

Competencies for ultrasound practice in private baby scan clinics

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Introduction

Private baby scan clinics offer a range of ultrasound examinations during pregnancy. Two different categories of ultrasound examination are provided by these centres:

- **Diagnostic scan**, which the [Care Quality Commission \(CQC\)](#) defines as a scan that “uses ultrasound to check the health of you and your baby... so you know your pregnancy is progressing” as planned.
- **Souvenir scan**, which is defined as using “ultrasound to record sound, pictures or videos of your baby to keep as a memento. Souvenir scans are not for diagnosing problems with you or your baby.” ([CQC](#))

The requirements below are in addition to those specified by the CQC [Inspection framework](#), Health Improvement Scotland, Healthcare Inspectorate Wales and the Regulatory and Quality Improvement Authority in Northern Ireland.

Providers should also be aware of and adhere to, where relevant, other guidance such as:

- [Quality Standard for Imaging \(QSI\)](#)
- Consortium for the Accreditation of Sonographic Education (CASE) [Standards for Sonographic Education](#)
- Skills for Health occupational standard [CI.C.2019 Perform, interpret and report on ultrasound examinations](#)
- Statutory and regulatory body guidance, professional standards, eg Society of Radiographers (SoR) and British Medical Ultrasound Society (BMUS) [Guidelines for professional ultrasound practice](#), BMUS [Guidelines for the safe use of diagnostic ultrasound equipment](#), the European Federation of Societies for Ultrasound in Medicine and Biology (EFSUMB) [Statement on the safe use of Doppler ultrasound during scans at 11-14 weeks \(or earlier in pregnancy\)](#), the Health Protection Agency guidance [Ultrasound: what it is, how it works and impact of exposure](#)
- Current evidence-based guidance for the service they provide

Ultrasound practice by sonographers in the UK is not regulated, which has led to a range of people undertaking ultrasound examinations. In the NHS, obstetric ultrasound scans are performed by highly skilled healthcare professionals with further training as part of their role and/or qualifications

in ultrasound. To ensure a safe, high-quality equivalent service provision in private clinics, the SoR recommends that ultrasound practitioners have a CASE-accredited qualification or equivalent.

Competencies

Although the SoR believe that safety guidance should be followed and scans should not be performed without a clinical justification, particularly in pregnancy, in line with the World Federation for Ultrasound in Medicine and Biology/International Society of Ultrasound in Obstetrics and Gynecology (WFUMB/ISUOG) [Safety statement](#), the [WFUMB recommendations on non-medical use of ultrasound](#) and BMUS [Guidelines for the safe use of diagnostic ultrasound equipment](#), it is clear that many such services exist. The competencies outlined in this document are the minimum expected level of competency that the SoR would expect for staff providing ultrasound examinations, to ensure the safety of women and pregnant people and their unborn children.

Sonographers performing ultrasound examinations have a professional responsibility to provide a safe service and reduce unnecessary insonation to the fetus.

Competencies have been divided into sections to cover diagnostic and souvenir scans. They include equipment manipulation, safety, quality management and expectations at different gestational ages.

According to the NHS, approximately 1 in 90 pregnancies are ectopic ([NHS, 2018](#)). There is a risk of ectopic pregnancy going undiagnosed if scans are performed by unqualified ultrasound practitioners or when endovaginal scans are not available.

Endovaginal scans are recommended for any early pregnancy scan, where this is acceptable to the woman or pregnant person ([NICE, 2019](#)); so, where applicable, endovaginal scans should be offered for diagnostic purposes when a pregnancy is less than eight weeks of gestation. The SoR recommends that symptomatic pregnancies of less than 12 weeks are seen in dedicated early pregnancy assessment units (EPAUs) that can provide holistic care for clients. In cases where a diagnostic scan has been unable to identify embryonic heart pulsations prior to 12 weeks of gestation, an endovaginal scan is recommended to confirm, before onward referral.

Due to the potential to put pregnant women and pregnant people at risk from missed ectopic or heterotopic pregnancy, the SoR **does not** recommend that early pregnancy scans, before 12 weeks of gestation, are carried out for souvenir purposes in clinics.

Risk assessment should be carried out at the time of booking to ensure that women and pregnant people are supported to access the appropriate care for their situation, eg pregnancy of less than 12 weeks with bleeding or pain should be seen in an EPAU. The CQC and equivalent organisations in the devolved nations will review this when registering a service provider, as highlighted in the CQC [Inspection framework](#) (S2.5 and S2.6).

The SoR strongly recommends that follow-up scans are performed by the same provider. For example, if a scan is performed in the NHS in early pregnancy or as part of the NHS Fetal Anomaly Screening Programme (FASP) in England, Antenatal Screening Northern Ireland (ASNI), Antenatal Screening Wales (ASW) or Scottish Pregnancy Screening Programme (SPSP), rescans are carried out by the NHS (or the recognised NHS provider that performed the initial scan). This is to ensure continuity of care, in addition to providing care at the appropriate time within the pregnancy and after a suitable time interval to reduce unnecessary anxiety or inaccurate results. It is also essential that private providers of obstetric ultrasound scans are able to communicate to clients the risk of having multiple non-clinical ultrasound scans and fully understand the ‘as low as reasonably practicable’ (ALARP) principle.

Doppler is not recommended for non-diagnostic scans at any gestational age, particularly pulse wave Doppler, due to the increased output power and subsequent increase in the heating effect on sensitive fetal tissue ([AIUM, 2020](#), [BMUS, 2020](#), [BMUS, 2009](#), [EFSUMB, 2019](#)).

Protocols should be in place for all examinations performed by the service. These should include information about referral pathways should an unexpected finding or unexpected physical condition be found during the scan. All staff working in the clinic should be aware of and adhere to the protocols, to protect clients from harm. Staff should also work within their scope of practice, and should not deviate from that or undertake examinations that they are not trained and competent to perform. Client safety should be first and foremost in any service.

Competency	Diagnostic scans	Souvenir scans
Equipment, quality management and safety		
Equipment		
Anyone using ultrasound equipment should be trained to use it safely and competently, ideally by an appropriately qualified healthcare professional with a CASE-accredited qualification or equivalent.		
Select appropriate transducer for the examination		
Select appropriate preset for the examination		
Optimise the equipment settings <ul style="list-style-type: none"> • B-mode 		
Optimise the equipment settings <ul style="list-style-type: none"> • Colour Doppler (not recommended for non-diagnostic use) 		N/A
Optimise the equipment settings <ul style="list-style-type: none"> • Spectral Doppler (not recommended for non-diagnostic use) 		N/A
Understand safety indices, national and international guidance		
Ensure the mechanical index (MI) is as low as possible		
Ensure the thermal index (TI) is as low as possible		
Be aware of artefacts		
Recognise artefacts and how to minimise impact		
Understand the limitations of ultrasound and how to communicate these to parents and in a report (where relevant), eg bowel gas, increased body habitus		
Understand best practice guidance for hygiene and waste disposal		
Have a comprehensive understanding and application of appropriate personal protective equipment, including safe disposal		

Have current awareness of national guidance on the use of ultrasound gel		
Follow national guidance on the appropriate use of ultrasound gel		
Have comprehensive knowledge of decontamination processes		
Competently decontaminate ultrasound probes following current guidance and to manufacturer's specifications		
Safely decontaminate other equipment		
Understand and follow Duty of Candour guidance		
Have a thorough knowledge and understanding of local referral pathways for all examinations undertaken and competently follow these		
Competency	Diagnostic scans	Souvenir scans
Service user and staff safety		
Be aware of ergonomics and health and safety relating to ultrasound		
Be aware of the ALARP principle in obstetric ultrasound and how to implement that in practice		
Practise in a way that minimises risk to clients, self and others		
Understand the principles of and provide person-centred/parent-centred care		
Understand current guidance on the use of chaperones		
Demonstrate appropriate use of chaperones		
Understand the need for and appropriately use interpreters if required		
Understand and implement exclusion criteria for the service, ensuring that clear communication is provided when a client does not meet the inclusion criteria		
Understand consent processes and national guidance		
Be able to explain the examination undertaken to obtain valid informed consent (including benefits, risks and limitations)		

Ensure women and pregnant people are aware of the importance of discussing NHS screening options with their midwife		
Have a clear understanding of the rescan policy and ultrasound safety		
Be able to communicate the risks of multiple non-clinical scans to clients		
Understand safeguarding policies		
Provide a service that safeguards all those who access it		
Be aware of the responsibilities under female genital mutilation (FGM) legislation		
Understand escalation processes and how to identify when they are required		
Clearly follow escalation processes when required		
Competency	Diagnostic scans	Souvenir scans
Quality assurance and learning		
Understand the need for and methods of assessing imaging and reporting quality		
Undertake peer review audit of ultrasound scans Audits might include (depending on type of service):		
<ul style="list-style-type: none"> • Rescan rates for incomplete assessment • Return visits for individual clients • Fetal sexing accuracy • Image quality • Report quality, where relevant • Infection control, eg probe decontamination, hand washing 		
Understand continuing professional development (CPD) requirements for safe ongoing development and practice		
Regularly undertake CPD related to scope of practice		
Reflect on learning and consider how it can be used to improve the care and service delivery		
Implement changes to practice in response to CPD, never events, patient feedback, appraisals and changes to the evidence base		

Early pregnancy ultrasound (EPU)

If clinics do perform souvenir scans before 12 weeks, **against SoR advice** and best practice guidance (endovaginal scans), the minimum competencies are given below.

Competency	Diagnostic scans	Souvenir scans
Perform a survey scan to optimise image settings		
Determine the location of the gestation sac and/or embryo(s), eg intrauterine or extrauterine		
Be competent to determine whether an intrauterine gestation sac is located in a caesarean section scar, cervix or other non-fundal location		
Image to show the location of the embryo(s)		
Determine the presence and number of yolk sacs		
Check the number of embryos		
Determine whether embryonal heart pulsations are present or absent		
Understand when to refer for further assessment		
Have comprehensive knowledge of appropriate communication		
Communicate appropriately with a range of service users		
Competently discuss the implications of early pregnancy complications in an honest and transparent manner		
Competently refer for biochemistry or ongoing care into appropriate NHS EPAUs and explain findings to staff and clients where necessary		
Have an awareness of relevant national or local support groups to recommend to clients		
Perform transabdominal scan only Endovaginal scans should not be used, unless an examination progresses to a diagnostic scan (see diagnostic scan competencies)	N/A	
Perform transabdominal and/or endovaginal scans as required within specific clinic inclusion criteria (only by qualified, competent sonographers)		N/A

Understand when and why endovaginal scans should be used and competently perform these to assess for heterotopic pregnancy and/or ectopic pregnancy		N/A
Do not use Doppler	N/A	
Use Doppler only with clinical justification in line with national clinical and safety guidance, if within the practitioner's scope of practice		N/A
Clarify the non-diagnostic nature of the examination and limitations when gaining informed consent	N/A	
Undertake a full assessment of the uterus		N/A
Understand normal first trimester ultrasound appearances, including normal variants		N/A
Assess the embryo in detail		N/A
Determine amnionicity and chorionicity if multiple pregnancy		N/A
Accurately measure the mean sac diameter (MSD) of the gestation sac		N/A
Accurately measure the crown rump length (CRL)		N/A
Interpret MSD and CRL measurements and follow national guidance on rescans where necessary		N/A
Establish an accurate gestational age from the CRL measurement		N/A
Assess the ovaries and adnexae		N/A
Understand and be able to interpret ultrasound appearances of early pregnancy complications, including miscarriage, pregnancy of uncertain viability, pregnancy of unknown location, ectopic pregnancy and molar pregnancy, subchorionic hematoma		N/A
Write an accurate, clear, concise, actionable report in line with relevant guidance		N/A
Suggest rescan or further investigations as required		N/A
First trimester		
Competency	Diagnostic scans	Souvenir scans
Perform a survey scan to optimise image settings		
Determine the location of the fetus (see EPU)		

Check the number of fetuses		
Determine whether the fetal heart pulsations are present or absent		
Competently perform 2D +/- 3D and 4D ultrasound imaging Ideally not used until after 12 weeks		
Understand guidance for report writing		
Understand the care pathway for the NHS FASP, ASNI, ASW or SPSP If a woman or pregnant person wants information on NHS screening options, they should discuss this with their midwife; the practitioner should be competent to signpost clients		
Refer to a relevant healthcare professional in the event of unexpected findings being detected or refer for a follow-up scan when findings are outside the scope of practice of the practitioner		
Have comprehensive knowledge of appropriate communication		
Communicate appropriately with a range of service users		
Have an awareness of relevant national and local support groups to recommend to clients		
Perform transabdominal scan only Endovaginal scans should not be used, unless an examination progresses to a diagnostic scan (see diagnostic scan competencies)		
Perform transabdominal and/or endovaginal scans as required within specific clinic inclusion criteria (only by qualified, competent sonographers)		N/A
Understand when and why endovaginal scans should be used and competently perform these		

Competently use Doppler only with clinical justification and in line with national clinical and safety guidance, if within the practitioner's scope of practice		N/A
Clarify the non-diagnostic nature of the examination and limitations when gaining informed consent	N/A	
Clarify the nature of the examination and limitations when gaining informed consent		N/A
Undertake a full assessment of the uterus		N/A
Understand normal first trimester ultrasound appearances		N/A
Assess the fetus to demonstrate as a minimum: <ul style="list-style-type: none"> • Skull integrity • Abdominal wall integrity • Fetal stomach • Fetal urinary bladder • Four limbs present 		N/A
Accurately measure the CRL		N/A
Establish an accurate gestational age from the CRL measurement		N/A
Accurately measure the nuchal translucency (NT) if within scope of practice		N/A
Subjectively assess amniotic fluid		N/A
Assess the ovaries and adnexae		N/A
Understand and be able to interpret ultrasound appearances of common first trimester pregnancy complications such as acrania/exencephaly		N/A
Write an accurate, clear, concise, actionable report in line with relevant guidance		N/A
Suggest rescan or further investigations as required, following local referral pathways		N/A

Second trimester		
Competency	Diagnostic scans	Souvenir scans
Perform a survey scan to optimise image settings		
Determine the location of the fetus		
Check the number of fetuses		
Determine whether the fetal heart pulsations are present or absent		
Competently perform 2D +/- 3D and 4D ultrasound imaging		
Accurately determine fetal sex, if within scope of practice		
Acknowledge when fetal sexing is not possible and determine when to recommend a rescan		
Have comprehensive knowledge of appropriate communication		
Communicate appropriately with a range of service users		
Have an awareness of relevant national and local support groups to recommend to clients		
Perform transabdominal scan only Endovaginal scans should not be used, unless an examination progresses to a diagnostic scan (see diagnostic scan competencies)	N/A	
Perform transabdominal and/or endovaginal scans as required within specific clinic inclusion criteria (only by qualified, competent sonographers)		N/A
Understand when and why endovaginal scans should be used and competently perform these		N/A
Do not use Doppler	N/A	
Competently use Doppler only with clinical justification and in line with national clinical and safety guidance, if within the practitioner's scope of practice		N/A

Clarify the non-diagnostic nature of the examination and limitations when gaining informed consent	N/A	
Clarify the nature of the examination and limitations when gaining informed consent		N/A
Undertake a full assessment of the uterus		N/A
Understand normal second trimester ultrasound appearances		N/A
<p>Assess the fetus (will depend on the level of scan being offered, but consent should be fully informed and a minimum should be skull integrity, brain symmetry, abdominal wall integrity, fetal stomach, urinary bladder and four limbs present)</p> <ul style="list-style-type: none"> • Skull integrity and anatomy including falx, cavum septum pellucidum, cerebellum, ventricles and nuchal fold • Assessment of the fetal heart • Fetal chest • Abdominal wall integrity • Fetal stomach • Fetal kidneys • Urinary bladder • Fetal limbs 		N/A
Accurately measure the head circumference (HC), abdominal circumference (AC) and femur length (FL)		N/A
Interpret fetal growth from the measurements taken		N/A
Subjectively assess amniotic fluid and measure if required, following local protocols and evidence-based guidance		N/A
Determine placental site and normality		N/A
Assess the ovaries and adnexae		N/A
Understand and be able to interpret ultrasound appearances of second trimester pregnancy complications		N/A

Write an accurate, clear, concise, actionable report in line with relevant guidance		N/A
Suggest rescan or further investigations as required		N/A
Be familiar with NHS FASP guidance on performing a 20-week screening scan in England or other similar guidance for the devolved nations eg ASNI , ASW and SPSP		N/A
Practitioners should have a clear understanding of the relevant pathway in their country of practice		
Understand and follow appropriate referral pathways in the event of unexpected physical conditions being detected		
Third trimester		
Competency	Diagnostic scans	Souvenir scans
Perform a survey scan to optimise image settings		
Determine the fetal position (fetal lie)		
Determine whether the fetal heart pulsations are present or absent		
Competently perform 2D +/- 3D and 4D imaging		
Accurately determine fetal sex, if within scope of practice		
Acknowledge when fetal sexing is not possible and determine when to recommend a rescan		
Subjectively assess amniotic fluid and measure if subjective assessment requires it		
Measure amniotic fluid if subjective assessment requires it		N/A
Have comprehensive knowledge of appropriate communication		
Communicate appropriately with a range of service users		
Have an awareness of relevant national and local support groups and forums for support		

Perform transabdominal scan only Endovaginal scans should not be used, unless an examination progresses to a diagnostic scan (see diagnostic scan competencies)	N/A	
Perform transabdominal and/or endovaginal scans as required, eg cervical length or placental assessment within specific clinic inclusion criteria (only by qualified, competent sonographers)		N/A
Understand when and why endovaginal scans should be used and competently perform these		N/A
Do not use Doppler	N/A	
Competently use Doppler with clinical justification in line with national clinical and safety guidance, if within the practitioner's scope of practice		N/A
Clarify the non-diagnostic nature of the examination and limitations when gaining informed consent	N/A	
Clarify the nature of the examination and limitations when gaining informed consent		N/A
Perform transabdominal scan (usual practice)		N/A
Perform transvaginal scan as required, eg cervical length assessment (only by qualified, competent sonographers)		N/A
Undertake a full assessment of the uterus		N/A
Assess the fetus in detail including <ul style="list-style-type: none"> • Skull integrity and anatomy including falx, cavum septum pellucidum (where possible), ventricles • Fetal stomach • Fetal kidneys • Urinary bladder 		N/A
Accurately measure the HC, AC and FL		N/A
Interpret fetal growth from the measurements taken		N/A
Determine placental site and normality		N/A

Understand and be able to interpret ultrasound appearances of third trimester pregnancy complications, including fetal growth restriction and conditions such as congenital diaphragmatic hernia, gastroschisis, exomphalos, renal agenesis, lethal skeletal dysplasia		N/A
Competently use Doppler with clinical justification, if within the practitioner's scope of practice		N/A
Interpret Doppler findings in relation to the clinical information and other ultrasound findings, if within the practitioner's scope of practice		N/A
Write an accurate, clear, concise, actionable report in line with relevant guidance		N/A
Suggest rescan or further investigations as required		N/A
Understand and follow appropriate referral pathways in the event of unexpected physical conditions, changes in growth profile or other complications being detected		

Appendix 1

This guidance relates to sections XR-102 to XR-109, XR-203 to XR-206, XR-209, XR-502, XR-504, XR-506 to XR-510 and US-801 to US-803 of the [Quality Standard for Imaging](#).



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