

Obstetric and Gynaecology USS Skills

Miss Sridevi Sankaran

Consultant Obstetrician & Gynaecologist

KSS Deanery USS Coordinator Gynae & EPAU ATSM
Preceptor

Training Programme Director for ST1-2

Overview

- Where to find information about USS training?
- Mandatory and optional USS Skills
- Training courses
- Training resources
- Local USS Educational supervisors
- How to achieve Mandatory USS competency?

[Home](#) > [Careers and training](#) > [Training](#) > [Curriculum](#) > [Subspecialty training curriculum](#)
> [Ultrasound module: Intermediate ultrasound of early pregnancy complications](#)
> [Ultrasound training: introduction](#)

Ultrasound training: introduction

Use and application of ultrasound in obstetrics and gynaecology is now an integral part of clinical practice.

You'll need to use ultrasound in your daily practice, for example when assessing fetal presentation in preterm labour, or for placental localisation in a woman with an antepartum haemorrhage.

Ultrasound is a practical skill that needs to be learned as part of your specialist training in O&G. The RCOG has an [ultrasound guidance document on RCOG eLearning](#) for ultrasound training.

Practical experience

There's no standard model for the provision of practical ultrasound training,

Find out more

If you need any help or advice, please email advancedtraining@rcog.org.uk or call +44 20 7772 6348.



USS Training

- Ultrasound is a practical skill that needs to be learned as part of your specialist training in O&G.

USS Training

Ultrasound Guidance Document

January 2022

Introduction

Ultrasound 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. This guidance document explains how ultrasound training sits within the 2019 Core Curriculum. It is intended for use by trainers and trainees in Obstetrics and Gynaecology as well as those training in ultrasound from allied professional backgrounds e.g. sonographers, radiologists and midwives. Table 1 shows the ultrasound content in the 2019 Core Curriculum which has been amalgamated into seven ultrasound procedures (three in Gynaecology and four in Obstetrics).

Table 1: Extract from the O&G Procedures table in the Core Curriculum Definitive Document showing Ultrasound Procedures

Gynaecology	Transabdominal ultrasound examination of early pregnancy (<i>mandatory</i>) x
	Ultrasound examination of early pregnancy complications (<i>optional</i>) x
	Ultrasound examination in gynaecology (non-pregnant patient) (<i>optional</i>) x
Obstetric	Transabdominal ultrasound examination in later pregnancy (<i>mandatory</i>) x
	Transabdominal ultrasound examination of biometry in later pregnancy (<i>formative – mandatory, summative -optional</i>) x
	Transabdominal ultrasound examination of fetal anatomy in later pregnancy (<i>optional</i>) x

USS Curriculum

- Broadly, the ultrasound procedural content is now incorporated into the core ‘**procedural skills in obstetrics and gynaecology**’ as outlined in the Core Curriculum Definitive Document

USS Procedural skills

Gynaecology	<ol style="list-style-type: none">1. Transabdominal ultrasound examination of early pregnancy (<i>mandatory</i>)2. Ultrasound examination of early pregnancy complications (<i>optional</i>)3. Ultrasound examination in gynaecology (non-pregnant patient) (<i>optional</i>)
Obstetric	<ol style="list-style-type: none">1. Transabdominal ultrasound examination in later pregnancy (<i>mandatory</i>)2. Transabdominal ultrasound examination of biometry in later pregnancy (<i>formative – mandatory, summative -optional</i>)*3. Transabdominal ultrasound examination of fetal anatomy in later pregnancy (<i>optional</i>)*4. Transvaginal examination in later pregnancy (<i>optional</i>)

Mandatory USS Skills

- Mandatory before starting optional US modules
- Completion of mandatory USS skills by end of ST3
- **Stepping stone** for more advanced supervised ultrasound training

Knowledge

- The **safe use of ultrasound** and an understanding of how it works are covered in basic obstetrics and gynaecology ultrasound courses run regionally in the UK

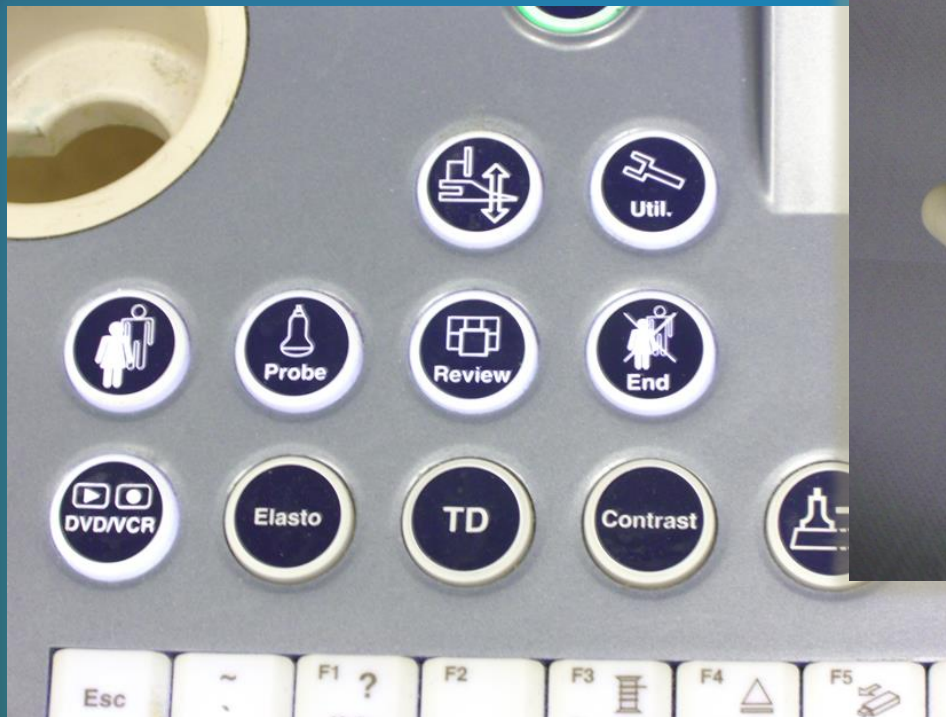
Machine set up and knobology

- Patient's details
- Use obstetric pre-set
- Chose probe
- Orientation
- Size of image
- Image quality



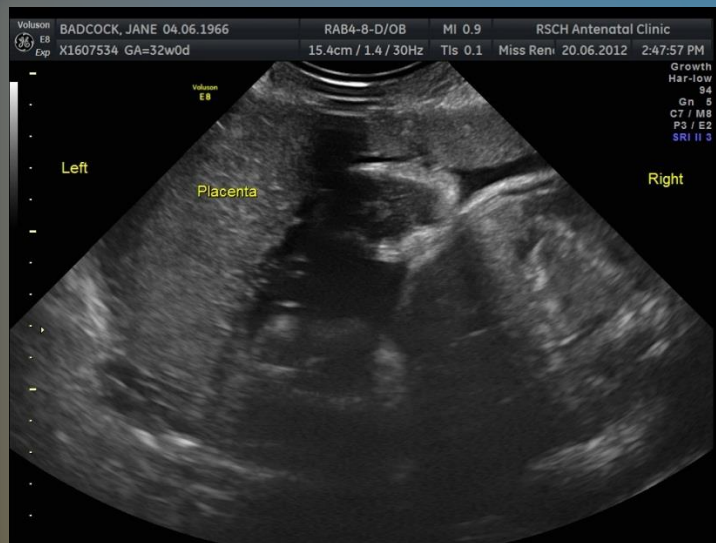
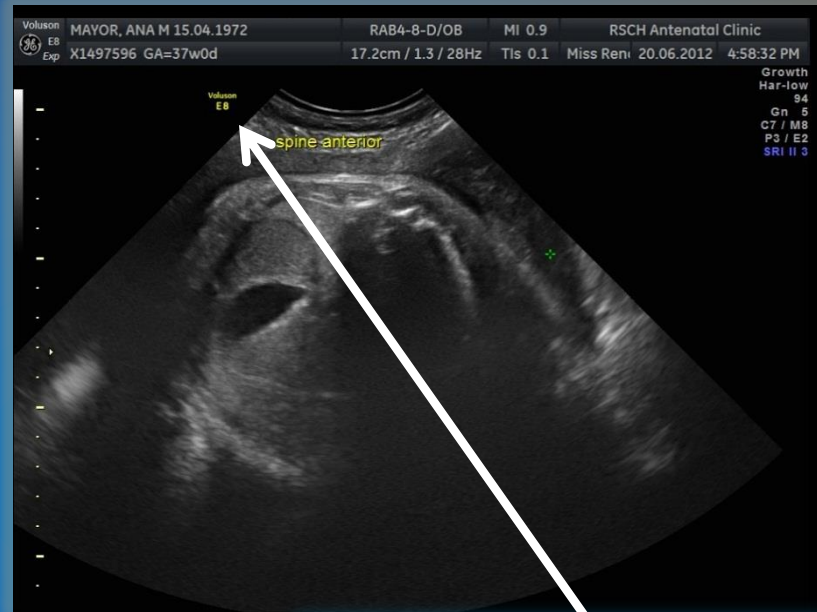
Probe selection

- 3.5-5MHz curvilinear probe
- 7.5Mz TV
- 3D



Orientation and axial planes

- Anterior
- Posterior
- Right /left



Procedural skills

- Obtaining valid consent (for most scans this is verbal consent),
- Communication skills during and after performing the scan,
- Informed decision making,
- Documentation of findings accurately
- Writing a report
- **Insight into one's own limitations**
- An appropriate senior opinion and/or involvement for further management.

Transabdominal USS examination of Early pregnancy (8-12 weeks)

Skills needed

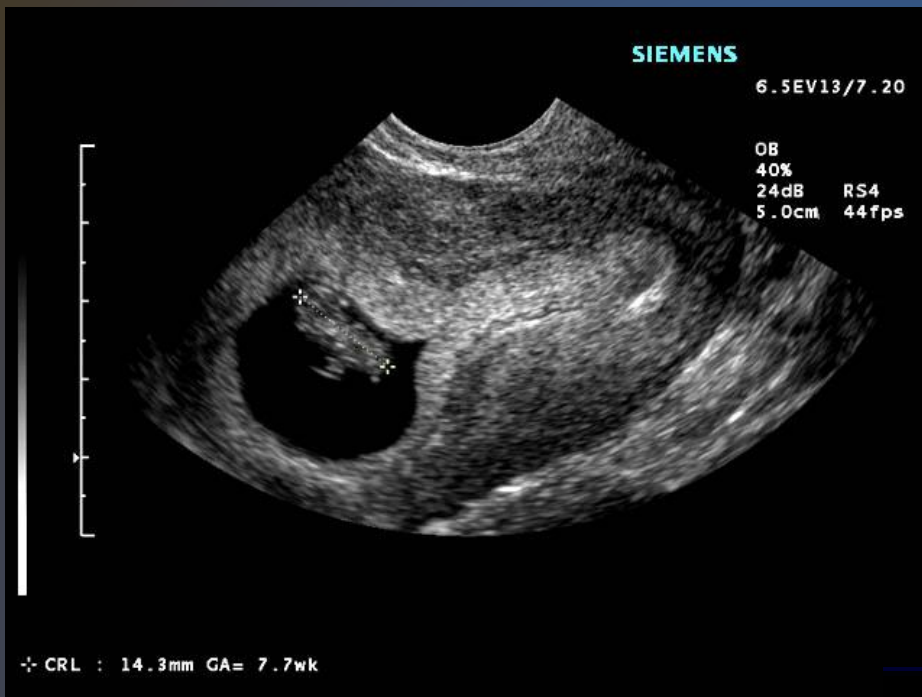
- Ability to identify the features of a normal gestational sac and confirm its intrauterine location
- Ability to identify early cardiac activity using B-mode
- Ability to Identify fetal number
- Ability to measure gestational sac size and crown rump length

Transabdominal USS of Early pregnancy (8-12 weeks)

- **Gain exposure to, and experience in, use of the TV probe, but TVS competencies are not mandatory**

OSATs required

- Transabdominal ultrasound examination of early (8-12 week) pregnancy.



Transabdominal ultrasound examination of later pregnancy (second and third trimester)

Skills required

- Ability to perform basic ultrasound assessment of fetal presentation/lie/biometry
- Ability to perform basic ultrasound assessment of liquor volume
- Ability to perform basic assessment of placental location

(Basic biometry techniques will be taught but competence to the level of 'independent practice' is not required)

OSATS (e-portfolio)

Know the limits of their own competencies

- OSATS required:
 - Assessment of fetal lie, presentation, liquor assessment (Amniotic fluid index (AFI) and maximum pool depth) and placental assessment.
 - Measurement of HC, AC and FL- **formative OSATs** required to demonstrate evidence of directly supervised practice.

Assessment


- Trainers could be **sonographers, midwives, senior trainee or consultants**
- **Simulators** may be used for formative assessments.
- OSATS can be undertaken as many times as the trainee and their supervisor feel is necessary (formative).
- Considered competent to perform a procedure independently after completing **three summative OSATS** by **more than one assessor** involved in their ultrasound training.
- Need not show ongoing competence unless the supervisor or trainee feels it's necessary.

Courses


- Mandatory USS skills
 - Basic Theoretical Ultrasound course RCOG
 - Deanery- **Medway Hospital**

- Optional USS skills
 - RCOG Intermediate USS course
 - Deanery- Early Pregnancy and Gynaecology USS Course- Frimley Park Hospital

Training resources

All registered RCOG Trainees with an NTN (national training number) have free trainee membership of the [International Society of Ultrasound in Obstetrics and Gynaecology \(ISUOG\)](#) . This includes free online access to ISUOG's official journal, *Ultrasound in Obstetrics and Gynaecology* ('the White Journal').

To activate your membership:

- Go to the [ISUOG membership application page](#)  and complete the application form
- Select 'Trainee Membership' – this will bring up a 'Trainee code' field at the top of the form
- In the 'Trainee code' field, enter your trainee discount number (this is the letters 'RCOG' followed by your RCOG registration number, e.g. 'RCOG123456')

Your free trainee membership will continue until you obtain your CCT.

If you have any questions about trainee membership of ISUOG, please contact ISUOG directly by [email](#), or call +44 20 7471 9955.

NHS Fetal Anomaly Screening Programme

The [NHS Fetal Anomaly Screening Programme website](#)  includes a wide range of online resources that will support your ultrasound training.

e-Learning materials

StratOG Module

- Principles of ultrasound eTutorial

SIMULATORS

Blue phantom (CAE healthcare)



ULTRASIM- Medsim



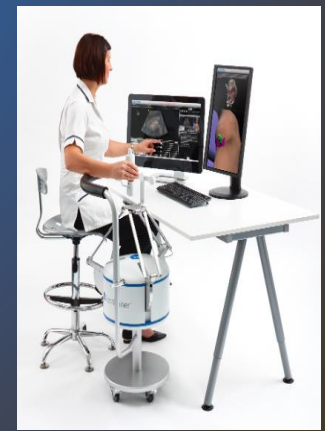
VIMEDIX Women's Health Imaging



MEDAPHOR TVS



MEDAPHOR TAS



Who is who in USS training?

- Regional/ Deanery US Coordinator-
KSS Ultrasound coordinator Obstetrics- Prof Ranjit Akolekar
KSS Ultrasound coordinator Gynaecology- Miss Sridevi Sankaran
- Local USS Educational supervisors, scanning consultants, responsible Lead sonographers at local level
- Know USS educational supervisor in your department

Hospital	Local USS coordinator 8–12 weeks	Local USS coordinator Basic 2nd trimester
Ashford & St. Peter's Hospitals NHS Trust	Ngozi Izuwah-Njoku	Sian McDonnell
Royal Sussex County Hospital Brighton	Tasneem Singhal	TBC
Princess Royal Hospital Haywards Health	Tasneem Singhal	TBC
Dartford and Gravesham Hospital	Mr Gabriel Awadzi	Mr Ahmed Khalil
Queen Elizabeth the Queen Mother	Preethi Angala	Nimmi Othayoth
The William Harvey Hospital	Nayantara Bijral	Christina Aung
Conquest Hospital Hastings (East Sussex hospitals NHS Trust)	Nicky Roberts	Nicky Roberts
Frimley Park Hospital	Sridevi Sankaran	Sima Delavari
Tunbridge Wells Hospital	Rasana Bachracharya	Rasana Bachracharya
Medway Maritime Hospital	Melissa Islam	Ranjit Akoleker
Royal Surrey County Hospital	Chimwemwe Kalumbi	Samar Geris
East Surrey Hospital	Karen Jermy	Hina Gandhi & Sharmilla Sirvajan
Worthing Hospital	Anna Stienen-Durand	Ruth Mason
St Richard's Hospital	Neelima Dixit	Attila Vecsei

Ultrasound trainers

- Ultrasound training is delivered by many different professional groups, such as sonographers, midwives, nurses, obstetricians and gynaecologists.

Where

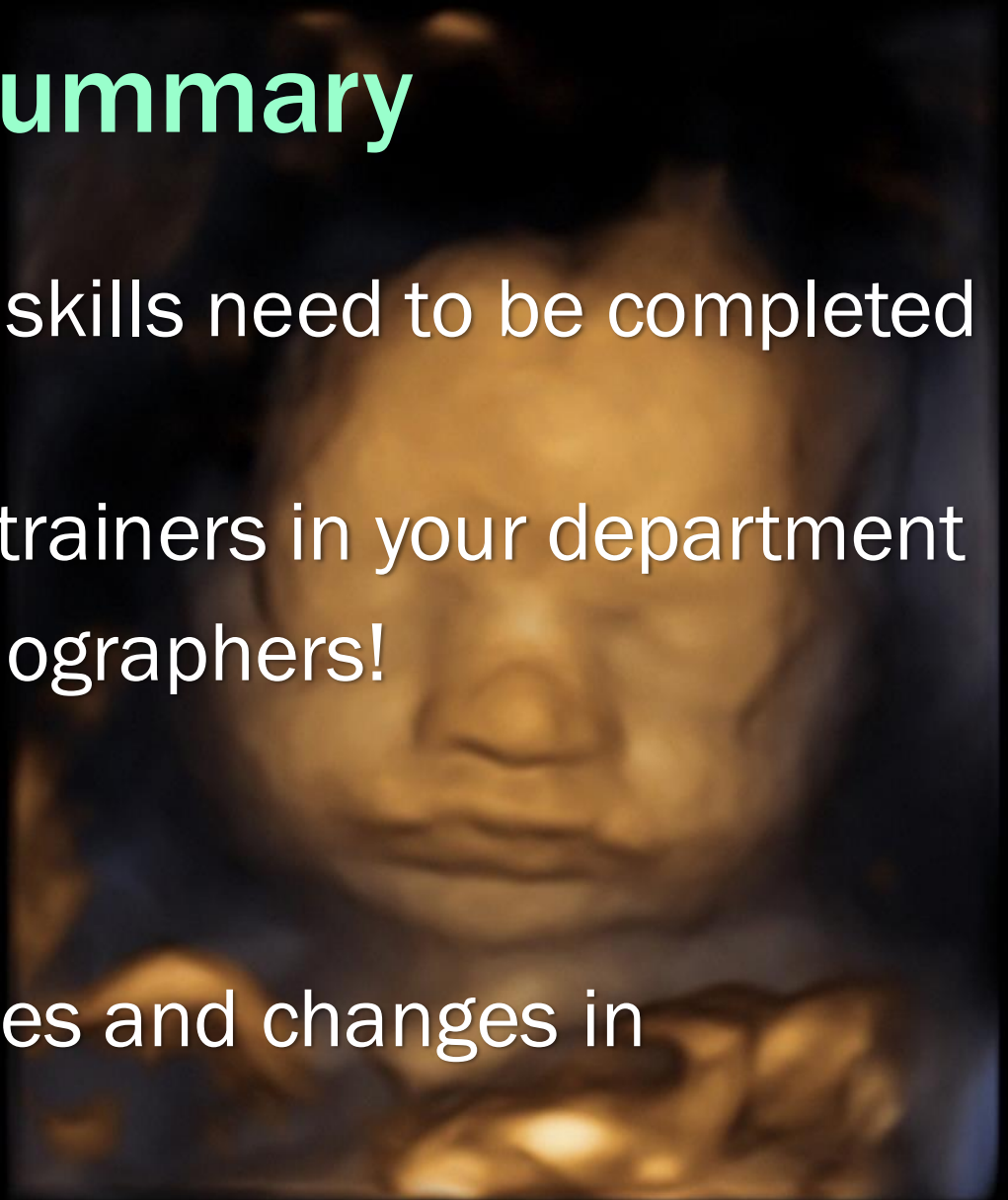
- Dedicated USS training sessions
- Early Pregnancy unit
- Labour ward
- Day assessment unit
- Antenatal clinic

System of USS training

- Find out how USS training is delivered in your hospital
- If unable to incorporate in rota, you can take it as study leave
- The two basic modules should take about one week (10 sessions) to complete.

In summary

- Mandatory USS skills need to be completed by end of ST3
- Know your USS trainers in your department
- Get to know sonographers!
- Enjoy scanning
- Watch for updates and changes in curriculum!!!



Be proactive and organised

Thank you

sridevi.sankaran@nhs.net

ANY QUESTIONS?