Ultrasound Guidance Document West Midlands Obstetrics and Gynaecology

Introduction

Ultrasound (USS) is integral to the clinical practice of Obstetrics and Gynaecology. The RCOG has pioneered the introduction, and formalised assessment, of ultrasound as a core procedural skill in its postgraduate curriculum and has produced a draft guidance to explain how ultrasound training sits within the 2019 Core Curriculum. This document includes information in line with this document to provide a structure to both trainers and trainees.

RCOG has renamed the 2 USS modules as Mandatory (previously Basic) and Optional (previously Intermediate) and has introduced a competency-based ultrasound training programme that forms a compulsory part of the curriculum for doctors undergoing specialty training in obstetrics and gynaecology

Mandatory Ultrasound Training in Obstetrics & Gynaecology

Mandatory Modules are compulsory for all trainees in O&G. They are mandatory for progression from ST2 to ST3 as per 2022-2023 Core curriculums and include as below:

Transabdominal ultrasound examination of early pregnancy (mandatory)*

Transabdominal ultrasound examination in later pregnancy (mandatory)*

Transabdominal ultrasound examination of biometry in later pregnancy (*formative – mandatory, summative -optional*)

Early pregnancy defined as <14-weeks and later pregnancy defined as >14-weeks

The components of Basic Ultrasound Training are:

- 1. Attendance at a recognised Theoretical Course the West Midlands course is held every year. This course also includes an Introduction and hands on small group to Scan Simulator.
- 2. Practical Hands on Training This is undertaken in the local unit. Sessions should be arranged via the Local Ultrasound Educational Supervisor. All units should offer Mandatory Ultrasound Training.
- 3. Sign off: To sign off they need 3 competent summative OSATs for each aspect are required for confirmation of competency (Check list—appendix). The OSATS need to be assessed by at least 2 assessors; one of it ideally should be the Local Ultrasound Educational Supervisor.

The Final Sign off will be by the Local Ultrasound Educational Supervisor using the RCOG form (This form is available on the HEE website)

Documentation needed Certificates of Completion to be issued:

- Certificate of attendance at Theoretical Course
- All competent OSATs including Generic Technical Skills Assessment sheet for each OSAT

Module Completion Form – sign off to be within 3 years of Theoretical Course

Please be aware that completion of the mandatory scan modules does not necessarily mean being capable of independently scanning.



Procedural Skills for Mandatory Modules:

Procedure	Required For	Skills Required
Transabdominal ultrasound examination of early pregnancy	Core Training (by ST3)	 Ability to identify the features of a normal gestational sac and confirm its intrauterine location Ability to identify early cardiac activity using B-mode Ability to identify fetal number Ability to measure gestational sac size and crown rump length
Transabdominal ultrasound scan examination of late pregnancy	Core Training (by ST3)	 Ability to identify the fetal heart and the presence of cardiac activity Ability to perform ultrasound assessment of fetal presentation and lie Ability to perform ultrasound assessment of liquor volume using either AFI or maximal pool depth Ability to perform transabdominal ultrasound assessment of placental location
Transabdominal ultrasound examination of biometry in later pregnancy	(by ST3) **Formative evidence only	Ability to use ultrasound to assess fetal biometry (head/abdominal circumference and femur length)

Optional Ultrasound Training in Obstetrics & Gynaecology

Optional Modules are by choice and interest of the trainees in O&G and include as below:

Gynaecology:

Ultrasound examination in gynaecology (non-pregnant patient)

Obstetrics:

Transabdominal ultrasound examination of biometry in later pregnancy*

Transabdominal ultrasound examination of fetal anatomy in later pregnancy**

Transvaginal examination in later pregnancy*(Cervical length and Placental location and assessment)

*Early pregnancy defined as <14-weeks and later pregnancy defined as >14-weeks

Some Optional modules are mandatory for ATSM training, eg Transabdominal ultrasound examination of fetal anatomy in late pregnancy are mandatory for fetal medicine ATSM or to undertake subspeciality training in maternal and fetal medicine.

Gynaecology scan is essential for acute gynaecology and early pregnancy ATSM, advanced laparoscopic surgery for the excision of benign disease or subfertility and reproductive health or for sub-speciality training.

In certain situation you can obtain the ultrasound scan skills in parallel to the ATSM or subspeciality training, but this needs to be agreed in advance.

The components of Optional Ultrasound Training are:

- 1. Attendance at a recognised Theoretical Course.
- 2. Practical Hands on Training This is undertaken in the local unit. Sessions should be arranged via the Local Ultrasound Educational Supervisor. If you unit does not offer the desired module than contact your TPD-USS.
- 3. Sign off: To sign off they need 3 competent summative OSATs for each aspect are required for confirmation of competency (Check list –appendix). The OSATS need to be assessed by at least 2 assessors; one of it ideally should be the Local Ultrasound Educational Supervisor using the RCOG form. (This form is available on the HEE website)

The Final Sign off will be by the TPD-USS using the RCOG form

Guidance for completing Individual modules

^{**}Must be signed off as competent prior to undertaking the Fetal Medicine ATSM or subspecialty training in Maternal and Fetal Medicine

Transabdominal ultrasound examination of fetal anatomy in late pregnancy.

This module is mandatory for conducting fetal medicine ATSM and sub-speciality training in MFM.

What is needed to complete the Fetal anatomy optional module:

- 1. Completion of the mandatory modules.
- 2. Attending a fetal anatomy theoretical course
- 3. Be able to conduct fetal anomaly scan assessment.
- 4. Completion of 3 summative OSATS for fetal anatomy assessment by two independent assessors
- 5. Sign off by the LUES.
- 6. Final sign off by the TPD- USS

Useful resources to complete this Module:

ISUOG Practice Guidelines (Updated): Performance of the routine mid-trimester fetal ultrasound scan

The Fetal Medicine Foundation (Education / Fetal abnormalities)

• Transvaginal examination in late pregnancy

This module is suitable for trainees interested in management of preterm labour and PAS. It also forms parts of other ATSM like High risk pregnancy.

How to complete this module:

- 1. Completion of the mandatory modules.
- 2. Attending a theoretical course within the last 3 years
- 3. 3 summative OSATS for normal cervix TVUS
- 4. 3 summative OSATS for short cervix TVUS
- 5. 3 summative OSAT for low lying placenta / Placenta Praevia / Placenta accreta spectrum.
- 6. 3 summative OSAT for normally located placenta
- 7. Sign off by the LUES.
- 8. Final sign off by the TPD- USS

Please note: all examinations should be transvaginal assessment.

• Useful resources for this module:

Cervical assessment - FMF Courses (fetalmedicine.com)

Placenta Accreta Spectrum - FMF Courses (fetalmedicine.com)

ISUOG Practice Guidelines: role of ultrasound in the prediction of spontaneous preterm birth

• Early pregnancy complications (Optional module)

How to complete this module:

- 1. Completion of the mandatory modules.
- 2. Attending a theoretical course within the last 3 years
- 3. 3 summative OSATS for Examination of normal early pregnancy
- 4. 3 summative OSATS for Examination of suspected ectopic pregnancy
- 5. 3 summative OSATS for Examination of fetal demise
- 6. Sign off by the LUES.
- 7. Final sign off by the TPD- USS

• Gynaecology optional scan module

Requirement for Completion:

How to complete this module:

- 1. Completion of the mandatory modules.
- 2. Attending a theoretical course within the last 3 years
- 3. 3 summative OSATS for Normal Female Pelvis
- 4. 3 summative OSATS for Ovary
- 5. 3 summative OSATS for Endometrium
- 6. 3 summative OSATS for Pelvic Pain
- 7. 3 summative OSATS for Fibroid
- 8. Sign off by the LUES.
- 9. Final sign off by the TPD- USS

Procedural Skills for Optional Modules:

Procedure	Required For	Skills Required
Transabdominal ultrasound examination of biometry in later pregnancy	ATSM: FM, HRP	Ability to use ultrasound to assess fetal biometry (head/abdominal circumference and femur length)
Transabdominal ultrasound examination of fetal anatomy in later pregnancy	ATSM: FM	 Ability to use ultrasound to assess normal morphological ultrasound appearances of the fetus and its environment Ability to use ultrasound to assess normal fetal anatomy
Ultrasound	ATSM: AGEP,	Ability to use ultrasound to diagnose normal intrauterine

examination of early pregnancy complications	SRH	 pregnancy Ability to use ultrasound to diagnose miscarriage Ability to use ultrasound to diagnose tubal ectopic pregnancy Ability to use ultrasound to diagnose non tubal ectopic pregnancy
Ultrasound examination in gynaecology (non-pregnant patient)	ATSM: AGEP, ALAP, SRH ASM: SPAC	 Ability to use ultrasound to identify normal morphological ultrasound appearances of the female pelvis and its variations during the menstrual cycle Ability to use ultrasound to assess the endometrium and diagnose an endometrial abnormality Ability to use ultrasound to assess the pelvis for pathology including causes of pelvic pain
Transvaginal examination in later pregnancy (>14-weeks)	ATSM: HRP	 Ability to use ultrasound to identify the normal morphological ultrasound appearances of the cervix in the second and third trimester Ability to use ultrasound to measure the cervical length appropriately Ability to use ultrasound to assess for placental position in relation to internal os with low lying placenta

Simulator Training

The West Midlands School of Obstetrics & Gynaecology have procured a Medaphor Trans abdominal and Transvaginal Ultrasound Trainer for use by trainees in O&G in the West Midlands. This is housed in the Education Centre , BWCH . The ultrasound trainer has self-directed training modules with assessment. Trainees can book sessions through Julia Arnold. This is a haptic training model which needs to be treated with care.

Another scan trainer is available at the Heartlands Hospital UHB, housed at the Gynae assessment Unit.

Frequently asked questions:

When can I start my mandatory ultrasound scan training?

As early as you can, it is very important to get your ultrasound scan skills build up. It is one of the skills you will develop with continuous practice, so we advise to start the earliest you can . It needs to be completed by the end of ST3 the latest.

What if I missed the theoretical course, can I attend any other course?

Yes, as long as It is fulfil the RCOG recommendations for the basic training, few courses available across the UK at varying times in the year.

Any resources that I can rely on?

https://learning.rcog.org.uk/d2I/home/6686

https://www.isuog.org/event/bt-flex-2022.html

https://www.rcog.org.uk/careers-and-training/training/curriculum/subspecialty-training-curriculum/ultrasound-module-intermediate-ultrasound-of-early-pregnancy-complications

Where I should be attending the basic scan training? Obstetric or Gynaecology department? Scan training for this module will be conducted in your local trust, Early pregnancy / scan training mostly will be in the early pregnancy gynaecology unit and the late basic scan training will be in the maternity scan department. However, this differs from trust to trust.

What sessions I can attend to obtain competencies for the ultrasound examination of early pregnancy?

For Transabdominal ultrasound examination of early pregnancy, you can attend sessions in the early pregnancy scan department or in the routine first trimester scan (usually in the maternity scan department)

What sessions shall I attend for Transabdominal ultrasound examination in later pregnancy?

You can attend Growth scans or fetal wellbeing scans in scan department or on labour ward and triage areas.

What if I cannot get any training sessions during the year?

Please contact your educational supervisor and discuss this with them. It is mandatory for the skill development to have regular training sessions when possible.

Who can be the assessors?

Appropriate assessors include sonographers, midwives, senior trainees, and consultants. The use of simulation-based learning should be encouraged where local facilities are available but, as for all procedural skills, simulation cannot be used toward the acquisition of summative OSATS.

Which OSATS I use?

Currently the OSATs available for completion on e-portfolio are the pre-2019 versions until the updated OSATS are available.

How many OSATS are needed to achieve competency?

Formative OSATS can be undertaken as many times as the trainee and their supervisor feels necessary. A trainee is regarded as competent to perform the procedure independently (with support) upon completion of three summative OSATS by more than one appropriate assessor.

Do I need to have OSATS for ongoing competency?

Once competence has been achieved it is no longer necessary to provide further OSATS as evidence of ongoing competence, unless this is felt necessary by the Educational Supervisor. However, trainees are actively encouraged to maintain a formal log of ongoing ultrasound experience for their own personal and professional development.

Other people to contact: your local ultrasound Educational supervisor and TPD- Ultrasound at HEE.

For further information: https://www.rcog.org.uk/careers-and-training/training/curriculum/subspecialty-training-c

Useful links:

- Society and College of Radiographers (SCoR)
- British Medical Ultrasound Society (BMUS)
- International Society of Ultrasound in Obstetrics and Gynaecology (ISUOG)
- British Maternal and Fetal Medicine Society (BFMFS)
- British Society for Gynaecological Imaging (BSGI)

Appendix

- https://www.rcog.org.uk/careers-and-training/training/curriculum/subspecialty-training-curriculum/ultrasound-module-intermediate-ultrasound-of-early-pregnancy-complications
- RCOG final sign off forms- Mandatory and Optional
- WM- Check list for sign off.