity and demand, and improve flow. If this is not done effectively it can lead to situations where inadequate times are allowed for examinations and unacceptable practices such as ‘double booking’ are introduced to compensate for DNAs. Two examples of sources of advice on reducing the numbers of DNA are in the references list[7,8].

Raising concerns

If there are concerns, these should be raised with the manager in the first instance. Any subsequent risks, as a result of inadequate time allocation, should be reported in a risk report. The SCoR has published guidance on raising concerns[9]. There is also advice on raising concerns in Section 2.12.1 of the SCoR and British Medical Ultrasound Society (BMUS) guidelines for professional ultrasound practice[10].

Appendix 1: Factors affecting the length of an ultrasound examination

Subject to local variation, an ultrasound examination consists of:

- Greeting patient and sonographer/chaperone introduction
- Explanation of procedure
- Obtaining informed consent (usually verbal); some centres will obtain written consent e.g. for transvaginal examinations
- Preparing patient and assisting onto couch as necessary
- The examination itself, including extending the scope of the examination if found to be clinically necessary, and recording images to Picture Archiving and Communication Systems (PACS)
- Assisting patient off examination couch
- Responding to questions from the patient, and explanation as to when and where results can be obtained
- Aftercare and closing comments
- Preparing and verifying the report
- Acting on critical or urgent findings as necessary.

Some factors that may affect ultrasound examination times include:

- Experience of the sonographer
- Teaching others (good quality teaching will require extra time)
- Whether the support of an assistant is available or not
- NHS standard tariff
- Patient mobility and age
- Familiarity with equipment (if new to the sonographer)
- Quality of the equipment
- Room design
- Availability of support from other experienced sonographers, or a radiologist
- Clinical questions asked (e.g. is a full upper abdominal and pelvic scan including transvaginal scan likely to be needed?)
- Is a post-micturition bladder volume examination needed? This can add significant time, especially if the toilets are some way away and the patient is not fully mobile
- Local examination protocols
- Overall pattern of bookings during the session
- Working methods (e.g. two sonographers scanning alternate cases; a single sonographer working with an assistant; a single sonographer working alone)
- How long a particular work intensity can and should be maintained
- Sonographer work-related musculoskeletal disorder avoidance practices.

Appendix 2: Further information

The Society and College of Radiographers. (2012). Ultrasound examination lengths survey analysis. Available at: http://www.sor.org/learning/document-library/ultrasound-examination-lengths-survey-analysis. Accessed: 28 January 2020.

Health and Safety Executive. (2012). Risk management of musculoskeletal disorders in sonography work. Available at: http://www.hse.gov.uk/healthservices/management-of-musculoskeletal-disorders-in-sonography-work.pdf.

The Society and College of Radiographers and British Medical Ultrasound Society. (2019). Guidelines for Professional Ultrasound Practice. Available at: https://www.sor.org/sites/default/files/document-versions/2020.1.19_scor_bmus_guidelines_-.pdf.

Public Health England. Fetal Anomaly Screening Programme (FASP). Available at: https://www.gov.uk/topic/population-screening-programmes/fetal-anomaly. Accessed 28 January 2020.

Scotland

Pregnancy and Newborn Screening Programmes in Scotland (National Services Division): http://www.pnsd.scot.nhs.uk/

Wales

Antenatal Screening Wales: http://www.antenatalscreening.wales.nhs.uk/public/home

Northern Ireland

A second trimester fetal anomaly scan is offered to all pregnant women in Northern Ireland although it is not part of a formal screening programme. https://www.nidirect.gov.uk/articles/antenatal-appointments-schedule

Appendix 3: NHS Improvement examination times assessment tool

The archived NHS Improvement document 'Modernising Radiology Services: A practical guide to redesign' can be accessed at: http://webarchive.nationalarchives.gov.uk/20130221101407/http://www.improvement.nhs.uk/diagnostics/RadiologyImprovement/tabid/55/Default.aspx.

Click on Improvement toolkit in the Radiology pages list on the right, which opens a link to five PDFs. Challenge four: 'Being clear about actual demand' can be found in Radiology section A (pages 16–21). Appendix 2: Examples of process templates to establish examination timings can be found in Radiology appendices. This provides suitable evaluation pro forma. The example given is for computerised tomography (CT) but can be adapted for ultrasound.

References

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2. Public Health England with NHS England and NHS Improvement Public Health Commissioning. (2019). NHS public health functions agreement 2019-20: Service specification no.17. NHS Fetal Anomaly Screening Programme – 18+0 to 20+6 week fetal anomaly scan. Available at: https://www.england.nhs.uk/publication/public-health-national-service-specifications/. Accessed: 28 January 2020.
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5. NHS England. National Tariff. Available at: https://www.england.nhs.uk/pay-syst/national-tariff/. Accessed: 28 January 2020.
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7. NHS Improvement. Online library of Quality, Service Improvement and Redesign tools. Reducing did not attends (DNAs). Available at: https://improvement.nhs.uk/documents/2108/reducing-dna.pdf. Accessed: 28 January 2020.
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Publication history

First published March 2013
Updated weblinks and information July 2015
Updated weblinks and information January 2020

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