FOI REF: 26/339

East Sussex Healthcare NHS Trust

9th June 2026

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Further to your recent request for information made under the Freedom of Information Act (FOIA) 2000, I now set out our answers to your specific questions, and any clarifications sought and provided, as follows:

Please provide us with the Trust's protocols/guidelines for the screening of fetus' for suspected microcephaly and/or IUGR, your guidelines for referral to fetal medicine, and for carrying outgrowth scans.

East Sussex Healthcare NHS Trust does not have a standalone protocol or guideline specifically for the screening of fetuses for suspected microcephaly. This is because such screening is encompassed within the broader assessment and identification of fetal abnormalities.

Please refer to the attached documents, which provide relevant information in relation to your request:

- '00281_04_P' - Clinical Guidelines for Obstetric Ultrasound in the Third Trimester and SGA management – This covers IUGR.
- '01627_P' - Clinical Guidance for Second Trimester Obstetric Ultrasound (this covers the Anomaly scan where abnormalities may well be diagnosed)
- '00623_P' - Care of Women with Suspected or Identified Fetal Abnormality
- '00568_P' - Clinical Guideline for the Communication of Antenatal and New-born Screening Test Results in Maternity
- '00280_04_P' - Clinical Guidelines for First Trimester Ultrasound and Screening for chromosomal differences in the first and second trimester

Please note that it is the Trust's FOI policy to only provide the names of staff that are grade 8a or above, therefore staff that are below that grade have been redacted from the attached documents.

Please also note that we have redacted the names of the Trust's IT Systems, names of staff that no longer work for the Trust, personal email addresses and phone numbers, and are applying Sections and 31(1)(a), 40(2) and 44 respectively.

Section 31(1)(a)

Under Section 31(1)(a) of the Freedom of Information Act (FOIA), the Trust can confirm that it holds information relevant to your request, however, we are unable to disclose it for the reasons explained below.

Historically, we would disclose information relevant to the Trust's IT systems, infrastructure and software as part of our transparency agenda under the terms of the Freedom of Information Act (FOIA). However, in light of the recent cyber-attacks on NHS hospitals and the serious impact these have had on patient services and the loss of patient data, we are having to reconsider this approach. Please see several links to news articles about these recent cyber incidents provided below for your information.

- *NHS England — London » Synnovis Ransomware Cyber-Attack*
- *NHS England confirm patient data stolen in cyber attack - BBC News*
- *Merseyside: Three more hospitals hit by cyber attack - BBC News*

As a result of these attacks, thousands of hospital and GP appointments were disrupted, operations were cancelled, and confidential patient data was stolen which included patient names, dates of birth, NHS numbers and descriptions of blood tests.

When we respond to a Freedom of Information request, we are unable to establish the intent behind the request. Disclosure under the FOIA involves the release of information to the world at large, free from any duty of confidence. Providing information about our systems or security measures to one person is the same as publishing it for everyone. While most people are honest and have no intention of misusing information to cause damage, there are criminals who look for opportunities to exploit system weaknesses for financial gain or to cause disruption.

In the context of the FOIA, the term ''public interest'' does not refer to the private or commercial interests of a requestor; its meaning is for the "public good". The Trust receives a significant number of requests each year regarding our IT systems, infrastructure and cyber security measures. Most of these requests are commercially driven and serve no direct public interest. Information relevant to our IT portfolio is often requested by consultancy companies who then pass on this information to their client base. Many of these requests are submitted through the FOI portal whatdotheyknow.com who publish our responses, making this information available to an even wider audience.

As a large NHS Trust we hold extensive personal data relevant to our patients and staff, much of which is considered very sensitive. A lot of this information is held electronically on various administration and clinical systems. We have a duty under the Data Protection Act 2018 and the UK GDPR to protect this personal information and take all necessary steps to ensure this data is kept safe. This means not disclosing information that could allow criminals to gain unlawful access to our systems and infrastructure. The Trust can be heavily fined should it be found to have acted in a negligent way which results in a personal data breach. We need to demonstrate that we comply with our legal obligations under data protection and freedom of information legislation, but we must be careful that too much transparency does not result in harm to our patients or staff, or cause disruption to our services.

Moreover, under the Network and Information Systems (NIS) Regulations Act 2018, operators of essential services such as NHS organisations like ours have a legal obligation to protect the security of our networks and information systems in order to safeguard our essential services. By releasing information that could increase the likelihood or severity of a cyber-attack, the Trust would fail to meet its security duties as stated in Section 10 of the Network and Information Systems Regulations 2018. Should we not comply with these requirements regulatory action can be taken against the Trust. Further information about the Network and Information Systems (NIS) Regulations Act 2018 can be found here – The Network and Information Systems Regulations 2018: guide for the health sector in England - GOV.UK

Your request asks for policy documents which unfortunately mention specific details regarding our IT Systems which, for the reasons explained above, would be inappropriate to release into the public domain. If disclosed, it is possible that patient data as well as other confidential information would be put at risk. Such disclosure could also impact on the security of our systems and result in serious disruption to the health services we deliver to the local community. Section 31(1)(a) of FOIA provides that information is exempt if its disclosure would, or would be likely to, prejudice (a) the prevention or detection of crime. In this case, disclosure would be likely to prejudice the prevention of crime by enabling or encouraging malicious acts which could compromise the Trust's IT systems and infrastructure. The Trust's capacity to defend itself from such acts relates to the purposes of crime prevention and therefore Section 31(a) exemption is applicable in these circumstances. For these reasons, the Trust considers disclosure of the information you are seeking to be exempt under Section 31(1)(a) [law enforcement] of the FOIA and the names of the IT systems within the policy is being withheld. The full wording of Section 31 can be found here: Freedom of Information Act 2000

Section 31 is a qualified exemption and therefore we must consider the prejudice or harm that may be caused by disclosure of the information you have requested, as well as apply a public interest test that weighs up the factors in maintaining the exemption against those in favour of disclosure.

In considering the prejudice or harm that disclosure may cause, as explained should the Trust release information into the public domain which draws attention to any weaknesses relevant to the security of our systems or those of a supplier, this information could be exploited by individuals with criminal intent. Increasing the likelihood of criminal activity in this way would be irresponsible and could encourage malicious acts which could compromise our IT systems or infrastructure, result in the loss of personal data and/or impact on the delivery of our patient services. We consider these concerns particularly relevant and valid considering the increasing number of cyber incidents affecting NHS systems in recent years and the view by government, the ICO and NHS leaders that the threat of cyber incidents to the public sector is real and increasing.

- *Organisations must do more to combat the growing threat of cyber attacks | ICO*

In the Government's Cyber Security Strategy 2022-2030, the Chancellor of the Duchy of Lancaster and Minister for the Cabinet Office states on page 7:

"Government organisations - and the functions and services they deliver - are the cornerstone of our society. It is their significance, however, that makes them an attractive target for an ever-expanding army of adversaries, often with the kind of powerful cyber capabilities which, not so long ago, would have been the sole preserve of nation states. Whether in the pursuit of

government data for strategic advantage or in seeking the disruption of public services for financial or political gain, the threat faced by government is very real and present.

Government organisations are routinely and relentlessly targeted: of the 777 incidents managed by the National Cyber Security Centre between September 2020 and August 2021, around 40% were aimed at the public sector. This upward trend shows no signs of abating."

With this in mind, we then considered the public interest test for and against disclosure. It should be noted that the public interest in this context refers to the public good, not what is 'of interest' to the public or the private or commercial interests of the requester. In this case we consider the public interest factors in favour of disclosure are:

- Evidences the Trust's transparency and accountability
- Provides information relevant to the IT systems and applications the Trust uses
- Reassures the public and partners that the Trust procures these systems in line with Procurement legislation
- Reassures the public and partners that the Trust's IT infrastructure and systems are secure

Factors in favour of withholding this information are:

- Public interest in crime prevention
- Public interest in avoiding disruption to our health services
- Public interest in maintaining the integrity and security of the Trust's systems
- Public interest in the Trust avoiding the costs associated with any malicious acts (e.g. recovery, revenue, regulatory fines)
- Public interest in complying with our legal obligations to safeguard the sensitive confidential information we hold

In considering all of these factors, we have concluded that the balance of public interest lies in upholding the exemption and not releasing the information requested. Although disclosure would provide transparency about our software systems and IT infrastructure, this is outweighed by the harm that could be caused by people who wish to use this information to assess any vulnerabilities in our security measures and consequently use this information for unlawful purposes. Cybercrime can not only lead to major service disruption but can also result in significant financial losses. As a publicly funded organisation, we have a duty for ensuring our public funding is protected and spent responsibly. Moreover, as a public body the Trust must demonstrate that it keeps its confidential data and IT infrastructure safe and complies with relevant legislation, but at the same time we must be vigilant that transparency does not provide an opportunity for individuals to act against the Trust. In considering the impact that recent cyber-attacks have had on NHS services, including the cancellation of thousands of patient appointments and procedures as well as the loss of confidential patient data, we consider the overriding public interest lies in withholding this information. The private or commercial interests of a requester should not outweigh the public interest in protecting the integrity of our systems and continuity of our essential patient services. Although we

appreciate there may be legitimate intentions behind requesting this information, we must take a cautious approach to requests of this nature and appreciate your understanding in this matter.

Section 40(2)

I can confirm that we hold this information, but it is exempt under Section 40(2) of the Freedom of Information Act 2000 – Personal Information of third parties. This is because this information may allow the identification of individuals and disclosure would breach the principles of the Data Protection Act.

This is an absolute exemption and there is, therefore, no requirement to consider the public interest.

Section 44

We are unable to provide the contact details of staff as we consider this information to be exempt from release in accordance with Section 44 of the Freedom of Information Act (Prohibition on disclosure) and would refer to the Privacy and Electronic Communications EC Directive Regulations 2003 which provide specific rules on electronic communication services, including marketing (by phone, fax, email or text) and keeping communications services secure. We will not provide any information that could result in the transmission of unsolicited communications which may place an unacceptable risk to our email network and could also have a detrimental impact on patient care and treatment.

The contact number for the Trust is accessible on the Trust website http://www.esht.nhs.uk.

This is an absolute exemption and there is, therefore, no requirement to consider the public interest.

I trust this information is helpful in its detail or explanation however, if you are dissatisfied with the response, then you have the right to request an internal review. If you wish to seek an internal review, please write to the Freedom of Information Team at esh-tr.foi@nhs.net quoting the above FOI reference number, within 40 working days. Please note the Trust is not obliged to accept a request for an internal review after this time period.

Yours faithfully

Freedom of Information (FOI) Team
East Sussex Healthcare NHS Trust
0300 131 4716
Core Hours of Business: Monday to Friday 9.00am to 4.00pm

East Sussex Healthcare NHS Trust

Clinical Guidelines for First Trimester Ultrasound and Screening for chromosomal differences in the first and second trimester

Document ID Number	280
Legacy ID Number	1181
Version:	V4
Ratified by:	Women's Health DMG Meeting
Date ratified:	15 August 2025
Name of author and title:	[redacted] Specialist Midwife Antenatal and Newborn Screening [redacted] and Nicky Roberts April 2020 [redacted] Specialist Midwife Antenatal and Newborn Screening
Date originally written:	October 2011
Date current version was completed	July 2025
Name of responsible committee/individual:	Chair of the Guideline Implementation Group for Women and Children's Division
Division/Speciality:	Women and Children's / Maternity
Date issued:	05 September 2025
Review date:	August 2028
Target audience:	All Staff
Compliance with CQC Fundamental Standard	Regulation 9 Person centred Care Regulation 10 Dignity and Respect Regulation 11 Need for Consent Regulation 12 Safe Care and Treatment Regulation 15 Premises and Equipment
Compliance with any other external requirements (e.g. Information Governance)	NHS public health functions agreement 2019-20 Service specification no.16 NHS Fetal Anomaly Screening Programme - Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome (Trisomy 21, 18 & 13) and NHS Fetal Anomaly Screening Programme Standards and KPI's.
Associated Documents:	Clinical Guidelines for Obstetric Ultrasound in the Second Trimester Clinical Guidelines for Obstetric Ultrasound in the Third Trimester Care of Women with Suspected or Identified Fetal Abnormality Clinical Guideline for the Communication of Antenatal and Newborn Screening Test Results in Maternity Clinical Guideline for the care of women with a Multiple Pregnancy

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of the procedural document and can only guarantee that the procedural document on the Trust website is the most up to date version

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V3	July 2021	[redacted] Nicky Roberts	Compliance with PHE updates	Multiple pregnancy combined test update, NIPT implementation
V4	July 2025	[redacted]	Clinical Review	Updated guidance regarding multiple pregnancy, 'Vanished twin', updated failsafe process, and added guidance re R445 NIPT and those who have private NIPT.

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Women and Children's GIGS		Sept 2021
Women and Children's Governance and Accountability		Oct 2021
Nicky Roberts Consultant Obstetrician		April 2025
Ultrasound Management Team		April 2025
Women and Children's GIGS		July 2025
Women's Health DMG Meeting		August 2025

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of Contents

1. Introduction

All eligible women/pregnant people in their pregnancy are offered a first trimester ultrasound scan and screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome. Timings of when these are offered are in the guideline. The ultrasound scan service and screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome which is offered reflects evidence based recommendations following National Institute for Health and Clinical Excellence clinical guideline Antenatal care NG201 published 19/08/2021 , NHS Service Specification No.16 NHS Fetal Anomaly Screening Programme - Screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome (Trisomy 21, 18 & 13), NHS England 2022 (for period 2024-2025), and the NHS FASP Handbook (available via this link Fetal anomaly screening programme handbook - GOV.UK).

2. Rationale

The first trimester ultrasound scan and Down's Syndrome, Edwards' Syndrome and Patau's Syndrome screening (Combined test) aims to:

- Offer all women/pregnant people booked for antenatal care up to and including 14 weeks and 1 day gestation a first trimester ultrasound scan and screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome providing the CRL of the fetus is between 45mm and 84mm. (For those presenting to the service ≥ 13 weeks + 1 days and ≤ 14 weeks + 1 day screening will be offered providing there is availability for USS in the department and the CRL is within the screening parameters)
- Provide a service which meets national recommendations
- Provide appropriate, accessible information in a range of formats for women/pregnant people to enable them to make an informed choice about their screening options and management
- Provide a pathway including the management of care and options available to the woman/pregnant person if anomalies are detected and the way in which results are communicated

The second trimester screening for Down's syndrome (the Quad test) screening aims to:

- Offer all women/pregnant people booked for antenatal care between 14 weeks and 2 days gestation and 20 weeks and 0 days gestation the screening test for Downs syndrome (when the CRL measurement is greater than 84.0mm and the HC measurement is between 101.0mm and 172.0mm .
- Offer those women/pregnant people who have had a first trimester scan but combined screening could not be completed the option of the second trimester screening for Downs syndrome after 14 weeks and 2 days gestation up to and including 20 weeks and 0 days gestation
- Provide a service which meets national recommendations
- Provide appropriate, accessible information in a range of formats for women/pregnant people to enable them to make an informed choice about their screening options and management
- Provide a pathway including the management of care and options available to the woman/pregnant person if anomalies are detected and the way in which results are communicated

2.1 Scope

To provide Guidance for professional staff within the obstetric department; midwives, sonographers and medical staff in Obstetrics and Gynaecology
These guidelines consider that staff ensure the patient has an understanding of the screening offered, even if English is not their first language. Assessment of their mental capacity may be indicated.

3. Definitions

Dichorionic- In relation to multiple pregnancy – two chorion's are present

EDD - Expected date of delivery

EPAU - Early pregnancy assessment unit

IVF - In vitro fertilisation

LMP - Last Menstrual period

MCDA - Monochorionic Diamniotic

Within multiple pregnancies, one chorion, and two amnions – these are the membranes that surround the baby/babies while in the uterus

Monochorionic- In relation to multiple pregnancy – one chorion is present

NIPT – Non invasive prenatal test

USS - Ultrasound Scan

4. Responsibilities and Accountabilities

4.1 Midwives and Obstetricians

- To access, read, understand and follow this guidance
- To use their professional judgement in application of this guideline

4.2 Management

- To ensure the guideline is reviewed as required in line with the Trust and National guidelines
- To ensure the guideline is accessible to all relevant staff
- To monitor the audit process

5. Process

5.1 First trimester USS and Screening for Down's, Edwards' and Patau's syndrome - Pre-test Information

Women/pregnant people should be given verbal and written information about the pregnancy and neonatal screening options available by the community midwife in the form of the NHS England 'Screening test for you and your baby' leaflet. The online link to access the booklet is attached to an automatic email reply the women/pregnant people receive following their online self-referral to maternity care. If this is not received, it is given prior to or at booking by the midwifery team and will be available via the Badgernet portal.

This information should be given prior to the optimum time of testing so that the woman/pregnant person can make informed decisions whether or not to have the tests. The community midwife should give the woman/pregnant person information about the detection rates and false positive rates with screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome.

The Down's Syndrome, Edwards' Syndrome and Patau's Syndrome screening programme is overseen by the Specialist Midwife for Antenatal and Newborn Screening. The practitioner booking

the screening test for the woman/pregnant person is responsible for explaining it to them, via an interpreter if required, and must ensure that the woman/pregnant person has enough information to make an informed decision on whether or not to accept the offer of screening and proceed with the test. The woman's/pregnant person's choice to decline or accept screening is documented in the pregnancy record (either handheld or on Badgernet – whichever is used by the individual. The woman/pregnant person must also sign the consent form accordingly. The NHSE 'Screening test for you and your baby' leaflet is also available in alternative languages https://www.gov.uk/government/publications/screening-tests-for-you-and-your-baby-description-in-brief [accessed 02/04/2025].

5.2 Routine USS is offered at approx 12 weeks Gestation:

Purpose of USS at this time:

- Assessment of viability
- An accurate assessment of gestational age
- The early detection of multiple pregnancies
- Assessment of chorionicity (i.e. presence of Lambda or 'T 'sign:)
- Lambda sign indicates a dichorionic pregnancy
- 'T' sign indicates a monochorionic pregnancy
- Limited fetal anatomy assessment
- A chance assessment for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome: combined test.
- Assessment of the nuchal translucency (NT) measurement when an individual opts for the R445 NIPT rather than combined screening (previous pregnancy or child affected with full trisomy for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome).

Assessment of viability

Delayed miscarriage

Women/pregnant people with findings of a delayed miscarriage or other early pregnancy problems should be referred to the early pregnancy unit (EPAU).

An accurate assessment of gestational age

All pregnancies will now be dated using ultrasound parameters only (not LMP) LMP will only be used in pregnancies where the woman/pregnant person declines ultrasound scanning.

All pregnancies: The Crown–rump length (CRL) measurement should be used to determine gestational age between 10 and 13 weeks and 6 days to determine gestational age where CRL is 84mm or less, if however the measurement is above 84mm the gestational age should be estimated using Head Circumference.

IVF: For IVF pregnancy, please use the EDD given by the IVF unit based on date of egg collection. If an egg donor is used, please use the donor DOB or age for the Down's Syndrome, Edwards' Syndrome and Patau's Syndrome risk calculation

Twins dating: To date twin pregnancies the largest CRL will be used to calculate the EDD Please see Appendix B for '***MEASUREMENTS FOR PREGNANCY DATING AT DIFFERENT GESTATIONS***' table.

Early detection of multiple pregnancies and assessment of chorionicity and amnionicity (ie presence of Lambda or 'T 'sign:)

The lambda or T signs should be used to assess chorionicity in cases of multiple pregnancy. Twins should be called A and B and their location, and particularly sac location, should be clearly documented. Refer to consultants undertaking the high risk ultrasound scan lists on the two acute sites if there is any doubt regarding chorionicity as soon as possible.

Monochorionic twin (see under MCDA twins) pregnancies should be referred to the consultants undertaking the high risk ultrasound scan lists on the two acute sites for their second trimester scan or if there is any concern earlier in the pregnancy regarding TTTS or growth discrepancy. Referral should be made as soon as the diagnosis is made (if unsure then review at 15-16 weeks). The amniotic fluid, bladder visibility, and free floating membrane should be assessed and documented (look also at CRL and NT discrepancy). From 28/40 gestation scans may be undertaken in the obstetric ultrasound department as part of routine scanning clinics. For further information see 2.17 Multiple Pregnancy

5.3 Screening in Multiple Pregnancy

Women/pregnant people with a twin pregnancy can be offered combined screening. Screening for Trisomies can be performed in the first trimester using the combined test for both Monochorionic and Dichorionic twins. In a monochorionic twin pregnancy, the chance result is the same for each baby and one 'pregnancy' chance result is reported. In a dichorionic twin pregnancy, the chance result is reported for each baby. For further information in relation to national guidance, please refer to the Fetal Anomaly Screening Programme Handbook: Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome, updated 16/12/2024. https://www.gov.uk/government/publications/fetal-anomaly-screening-programme-handbook/screening-for-downs-syndrome-edwards-syndrome-and-pataus-syndrome--3#screening-in-twin-pregnancies (accessed 02/04/2025).

The serum marker levels are always raised and adjustments are made to take account of this by the screening laboratory.

Advice for quad tests and twins:
The quadruple test is offered to a woman with a twin pregnancy to screen for T21 only when one or both of the:

- NT measurements cannot be obtained
- CRL measurements are greater than 84.0mm

The larger of the 2 HC measurements should be used in the chance result calculation.
The quadruple test in twin pregnancies is not as sensitive as the combined test and the decision-making process can be more difficult for a number of reasons. Women considering the quadruple test should have a discussion with a healthcare professional with a special interest, experience and knowledge of managing multiple pregnancies.

Quadruple test chance results relate to the pregnancy not to individual babies. They are not interpreted in the usual way but used, with a cut-off of 1 in 150 at term, to define a higher chance group.

An appropriately trained healthcare professional should interpret and explain these results and pregnancy options due to the complexities involved

5.4 'Vanished' twin

For the purposes of screening, the definition of a vanished twin is when one fetus in a twin pregnancy is non-viable at the dating scan.

The ultrasound scan may show either:

- an empty second pregnancy sac
- a second pregnancy sac containing a non-viable fetus

In both scenarios, the biochemical markers can be affected and therefore the NHS FASP combined and quadruple screening tests cannot be offered.

In this event, where a woman/pregnant person has accepted screening, it is recommended the CRL and NT measurements of the viable fetus should be undertaken, and the full details of the both the viable and vanished twin recorded on the combined/quad screening request form. The woman/pregnant person should be sent to the pathology lab for their blood test on the same day as the scan. The testing offered is slightly different to those with singleton or twin pregnancies. The woman/pregnant person can be referred to the Antenatal Screening Midwife to discuss this further.

The testing options available to ESHT service users are as follows:

- a modified combined test - Maternal age, NT and free beta hCG (excluding PAPP-A)
- a modified quadruple test - Maternal age, hCG (beta), inhibin-A and uE3 (excluding AFP)

Detection rates (DR)
The tables below outline modelled DR per testing strategy for vanished twin pregnancies.

The modelled performance for the combined test and quadruple test in singleton pregnancies are included for comparison.

Testing strategy	**Expected DR (%) for T21**	**Expected DR (%) for T18**	**Expected DR (%) for T13**	**False positive rate (%)**
Modified combined test excluding PAPP-A	82	75	61	2.7
Current NHS FASP combined test in singleton pregnancies	87	81	72	2.3
Modified quadruple test excluding AFP	74	N/A	N/A	4.2
Current NHS FASP quadruple test in singleton pregnancies	80	N/A	N/A	3.8

For further information in relation to 'vanished' twin pregnancies, please see FASP guidance updated 16/12/2024 https://www.gov.uk/government/publications/fetal-anomaly-screening-programme-handbook/screening-for-downs-syndrome-edwards-syndrome-and-pataus-syndrome--3#screening-in-twin-pregnancies (accessed 02/04/2025).

Triplet pregnancies or higher:
For women/pregnant people with a triplet, or higher, multiple pregnancy, the combined and quad test is not available and therefore before offering screening, an appointment will be offered to discuss screening for multiple pregnancies further with the consultant / specialist midwife for screening, at which point a referral can be made to the specialist tertiary centre to discuss further if required.

5.5 Fetal anatomical check

The cranial vault should be clearly visualised to exclude anencephaly. The following fetal anatomy should be reviewed and assessed as normal for the gestation: skull/brain, abdominal wall, bladder, stomach and all four limbs. It should be made clear to the woman/pregnant person that normal appearances at this scan are reassuring but will be reviewed fully at the 18 – 20+6 week anomaly scan according to NHSE FASP Guidance 20-week screening scan (2025).

5.6 Routine Screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome

The combined test is the recommended screening test in the first trimester for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome, and is offered to all eligible women/pregnant people booking at ESHT when the fetal crown-rump length is between 45 and 84mm (approximately 11+2 and 14+1 weeks' gestation). (Women/pregnant people booking too late for the combined test are offered the quadruple test (maternal/pregnant persons serum screening) in the second trimester. This can be offered from 14+2 to 20+0 weeks. See section regarding the quad second trimester screening test below).

Women/pregnant people can choose

- Not to have screening
- To have screening for T21 and T18/T13
- To have screening for T21 only
- To have screening for T18/T13 only

The combined test involves combining the following 3 markers:

- Measurement of nuchal translucency from ultrasound scan
- PAPP-A (Pregnancy associated plasma protein-A) substance in the maternal blood used as biochemical marker
- Free β-hCG (Free β-human chorionic gonadotrophin) substance in the maternal blood used as a biochemical marker

Screening for those who have had any previous pregnancy with reported full trisomy T21, T18 or T13 (Non invasive prenatal test R445)

This group of women are known to have an increased chance of recurrence of primary trisomy in any future pregnancy (a priori chance of around 1% or the chance related to maternal age, whichever is the greatest). Therefore, R445 offers these women the opportunity to proceed directly to the more sensitive screening test and at an earlier stage of pregnancy. (NHS England: R445 Working Group 2024)

Please see section 6.16 below for more detailed information.

Ultrasound measurements required for routine screening

See Appendix C also

The CRL should be measured according to the approved national guidelines see Appendix B. The measured image of the CRL should be recorded. If the CRL is less than 45mm a repeat scan is arranged in order to complete the screening. If the NT cannot be measured at the first attempt, a second time on the couch approach should be taken. If the NT cannot be measured after the second time on the couch the woman/pregnant person can be offered the quadruple test to screen for Down's Syndrome only (see detailed section below). Additional guidance for sonographers:

If the first attempt fails to obtain the measurement accurately, ultrasound practitioners will ask the pregnant person to:

- change her position on the couch
- nip to the toilet to empty her bladder
- take a short stroll away from the scan room to walk about
- return to the scan couch for a second attempt

After a second attempt on the couch, if it is not possible to accurately measure the NT, further attempts do not have to be offered and the pregnant person should be referred into the second trimester screening pathway. The optimum time for the second trimester test is around 16 weeks, but it can be taken between 14 weeks plus 2 days and 20 weeks plus zero days in pregnancy. Providing there was an accurate EDD given at the dating scan, there is no need for a further scan at 16/40 because EDD confirmed at the dating scan can be used to assess gestation at the time of screening. (PHE/NHSE 2015)

Nuchal translucency (NT) screening should only be performed and reported by sonographers who hold a DQASS number and are deemed safe to undertake these examinations in line with DQASS QA processes. Those Sonographers following improvement action plans should be supervised when undertaking these examinations. Non-accredited sonographers must be supervised by an accredited sonographer who is responsible for producing and countersigning all reports.

If the NT measurement is 3.5mm and greater the woman/pregnant person is offered bloods for first trimester screening and referred to the Specialist Midwives for Screening for a discussion of the implications of this result and referral to the consultants undertaking the specialist scan lists.

If the CRL is </=7mm and/or a missed miscarriage is suspected, please refer to Early Pregnancy Unit.

The screening support Sonographers (SSS) will regularly audit Sonographer compliance of ultrasound assessment of CRL and NT according to FASP guidelines***. (see Appendix F)***

The screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome should only be performed after the woman/pregnant person has given consent. Patient details including full name and date of birth should be checked before starting the screening process.

After the woman/pregnant person has had their first trimester scan, maternal/pregnant person's blood for the combined test is taken in the phlebotomy department where 5ml of blood is taken in an ochre (gold top) tube. This must be taken first if more than one blood sample is being taken to avoid EDTA contamination in the other vacutainers

The blood is sent to an external laboratory by the pathology department with the completed request form including the following essential information that will correctly identify the woman/pregnant person and provide the most accurate risk assessment:

- Correct maternal / pregnant person's demographics
- Gestational age determined by ultrasound and expected date of delivery
- Sonographer's code

- Smoking status (if yes or formerly, how many and date stopped, patches, e-cigarettes, gum)
- Maternal / pregnant person's weight on day sample (at EDGH site, the antenatal clinic team can check the current weight prior to having the sample taken; at Conquest site, the phlebotomy team check the weight prior to having the sample taken; each team document accordingly)
- Family origin or ethnicity
- Diabetic (yes/no)
- Single or multiple pregnancy and note of fertility treatment (e.g; donor egg or IVF and donor's date of birth)
- Previous history of pregnancies affected by chromosomal anomalies

Report: Use First Trimester screening Report.
The report will automatically upload on to the woman/pregnant person's Badgernet Record. The sonographers are required to log the following information on the woman/pregnant person's Badgernet Record:

- Scan Details Tab: Consent, Any mandatory fields (red), Type of scan, Performed by, Number of babies on scan
- Maternal Findings Tab: EDD from scan, Additional comments, e.g. See scanned document from [redacted]
- In the event of any abnormalities, please record details, e.g. referred to Foetal Medicine and/or screening

A copy of the ultrasound report can be printed and provided for the woman/pregnant person if requested, due to the full report not being visible on the pregnancy app held by the pregnant person.

5.7 Serum screening – Quadruple Test

The quadruple test is offered to all women/pregnant people where the CRL is greater than 84mm, or HC is >101mm (usually around 14 weeks+2 days gestation) and who have not had combined screening performed but request screening for Down's syndrome. The test involves taking a maternal blood sample from 14+2 – 20 weeks +0 days. If women/pregnant people are being offered the quad test, it must be made clear to them that the test ONLY screens for Downs Syndrome, and NOT Edwards' Syndrome or Patau's Syndrome. This screening for Down's syndrome should only be performed after the woman/pregnant person has given consent. Patient details including full name and date of birth should be checked before starting the screening process.

The CRL or HC should be measured according to the approved national guidelines see Appendix B. It is the responsibility of the practitioner offering the test to make sure that the nature and purpose of the test has been explained to the woman/pregnant person. The quadruple test form should be fully completed and given to the woman/pregnant person in order for their bloods to be taken for screening.

The quadruple test can only be carried out accurately when the dates of the pregnancy are known. Therefore, all women/pregnant people having the quad test must first have an ultrasound scan performed. Following the ultrasound scan, if the quad test is indicated and the woman/pregnant person is ≥14+2 weeks gestation (CRL >84mm and HC 101mm – 172mm), the sonographer will complete the request form and advise her to go straight to pathology for the blood test (assuming consent has been given). If the woman/pregnant person is ≤14+1 weeks pregnant, she will be advised to return for blood test between 14+2 and 20+0 weeks. The woman/pregnant person can attend phlebotomy or her CMW can take the blood sample for the quad test (a 5ml of blood is taken in an ochre (gold top) tube, which must be taken first if more than one blood sample is being taken to avoid EDTA contamination in the other vacutainers). The blood sample is to be sent to the ESHT laboratory on the day of draw, ready for courier delivery to the specialist laboratory.

The sample is analysed by the screening laboratory and a chance that is higher or lower is determined using a cut-off of 1:150 for both first and second trimester screening.

The quadruple test can also be offered to women/pregnant people with a twin pregnancy. Women/pregnant people with a twin pregnancy and considering screening should have a discussion with a healthcare professional with an interest in multiple pregnancies to help facilitate informed choice. Referral should be made to the Antenatal and Newborn Screening Midwives or Obstetric Consultant to discuss limitations or otherwise of screening with twins and the guidance should be followed according to the Fetal Anomaly Screening Programme Laboratory Handbook (https://www.gov.uk/government/publications/fetal-anomaly-screening-laboratory-handbook-downs-edwards-and-pataus-syndromes/fetal-anomaly-screening-laboratory-handbook)

5.8 Women/pregnant people booking too late for the Quadruple test

If a woman/pregnant person books too late for screening by the quadruple test they are not eligible for screening. However, an urgent ultrasound scan in the ultrasound department should be arranged.

5.8.1 Lower chance combined or quad results

The screening team receive combined and quad results electronically via an online portal (Lifecycle 7) linked to the screening laboratory. This is accessed every weekday. Women/pregnant people with lower chance results will be sent a letter informing them of the result directly from the screening laboratory. The result is sent within two weeks of the test being taken. The screening report is uploaded by the Screening Administrator onto the Badgernet Maternity record, and the result recorded in the 'blood test' section on Badgernet, if the blood test request has been made by the CMW. The result outcomes are then entered on the tracking spreadsheet for combined and quad screening results, in the screening folder on the ESHT shared drive. No further action is indicated. The Community Midwife is responsible for checking a result has been received at the 16 week appointment, and following this up if a result is not recorded.

Women/pregnant people at lower chance of Down's Syndrome, Edwards' Syndrome and Patau's Syndrome requesting an invasive test

The trust policy is to offer all eligible women/pregnant people screening for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome, regardless of their age. The screening test used is as described above and no further testing is indicated if the result is lower chance. The woman/pregnant person can be offered a further appointment with the Specialist Midwives for screening and/or consultant if they wish to have a further discussion about her result or requests invasive testing.

All screening tests take into account maternal age when calculating the chance to that pregnancy so age should not be seen as a separate issue.

The Specialist Midwives for screening and/or consultant will provide information to the woman/pregnant person and her partner about Down's Syndrome, Edwards' Syndrome and Patau's Syndrome, the implications of the screening result, the screening pathway for lower chance results i.e. that she is not eligible for invasive testing within the pathway and the risks of invasive testing.

5.8.2 Higher chance combined or quad results

The screening team receive an email via the generic screening results nhs.net mail-box: esh-tr.ScreeningResults@nhs.net, from the screening laboratory informing them of a higher chance result, which is available to view on the online reporting portal (Lifecycle 7). This is accessed every weekday and the screening team confirm receipt of the higher chance result with the external laboratory by email. All women/pregnant people with higher chance results (screen positive) will be telephoned and offered a face to face appointment within 3 working days of the result being received (day 1 is the day the result is reported) to discuss the result with the specialist midwife for screening and/or the consultant. The community midwife is informed by telephone or email of the result and any decisions made by the woman/pregnant person. All options will be discussed including:

- To have no further testing
- Offer of Prenatal diagnosis (refer to 6.10 onwards). This option should be offered within three working days of receiving the screening test results.
- Offer of non-invasive prenatal testing (NIPT) (refer to 6.15)

The screening midwife will update the online portal when the result has been given to the woman/pregnant person.

See Appendix E for pathway

If a woman/pregnant person opts to have no further tests, the screening midwives will inform the community midwife and named consultant, and send a copy of the result by email for filing in the maternity record (and upload to Badgernet when available). If the woman/pregnant person are not under consultant care, an Antenatal clinic appointment will be arranged to discuss the result and confirm decision.

All women/pregnant people having serum screening are advised to contact their community midwife or the specialist midwife for screening if they have not had their result within 14 days of being tested.

5.9 Referral for prenatal diagnosis

Specialist tertiary centres used in ESHT are Guy's and St Thomas's Hospital or King's College Hospital where quantitative fluorescence polymerase chain reaction (QF-PCR), full karyotyping or CGH array is offered for pre-natal diagnosis. Sample collection for the test is performed by chorionic villus sampling (CVS) between 12 and 15+6 weeks or amniocentesis following 16 weeks gestation. QF-PCR is attempted in all cases to test for trisomies 21, 18 and 13 with results taking approximately three to five working days. It is now the standard single test offered for diagnostic testing subsequent to a high-risk screening result (see below). Occasionally this test will not be possible (e.g. if sample is heavily bloodstained) and in such cases the laboratory will inform us that a rapid result will not be available and in that situation cellular culture will be set up and karyotyping attempted. PCR identifies the number of copies of chromosomes 21, 18 and 13 and can confirm a normal number for these chromosomes (2 copies of each) and therefore exclude the major trisomies (Trisomy 21, 18 and 13). It is considered to be a suitable standalone test in cases, which primarily are at risk for a major trisomy. These include:

1) Chance equal to or greater than 1:150 for Down's Syndrome, Edwards' Syndrome and Patau's Syndrome on the combined screening test
2) Chance equal to or greater than 1:150 for Down's syndrome on a quadruple screening test
3) Increased nuchal translucency where the measurement is equal to or greater than 3.5mm
4) Incidental chromosomal testing in conjunction with a primary molecular indication
5) Or, as part of a testing for cases of fetal abnormality

Multiple pregnancies are conducted in accordance with the NICE clinical guideline 137:Twin and triplet pregnancy, published September 2019 (last updated 09/04/2024) and RCOG Green-top Guideline No. 8 Amniocentesis and Chorionic Villus Sampling (2010) (last updated 25/10/2021).

It is essential that the **blood group** of woman/pregnant person having invasive tests is known prior to the test because of the risk of isoimmunisation. The professional requesting the appointment should ensure the result is emailed with the referral form to avoid repeat blood test and delay in administration of Anti D. It is also essential that the antenatal serology is known prior to the test and recorded on the referral. If a woman/pregnant person is **HIV and / or Hepatitis B positive** there is a risk of transmission to the fetus during an invasive procedure. This should be discussed in the first instance with the woman's/pregnant person's consultant and a plan made to minimise the risk of transmission. This may require anti-retroviral therapy prior to testing, so should be done as soon as the woman/pregnant person request an invasive test to minimise delay.

It is the responsibility of the Specialist midwife and/or consultant for screening to check whether a woman/pregnant person who has been referred for an invasive procedure has been tested for HIV and to email the result. The tertiary specialist centre should be informed if the woman/pregnant person is HIV and/or Hepatitis B positive to allow counselling about the risks to the fetus.

Any woman/pregnant person requiring assistance with communication must have a professional interpreter booked for her appointment and this request should be indicated as a requirement on the referral form.

The tertiary specialist centre is also informed about any safeguarding concerns about the patient.

The screening midwife will inform the community midwife and named consultant of the referral and upload a copy to Badgernet. If the woman/pregnant person is not under consultant care, the fetal medicine consultant will be informed and updated of the outcome.

5.10 Prenatal diagnosis (PND): Pre-test information

Specialist Midwives for Screening provide pre-test information to ensure the woman/pregnant person is aware of the purpose, benefits, limitations, implications of undergoing prenatal diagnosis, how the results are communicated, what the results will tell them and the options that are available to them on the basis of these results, including:

- There is a 0.5% risk of miscarriage. Most miscarriages happen within 3 days of the procedure, but they can happen up to 2 weeks after (PHE 2020) Miscarriage may be heralded by persistent pain, bleeding, amniotic fluid leakage or infection and the woman/pregnant person should be advised to report signs of these to their local acute unit where they are booked for maternity care.
- Where prenatal diagnosis is proposed at 22 weeks or beyond specific mention should be made of the possibility of a live birth resulting in a neonatal death or a live but impaired infant.
- Prenatal diagnosis is performed using continuous direct ultrasound guidance by an experienced clinician

The information booklet about CVS and amniocentesis is provided: NHS Fetal Anomaly Screening Programme, Chorionic villus sampling (CVS) and amniocentesis: information for parents Public Health England 2017 updated 03/02/2025 https://www.gov.uk/government/publications/cvs-and-amniocentesis-diagnostic-tests-description-in-brief/nhs-fetal-anomaly-screening-programme-chorionic-villus-sampling-cvs-and-amniocentesis-information-for-parents#possible-risks-of-cvs-and-amniocentesis

When having a CVS, it is almost always performed by the transabdominal (TA) route. The transcervical (TC) route is rarely performed due to a higher rate of miscarriage. Pre-test discussion should also include:

There is a 1 in 1000 risk of the PCR and full karytoype results being different if both tests are performed. This can arise when there is confined placental mosaicism (CPM). In this situation the karyotype of the fetus cannot be predicted with certainty although more information may be obtained by amniocentesis. It is particularly important to remind women/pregnant people with an **apparently structurally normal fetus and an abnormal PCR result** that there is a 1 in 1000 chance the PCR result may be **inconclusive**, and so the laboratory will await the culture and full karyotype. **The woman/pregnant person would be advised to await this result. Results from the cultured cells must be received and discussed with the woman/pregnant person before any decisions are made regarding pregnancy options including continuing or terminating the pregnancy.** If the full karyotype shows a different result to the PCR this may indicate that the abnormality is confined to the placenta but may not be present in the fetus. Subsequent amniocentesis may be offered in this situation.

5.11 Chorionic Villus Sampling (CVS)

Chorionic villus sampling (CVS) is performed from weeks 11 to 14 weeks of pregnancy but can be done later. Obtaining an adequate sample may be more difficult at later gestations. A small sample of placental tissue is taken under ultrasound guidance.

Women/pregnant people considering CVS to exclude Down's, Edwards' and Patau's syndromes should be given the appropriate information prior to the procedure, as stated above.

Women/pregnant people having CVS for genetic diagnosis should be referred to the genetics department prior to the procedure. Results of prenatal genetic diagnosis where the woman/pregnant person has seen a genetic counsellor are usually given by them unless specifically arranged otherwise.

5.12 Amniocentesis

Amniocentesis is usually performed between 15 – 20 weeks of pregnancy, but can be performed later. A small amount of amniotic fluid is removed under ultrasound guidance. The sample will be sent to the laboratory for diagnostic testing.

5.13 Result handling

Results are telephoned by the fetal medicine midwives in the specialist tertiary centre directly to the woman/pregnant person unless she requests otherwise and then an individualised plan is made.

If the result is normal she will be phoned and informed. The woman/pregnant person will receive the result via the Screening Midwife. The result will be uploaded to the Badgernet Maternity record. The woman/pregnant person is informed that their pregnancy will continue as per antenatal care plan made at booking. The referral outcome will be entered onto the screening referral spreadsheet to close the screening episode. If under consultant care, the named consultant will be informed of the result for information. If the woman/pregnant person are not under consultant care, the fetal medicine consultant will be updated of the outcome.

If the result is **abnormal**, the Fetal Medicine Midwives in the specialist tertiary centres will inform the woman/pregnant person and either email or telephone the specialist midwives for screening or the consultant to arrange the appropriate follow up. The woman/pregnant person will be provided with all the information about the result and given the opportunity to discuss the results with health professionals who are knowledgeable about Down's, Edwards' and Patau's syndromes.

As detailed by NHSE in the NHS Fetal Anomaly Screening Programme handbook (2015):

- Where the QF-PCR result from a CVS sample indicates that the baby may be affected by Down's syndrome, Edwards' syndrome or Patau's syndrome and in the absence of any suspected or identified structural anomalies on ultrasound scan, a culture result must be used to confirm the QF-PCR result prior to any decisions being made regarding ongoing care or termination of the pregnancy (due to the 1:1000 chance of CPM as detailed above).

- Where structural anomalies are present on ultrasound scan and the QF-PCR result indicates that the baby may be affected by Down's syndrome, Edwards' syndrome or Patau's syndrome, the clinician should discuss the options for ongoing pregnancy care with the woman/pregnant person. This will include the offer of a termination to end the pregnancy. If the woman/pregnant person continues the pregnancy the outcome is obtained. If she ends the pregnancy the termination is undertaken in line with the Abortion Act 1967.

5.13.1 Full karyotype

The full karyotype result will only be performed by the cytogenetic laboratory if:

- Nuchal translucency is equal to or greater than 3.5mm
- Fetal abnormalities detected
- Intrauterine growth restriction detected
- Considered if the screening result is equal to or below 1 in 50 depending on the clinical findings

This result is available 2-3 weeks after the test and a copy is sent to the specialist screening midwives.

If the prenatal diagnosis result identifies the baby is affected with either Down's syndrome, Edwards' syndrome or Patau's syndrome, the woman/pregnant person will be referred to the obstetric consultant, along with the Specialist Screening midwife (if available) to discuss the results and options for ongoing care. Please refer to the guideline, Fetal Anomaly Suspected or Identified Fetal Abnormality (esht.nhs.uk).

5.14 Non-invasive prenatal testing (NIPT) – FASP pathway

Following a high chance combined / quad result:

From 01/06/2021 NHSE Screening recommends the offer of NIPT screening for Down's syndrome (T21), Edwards' syndrome (T18) or Patau's syndrome (T13), following a higher chance result from the combined or quadruple test in singleton and twin pregnancies. A higher chance result is between 1 in 2 and 1 in 150.
As part of the NHS FASP care pathway NIPT screens for T21, T18 and T13 and will not screen for other chromosomal conditions or assess the baby's sex.

Those opting for NIPT will have a choice of screening for:

- T21, T18 and T13
- T21 only
- T18 and T13 only

NIPT screening will report individual chance results for T21, T18 and T13, as either LOWER CHANCE or HIGHER CHANCE.

5.14.1 Inclusions

As part of the NHS FASP evaluative rollout, NIPT can be offered and performed:

- when a woman/pregnant person receives a higher chance result for T21 or a joint higher chance result for T18 and T13 from the combined test
- when a woman/pregnant person receives a higher chance result for T21 from the quadruple test
- in both singleton and twin pregnancies
- up to 21 weeks and 6 days (21^{+6}) of pregnancy

Women/pregnant people with in-vitro fertilisation (IVF) or donor egg pregnancies are eligible for the offer of NIPT. The relevant details must be recorded accurately on the NIPT screening request form.

5.14.2 Exclusions

As part of the NHS FASP evaluative rollout, NIPT cannot be offered and performed:

- when a woman/pregnant person receives a lower chance result for T21, T18 or T13 from the combined or quadruple test
- in higher multiple pregnancies (triplets or more)
- after 21^{+6} weeks of pregnancy

Also, NIPT cannot be offered and performed as part of the NHS FASP pathway when a woman/pregnant person has:

- cancer, unless in remission, as NIPT may detect cell free DNA (cfDNA) in the maternal blood which is released by a cancerous tumour
- received a blood transfusion in the previous 4 months, as studies show that donor DNA in blood transfusion recipients lasts for several months, sometimes longer
- had bone marrow or organ transplant, as donor DNA will be present
- immunotherapy in the current pregnancy, excluding intravenous immunoglobulin (IVIg) treatment
- had stem cell therapy, as this will depend on whether she has received her own stem cells or stem cells from a donor (certain methods of NIPT are not suitable for stem cell transplants)
- a vanished twin pregnancy (an empty second pregnancy sac or a second pregnancy sac containing a non-viable fetus), as there is evidence to suggest that the placenta can continue to shed cell free fetal DNA (cffDNA) even after the baby has died
- Down's syndrome or a balanced translocation or mosaicism of T21, T18 or T13

5.14.3 Uncertain eligibility criteria

To confirm eligibility for NIPT screening, contact the laboratory before taking a NIPT sample when the woman/pregnant person has any other chromosomal condition other than T21, T18 or T13. This is because it may affect the analysis of NIPT.

5.14.4 NIPT: pre-test information

Specialist Midwives for Screening provide pre-test information to ensure the woman/pregnant person is aware of the purpose, benefits, limitations, implications of having a non-invasive prenatal test, how the results are communicated, what the results will tell them and the options that are available to them on the basis of these results. They should be given the PHE leaflet 'Your choices after a high chance screening result'. This details the screening pathway and options available, as well giving further information about the NIPT test. They should be advised the test can screen for T21, T18 and T13 (choice of combination as detailed above), but it will not screen for other chromosomal abnormalities or the fetal sex.

It is important to remember that NIPT is still a screening test. The result will be reported as either higher-chance or lower-chance for the conditions screened for. NIPT will give an accurate result for most women/pregnant people who choose to have it but there can also be false positive and false negative results. They should be informed that if they had a very high chance result from the combined or quadruple test (such as between '1 in 2' and '1 in 10') then a false negative result is more common. So there will be some women/pregnant people who receive a lower-chance NIPT result who do have a baby with one of the conditions.

It should be made clear to women/pregnant people that if they opt for the NIPT test, and they receive a lower chance result, this will be the end of the screening pathway and no further tests will be indicated or offered. If the result is higher chance however, further testing will be offered, as explained further below.

5.14.5 Taking the NIPT test

If the NIPT is chosen, an appointment will be offered to have the blood taken by the Specialist Screening Midwives as soon as possible or at least within 3 working days, to avoid delay and minimise anxiety. The sample is taken in accordance with the laboratory instructions, and sent to the specialist laboratory in the transport boxes provided, by Royal Mail tracked delivery service. If the sample is not being posted straight away, it MUST NOT be refrigerated.
The sample is registered on the online *NIPT Portal* database to enable tracking of the result and effective correspondence between the laboratory and the Specialist Screening Midwives. The sample should be received by the laboratory in ≤2 working days (the day of draw is day 0). If a sample is not received by the laboratory within 5 calendar days of dispatch the Specialist Screening Midwives will contact the laboratory to check the tracking of the sample. On receipt in the laboratory, an expected report date is provided, which will be within 5 working days.
The laboratory team will contact the Specialist Screening Midwives via the online *NIPT Portal* if repeat samples are required, or if there are any discrepancies or incomplete information on the request form.

5.14.6 Reporting NIPT Results

NIPT results should be reported ≤5 calendar days of the sample being received by the laboratory. An email alert will arrive in the Screening Team generic email inbox, advising that a result is ready to be viewed. The Specialist Screening Midwife will contact the woman/pregnant person to give the result in ≤3 working days of the result being reported.
Women/pregnant people should expect their NIPT results around 2 weeks from sample collection.
NIPT results are reported as either lower chance or higher chance. Numerical values are not reported.

The result will be reported according to the choice of the conditions screened for:

- T21, T18 and T13
- T21 only
- T18 and T13 only

Individual chance results will be reported for each of the conditions they chose to be screened for.

- **LOWER CHANCE NIPT results**

The Screening Midwife will contact the woman/pregnant person and give them the lower chance NIPT result and advise that this is the end of the screening pathway and no further testing is indicated.
The 20 week anomaly scan will be arranged (if not already booked). The woman/pregnant person will be advised that if any concerns are raised at this appointment, they will be referred to the Screening Midwives as required. Please see 'Clinical Guidance for Second Trimester Obstetric Ultrasound' for more information.

- **HIGHER CHANCE NIPT results**

All women/pregnant people who receive a higher chance NIPT result should be offered a face to face or virtual appointment (depending on their choice) with a Specialist Screening Midwife (or Healthcare Professional with knowledge of NIPT and the NHS FASP pathway) to discuss the option of:

- No further testing – if this is chosen, arrange anomaly scan with fetal medicine consultant if availability allows

- Prenatal Diagnosis (PND) – if this is requested, PND should be completed in ≤3 working days of the woman/pregnant person receiving the NIPT result. Further information regarding PND is above in section 6.10. PND results should be reported in ≤3 calendar days of sample receipt.

In twin pregnancies, the higher chance result report should state that one or both babies may have the condition screened for.

IF PND is declined after a high chance NIPT result, the woman should be advised:

- A baby with T21 may have no unexpected findings detectable on ultrasound or at the 20-week screening scan. This can also occasionally be the case for babies with T18 and T13, although other ultrasound findings are usually present.
- A referral will be made to fetal medicine and paediatric services to discuss on going antenatal care and postnatal assessment including options for confirmatory postnatal diagnostic testing.

The woman/pregnant person will be signposted to support organisations as appropriate for information and ongoing support.

It is also important to advise the woman/pregnant person that she may change her mind about PND later in her pregnancy, but that there may be gestational limits on which tests / options are available to her.

- **No result reported**

In some cases, NIPT may fail to give a result. 'No result' is where a 'fit for analysis' sample was received in the laboratory, and it has failed to generate a result at any point of the analytical or reporting process.

If a 'no result' is obtained from an initial sample, the woman/pregnant person should be offered a face to face or virtual appointment (depending on their choice) with a Specialist Screening Midwife (or Healthcare Professional with knowledge of NIPT and the NHS FASP pathway) to discuss the option of:

- One further NIPT sample
- PND
- No further testing

A woman/pregnant person must be ≤ 21^{+6} weeks of pregnancy when the first NIPT sample is taken. A second NIPT sample can be offered and taken even if the woman/pregnant person is more than 21^{+6} weeks, in the following cases when a:

- sample is rejected
- 'no result' report is issued

It is possible that a second NIPT sample may also fail. If this occurs, the woman/pregnant person will be offered:

- No further testing
- PND

The Community Midwife and, if under consultant care, the named consultant will be informed of the outcome of the screening pathway for information. If the woman/pregnant person are not under consultant care, the fetal medicine consultant will be updated of the outcome.

5.15 Non-invasive prenatal testing (NIPT) – R445 NIPT pathway

The R445 pathway offers non-invasive prenatal testing (NIPT) to pregnant women who have had any previous pregnancy with reported full trisomy T21, T18 or T13.

5.15.1 Inclusions

All women with history of pregnancy with a full trisomy of T21, T18 or T13 should be offered NIPT in any subsequent pregnancy. This can be offered from 10+0 to 21+6 weeks inclusive, confirmed by USS, to both singleton and twin pregnancies.

It is recommended that the report from the previous affected pregnancy is reviewed to confirm full trisomy of T21, T18 or T13 prior to offering R445. However, R445 can still be offered even if the previous report is unavailable or obtaining it will cause a delay in screening. In such cases it should be explained to the woman that R445 is being performed on the basis that the previous pregnancy was a full trisomy T21, T18 or T13 and not another chromosomal anomaly, as these will not be detectable by NIPT.

5.15.2 Exclusions

The standard exclusion criteria for NIPT applies (see section 6.15.2 above) (discuss with NIPT lab if unsure). **In addition R445 is not to be offered** to women where:

- Previous pregnancy was a trisomy involving chromosomes other than T21, T18 or T13.
- Previous pregnancy was not a full trisomy: e.g., mosaicism, translocation or, partial trisomy of T21, T18 or T13.
- One of the parents has a Robertsonian translocation or balanced translocation involving chromosome T21, T18 or T13.
- Donor egg used in current pregnancy.

In these cases, referral to genetic counselling and / or fetal medicine should be offered.

5.15.3 The offer of R445 NIPT

Women with a history of pregnancy with full T21, T18 or T13 should be referred for pretest discussion to the Specialist Midwives for Antenatal and Newborn Screening.

Women meeting eligibility criteria for R445 have the following three options:

- No screening or diagnostic tests
- Screening via R445 NIPT for T21, T18 or T13.
- Pre-natal diagnosis (CVS or amniocentesis)

It should be made clear to women considering R445 that:

- R445 NIPT is a screening test for T21, T18 or T13. It cannot tell you if your baby definitely has one of these conditions, but it can provide information that may lead to further decisions about your pregnancy.

- NIPT may not detect partial trisomies, translocations, or mosaicism,
- NIPT will not detect other chromosome conditions.

Note: The offer of R445 replaces the offer of a combined/ quadruple screening test in the NHS Fetal Anomaly Screening Programme (NHS FASP) for this group of women. Therefore, these women should NOT be offered a combined or quadruple screening test as these tests have lower sensitivity for T21, T18 and T13 than R445.

Those opting for NIPT will have a choice of screening for:

- T21, T18 and T13
- T21 only
- T18 and T13 only

If a woman/pregnant person accepts the R445 NIPT, offer a dating scan. Gestational age must be confirmed before a sample is taken. The sample can be taken from 10+0 to 21+6 weeks of pregnancy inclusive.

Whilst some women may wish to access R445 at the earliest opportunity (10+0), other women may prefer to await until the 11+2-14+1 week dating scan as any unexpected findings suspected/ detected at that scan may help inform decisions about PND or R445.

A routine dating scan should be arranged in addition to an early scan in order for accurate dating of the pregnancy and also assessment of the NT measurement.

5.15.4 Dating scan

- Unexpected findings at the dating scan (Such findings might include raised nuchal translucency, higher order multiple pregnancy, structural defect, vanished twin, or other anomaly):
  - a sample for R445 should not be taken
  - refer for fetal medicine assessment and discussion about testing options
- No unexpected findings:
  - Arrange to take the NIPT sample

5.15.5 Taking the R445 NIPT

See section 6.15.5

5.15.6 Reporting R445 NIPT

See section 6.15.6

5.15.7 Declines R445 NIPT and wishes to proceed for prenatal diagnosis (PND)

If a woman/pregnant person opts for referral for PND rather than R445 NIPT, please arrange a dating scan, and send a referral for PND to the link tertiary centre. See section 6.10 – 6.14.

5.15.8 Declines R445 NIPT and declines PND

If a woman/pregnant person opts not to have any further testing, information should be given in the event they can change their mind, including the upper gestational limit for tests and who to contact to discuss this. They can be returned to routine antenatal care and offer all other screening tests within the national antenatal and newborn screening programmes.

5.16 Private NIPT

If a woman/pregnant person has had a private NIPT, the NIPT provider will issue and explain the results. If the woman/pregnant person receives a **higher chance** private NIPT result, and would like to discuss the result further and options for further testing, the CMW can refer them to the Specialist Screening Midwives. The options will be discussed and referrals for further testing can be offered in the same way as those who had an NHS NIPT (see section above).

For those who choose to have a private NIPT, and the result is lower chance, they are still eligible for NHS FASP combined screening, and therefore be offered screening in the usual way.

5.17 Fail-safe process

To ensure that all eligible women/pregnant people who request Down's Syndrome, Edwards' Syndrome and Patau's Syndrome screening receive a result the following fail-safe process is in place:

- Weekly down-loads of all those women/pregnant people booking at ESHT for their pregnancy care are received electronically by the screening team from the Maternity Systems team. All women/pregnant people who book in this trust are recorded on the maternity IT system at their booking appointment with their community midwife. This list is then checked against their dating and/or first trimester scans where the decision of whether or not screening is requested, is recorded. The screening administration clerk then checks if a result is available for all those women/pregnant people who requested screening. These lists are held on the ESHT shared screening drive.

- The Screening Administrator keeps a record of all those women/pregnant people who have had a scan and consented to screening however a screening result has not been reported. Initially the Screening Administrator will telephone the individual, confirm the decision for screening and give guidance on arranging the blood test. If a sample is still not recorded by the laboratory by 15-16 weeks, the Screening Administrator will informed the CMW and requested they re-offer screening (Quad test for T21 only) at the routine 16 week midwifery appointment. an email will be sent to the CMW who is requested to contact the women/pregnant and offer screening. If the woman/pregnant person declines screening at this point, the CMW should update the Badgernet Maternity system with this information, and the Screening Administrator will update the tracking spreadsheet. If a sample has not been received by 18 weeks, a 'failsafe' letter is sent to the woman/pregnant person and copied to the community midwife and GP. The letter states that no result has been received and offers the woman/pregnant person the opportunity to have Down's syndrome screening with details of how to arrange the test. The letter also states that if the woman/pregnant person has not contacted the screening midwives or community midwife within 2 weeks of the letter being sent, or a sample has not been recorded by 20+0 weeks of pregnancy, then it will be assumed that she has declined screening and records are updated accordingly.

5.18 Screening Incidents

All incidents that arise from a screening programme should be reported via:

- The Trust incident reporting process
- The Public Health England process: Managing Safety Incidents in NHS Screening Programmes. The following link provides further information https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/672737/Managing_safety_incidents_in_National_screening_programmes.pdf

5.19 Interpreter

Communication needs (includes preferred languages, including sign language; needs relating to impairment, such as lip speakers; use of communication aids) should be assessed and necessary arrangement made to ensure the woman/pregnant person understands their results and can be involved in the decisions surrounding their care.
Family members, friends or children less than 16 years of age are not acceptable as interpreters. A telephone interpreter should be used for providing information about screening but a face to face interpreter should be arranged if the woman/pregnant person receives a higher chance screening result. Interpreting services can be arranged by completing and submitting the trust intranet interpreting services referral form electronically.

6. Evidence Base/References

NHSE (2022) NHS Service Specification no 16 NHS Fetal Anomaly Screening Programme Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome (trisomy 21, 18 and 13)

NHSE (2015) NHS Fetal Anomaly Screening Programme handbook: Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome (updated 16/12/2024). Available at: https://www.gov.uk/government/publications/fetal-anomaly-screening-programme-handbook/screening-for-downs-syndrome-edwards-syndrome-and-pataus-syndrome--3

NHSE (2023) Collection: Population screening programmes: NHS fetal anomaly screening programme (FASP). Available at: https://www.gov.uk/government/collections/nhs-fetal-anomaly-screening-programme-fasp

NICE (2021) Antenatal care. NICE. NG201. Available at: https://www.nice.org.uk/guidance/ng201

Loughna P et al, 2009 Fetal size and dating: charts recommended for clinical obstetric practice. British Medical Ultrasound Society. Ultrasound Volume 17 number 3. Available at: https://www.bmus.org/static/uploads/resources/Aug_2009_Fetal_Measurements_D3NApK5.pdf

NICE (2019) Twin and triplet pregnancy NICE guideline [NG137]. (Updated 2024). Available at: https://www.nice.org.uk/guidance/ng137

ISUOG (2025) Updated ISUOG Practice Guidelines: role of ultrasound in twin pregnancy. Available at: Updated ISUOG Practice Guidelines: role of ultrasound in twin pregnancy (https://www.isuog.org/resource/isuog-practice-guidelines-role-of-ultrasound-in-twin-pregnancy-pdf.html#:~:text=This%20guidance%20will%20address%20the%20role%20of%20ultrasound,sequence%2C%20conjoined%20twins%20and%20single%20intrauterine%20death%20%28IUD%29.)
NHSE (2025) Guidance: 20-week screening scan. Available at: https://www.gov.uk/government/publications/fetal-anomaly-screening-programme-handbook/20-week-screening-scan (includes base menu and results)

NHSE (2015) NHS Fetal Anomaly Screening Programme handbook. (Updated 16/12/2024). Available at: https://www.gov.uk/government/publications/fetal-anomaly-screening-programme-handbook

NHSE (previously PHE) (2015) PHE Screening Blog: Can't get an accurate nuchal translucency measurement? Don't let women miss out. Available online: https://phescreening.blog.gov.uk/2015/10/29/cant-get-an-accurate-nuchal-translucency-measurement-dont-let-women-miss-out/

NHSE R445 Working Group (2024). Non-Invasive Prenatal Testing (NIPT) R445: Offer for women with a previous pregnancy with Down's syndrome, Edwards' syndrome or Patau's syndrome (T21, T18 and T13): Screening pathway and guidance for healthcare professionals.

NHSE (2020) Screening in pregnancy: CVS and amniocentesis information for parents. (Updated February 2025) Available at: Screening in pregnancy: CVS and amniocentesis information for parents - GOV.UK (www.gov.uk)

NHSE (2021) Guidance: Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome: NIPT. (Updated 08/10/2024) Available at: Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome: NIPT - GOV.UK (www.gov.uk)

NHSE (2021) Guidance: Your choices after a higher-chance screening result. (Updated 05/02/2025). Available at: Your choices after a higher-chance screening result - GOV.UK (www.gov.uk)

NHSE (2019) Screening tests for you and your baby. (Updated 05/02/2025). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/865122/Screening_tests_for_you_and_your_baby_information_leaflet.pdf

RCOG 2010 Green-top Guideline No. 8 Amniocentesis and Chorionic Villus Sampling (Updated October 2021) Available online: https://www.rcog.org.uk/globalassets/documents/guidelines/gtg_8.pdf [accessed 03/04/2025]

7. Monitoring Arrangements

Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Annual screening audit alongside KPI.	Specialist Midwife for Antenatal and neonatal screening	Data document provided by UK national screening committee	Annually	This is completed by the Specialist Midwife for Antenatal and neonatal screening and presented to obstetrics and gynaecology audit meeting, National screening committee	Clinical Unit lead and Head of Midwifery, Ultrasound Lead, Specialist Midwife for Antenatal and neonatal screening	Clinical Unit lead and Head of Midwifery, Ultrasound Lead, Specialist Midwife for Antenatal and neonatal screening, through mandatory training etc

Appendix A: Equality and Health Inequalities Impact Assessment (EHIA) template

Undertaking EHIA helps us to make sure that our services and polices do not inadvertently benefit some groups more than others, ensuring that we meet everyone's needs, and our legal and professional duties.

This is important because:

- Assessing the potential for services and policies to impact differently on some groups compared with others is a legal requirement.
- People who find it harder to access healthcare services are more likely to present later when their disease may be more progressed, have poorer outcomes from treatment and need more services than other groups who have better access.

The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. It is against the law to discriminate against anyone because of:

- age
- gender reassignment
- being married or in a civil partnership
- being pregnant or on maternity leave
- disability
- race including colour, nationality, ethnic or national origin
- religion or belief
- sex
- sexual orientation.

These are called 'protected characteristics'. The Act requires that public sector organisations meet specific equality duties in respect of these protected characteristics. This is known as the public sector equality duty.

Public Sector Equality Duty
Public bodies have to consider all individuals when carrying out their day-to-day work – in shaping policy, in delivering services and in relation to their own employees.

Public bodies must have due regard to the need to:

- eliminate discrimination.
- advance equality of opportunity
- foster good relations.

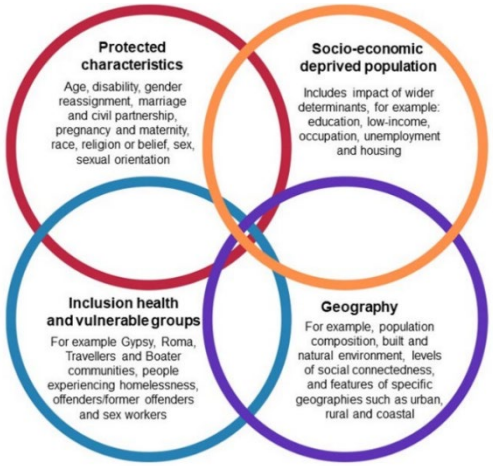
Armed Forces Covenant Duty
The new Covenant Duty raises awareness of how Service life can impact on the Armed Forces community, and how disadvantages can arise due to Service when members of that community seek to access key local services. The Duty requires organisations to pay due regard to the Covenant principles when exercising functions in healthcare. "Due regard" means that we need to consciously consider the unique obligations and sacrifices made by the Armed Forces; that it is desirable to remove disadvantages faced by the Armed Forces community; and that special provision may be justified in some circumstances.

Health Inequalities Duties- Equity for all

In addition to our legal duties in relation to Protected Characteristics, the Health and Social Care Act and other legislation, NHS Planning Guidance and sector specific recommendations require the NHS to have regard to the need to address health inequalities (or differences in access to or outcomes from healthcare) and take specific action to address them.

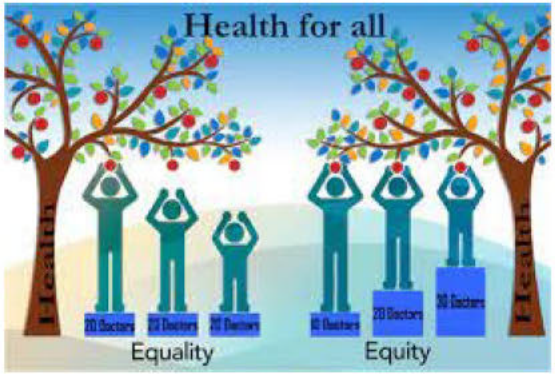
Figure 1 shows the different population groups, factors associated with where we live, or our individual circumstances, which separately, or when combined, influence access to and outcomes from health care.

Getting equal outcomes may require different inputs (or services). In completing an EHIA its important to think about whether a one size fits all approach will generate the same good outcomes for everyone, or whether we might need to make some tweaks or adjustments to enable everyone to benefit equally. The health tree diagram shows that unless we think about the needs of different people, equal services might generate unequal outcomes.



Factors associated with poorer health outcomes (PHE 2021)[1]

The Health Tree[1]



The following principles, drawn from case law, explain what we must do to fulfil our duties under the Equality Act:

- **Knowledge:** everyone working for the Trust must be aware of our equality duties and apply them appropriately in their work.
- **Timeliness:** the duty applies at the time of considering policy options and/or before a final decision is taken – not afterwards.
- **Real Consideration:** the duty must be an integral and rigorous part of your decision-making and influence the process.
- **Sufficient Information:** you must assess what information you have and what is needed to give proper consideration.
- **No delegation:** the Trust is responsible for ensuring that any contracted services which provide services on our behalf can comply with the duty, are required in contracts to comply with it, and do comply in practice. It is a duty that cannot be delegated.
- **Review:** the equality duty is a continuing duty. It applies when a policy/process is developed/agreed, and when it is implemented/reviewed.
- **Proper Record Keeping:** to show that we have fulfilled our duties we must keep records of the process and the impacts identified.

NB: Filling out this EHIA in itself does not meet the requirements of the equality and health inequalities duties. All the requirements above must be fulfilled or the EHIA (and any decision based on it) may be open to challenge. Properly used, an EHIA can be a tool to help us comply with our equality and health inequalities duty and as a record that to demonstrate that we have done so. It is advised that you complete the short EHIA training session on MyLearn before completing this EHIA.

SECTION A ADMINISTRATIVE INFORMATION

A completed copy of this form must be provided to the decision-makers in relation to your proposal. The decision-makers must consider the results of this assessment when they make their decision about your proposal. **Function/policy/service name and number:**	**Clinical Guidelines for First Trimester Ultrasound and Screening for chromosomal differences in the first and second trimester**
Main aims and intended outcomes of the function/policy/service and summary of the changes you are making (if existing policy/service):	To provide Guidance for professional staff within the obstetric department; midwives, sonographers and medical staff in Obstetrics and Gynaecology These guidelines consider that staff ensure the patient has an understanding of the screening offered, even if English is not their first language. Assessment of their mental capacity may be indicated.

[1] https://www.researchgate.net/figure/Equality-and-equity-of-medical-resources-distribution_fig2_323266914

How will the function/policy/service change be put into practice?	Existing guidance no new changes to practice		
Who will be affected/benefit from the policy?	Staff at ESHT performing the Newborn Examination		
State type of policy/service	Policy	Service	SOP / Guideline ✓
	Business Case	Function	Existing
Is an EHIA required? NB :Most policies/functions will require an EA with few exceptions such as routine procedures	Yes ✓		
	No (If no state reasons)		
Accountable Director: (Job Title)			
Assessment Carried out by:	Name: Gayle Clarke		
Contact Details:	[redacted]		
Date Completed:	29.7.25		

This form is a central part of how the Trust makes sure and can demonstrate to others that we are meeting our legal duties; and how we can assure ourselves that all patients will get the best outcome for them from our services.

SECTION B ANALYSIS AND EVIDENCE

Analysis of the potential impact – Equality and Health Inequalities Duties

For this section you will need to think about all the different groups of people who are more likely to experience poorer access or have poorer outcomes from health and care services. For each group please describe in the first column the potential impact you have identified, in the second column explain how you have arrived at this conclusion and what information you used to identify the potential impact, and in the third column say what you are going to do to prevent it from happening, or which elements of a service or policy specifically address the potential impact. Key things to remember.

- Everyone has protected characteristics but some groups who share one or more protected characteristics may be more likely to have poorer outcomes or access compared with others – and it is this potential that the EHIA process seeks to identify and address.
- The information included here should be proportionate to the type and size of the policy/service/change.
- An update to a policy should demonstrate that you have considered the potential for the policy to impact differently on different groups and taken steps to address that.
- A minor policy update is likely to need to be much less comprehensive than an EHIA for a major service change.
- You will need to know information about who uses or could use your service/policy will apply to (the population). You can use information about current patients or staff, and about the general population the Trust serves.

3. PROTECTED CHARACTERISTICS - Main potential positive or negative impact of the proposal for protected characteristic groups summarised
Please write in the box below a brief summary of the main potential impact (positive or negative) Please state **N/A if your proposal will not impact adversely or positively on the protected characteristic groups listed below, but make sure you include information on how you know there will be no impact.**

This guideline is protective towards infants born within the ESHT maternity service and provides advice for staff …….

Protected characteristic groups	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Age: older people; middle years; early years; children and young people.	N/A		
Disability: physical, sensory and learning impairment; mental health condition; long-term conditions.	N/A		
Gender Reassignment and/or people who identify as Transgender	N/A		
Marriage & Civil Partnership: people married or in a civil partnership.	N/A		
Pregnancy and Maternity: before and after childbirth and who are breastfeeding.	Positively supports women newly pregnant and accessing ESHT maternity services. Screening information and testing are discussed and provided by the community midwifery teams and the Screening	NICE, National Screening committee, Public Health England, RCOG	

	teams to ensure all national recommendations are met		
Race:	N/A		
Religion and belief: people with different religions/faiths or beliefs, or none.	N/A		
Sex:	N/A		
Sexual orientation	N/A		
Veterans/Armed Forces Communities	N/A		

4. HEALTH INEQUALITIES - Potential positive or adverse impact for people who experience health inequalities summarised

Please briefly summarise the main potential impact (positive or negative) on people at particular risk of health inequalities (as listed below). **If the policy/procedure is unrelated to patients, this section does not require completion.** Please state none if you have assessed that there is not an impact, but please make sure you complete the 'how do you know this' column to demonstrate that you have considered the potential for impact**. If you identify the potential for impact for one or more of these groups please complete the full assessment in Appendix B**

Groups who face health inequalities[2]	Summary explanation of the potential verse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local, evidence reviews, stakeholder or patient feedback	Action that will be taken e potential for negative
This includes all groups of people who may have poorer access to or outcomes from healthcare services. It includes: People who have experienced the care system; carers; homeless people; people involved in the criminal justice system; people who experience substance misuse or addiction; people who experience income or other deprivation; people with poor health literacy; people living in rural areas with limited access to services; refugees or asylum seekers; people in or who have been in the armed force; other groups who you identify as potentially having poorer access and outcomes.	**None**		

SECTION C ENGAGEMENT

5. Engagement and consultation

a. Talking to patients, families and local communities can be a rich source of information to inform health care services. If you are making substantial changes it's likely that you'll have to undertake specific engagement with patients. For smaller changes and policies your may have undertaken some engagement with patient groups, gained insight from routine sources e.g. patient surveys, PALS or Complaints information or information from Healthwatch, you may also have looked at relevant engagement that others have undertaken in the Trust, or locally

Have any engagement or consultative activities been undertaken that considered how to address equalities issues or reduce health inequalities? Please place an x in the appropriate box below.

Yes	No ✓

b. If yes, please ensure all stakeholders are listed in the consultation table at the beginning of the policy.

SECTION D SUMMARY OF FINDINGS

Reflecting on all of the information included in your review-

6. EQUALITY DUTIES: Is your assessment that your proposal will support compliance with the Public Sector Equality Duty? Please **add an x** to the relevant box below.

	Tackling discrimination	Advancing equality of opportunity	Fostering good relations
The proposal will support?			
The proposal may support?			
Uncertain whether the proposal will support?	x	x	x

7. HEALTH INEQUALITIES: Is your assessment that your proposal will support reducing health inequalities faced by patients? Please add an x to the relevant box below.

	Reducing inequalities in access to health care	Reducing inequalities in health outcomes
The proposal will support?	x	x
The proposal may support?		
Uncertain if the proposal will support?		

8. Outstanding key issues/questions that may require further consultation, research or additional evidence. Please list your top 3 in order of priority or state N/A

Key issue or question to be answered		Type of consultation, research or other evidence that would address the issue and/or answer the question
1	N/A	
2	N/A	
3	N/A	

9. EHIA sign-off: (this section must be signed)

Person completing the EHIA:	Gayle Clarke	**Date: 29.7.25**
Line Manager of person completing:	[redacted]	**Date: 29.7.25**

Appendix B
Breakdown of Groups who are more likely to experience health inequalities:

Groups who face health	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Looked after children and young people	N/A		
Carers of patients	N/A		
Homeless people. People on the street; staying temporarily with friends /family; in hostels or B&Bs.	N/A		
People involved in the criminal justice system: offenders in prison/on probation, ex-offenders.	N/A		
People with addictions and/or substance misuse issues	N/A		
People or families on a low income	N/A		
People with poor literacy or health Literacy: (e.g. poor understanding of health services poor language skills).	N/A		

Groups who face health	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
People living in deprived areas	N/A		
People living in remote, rural and island locations	N/A		
Refugees, asylum seekers or those experiencing modern slavery	N/A		
People who have served in the Armed Forces	N/A		
Other groups experiencing health inequalities (please describe)	N/A		

Appendix B – EHIA Resources

Sources of Information on the East Sussex population and sources of community or patient insight.
Population Data

State of the County 2021 Focus on East Sussex

East Sussex JSNA

Community Insight

Further Reading on Equality and Health Inequalities

Training

Appendix B: Measurements for Pregnancy Dating at Different Gestations

MEASUREMENTS FOR PREGNANCY DATING AT DIFFERENT GESTATIONS

	Ideal Measurement to obtain EDD	Other measurement to obtain EDD	Action
<9 weeks	CRL	Do not enter LMP	Indicate on report approximate gestation (free text) e.g. 5-6 weeks 6-7weeks and then report that 'formal EDD will be given at the booking 12 week scan'.
9-14weeks	CRL	Do not enter LMP	No further action
14-25weeks	Use LMP if known and correlates with measurements (i.e. **within** 3rd and 97th centiles) otherwise date by HC	HC, if fetal position difficult use FL	No further action
>25 weeks	As for 14-25weeks but note on report due to late gestation dating is less accurate	HC, if not possible use FL	All patients scanned after 25weeks that are re-dated or no LMP will require a growth scan 4 weeks later to confirm Ultrasound EDD

N.B.

- For IVF pregnancies use egg collection date to calculate EDD
- For multiple pregnancies use the above protocol and use the largest CRL to calculate EDD

References:
BMUS (2008)
NICE (2008)

Appendix C: NT Measurements

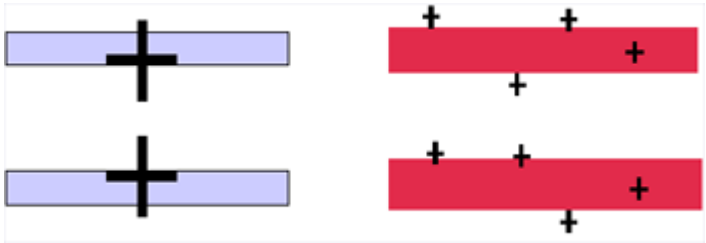
1 NT measurement:

1.1 An optimal measurement of the NT should be obtained from three different images. Ideally the three NT measurements should differ by no more than 0.2mm. The largest of the values should be used. The three images should be recorded and stored. If the optimal measurement cannot be obtained either transabdominally or transvaginally a repeat NT appointment should be offered. If no appointment is available with the sonographer the consultants undertaking the high risk ultrasound scan lists on the two acute sites should be contacted. The woman/pregnant person should then follow appendix in Care of Women with Suspected or Identified Fetal Abnormality

2 Measurement of Nuchal Translucency

2.1 The fetal crown-rump length should be between 45 and 84mm.
A good sagittal section of the fetus must be obtained, with the fetus horizontal on the screen. The correct view is a clearly visualized fetal profile.
The fetus should be in a neutral position, with the head in line with the spine, not hyper-extended or flexed. Ideally only the fetal head and upper thorax should be included. The magnification should be as large as possible and ALWAYS such that each slight movement of the callipers produces only a 0.1mm change in the measurement. The widest part of translucency must always be measured.

2.2 Measurements should be taken with the inner border of the horizontal line of the callipers placed ON the line that defines the nuchal translucency thickness – the crossbar of the calliper should be such that it is hardly visible as it merges with the white line of the border, not in the nuchal fluid.



2.3 In magnifying the image (pre or post freeze zoom) it is important to turn the gain down. This avoids the mistake of placing the calliper on the fuzzy edge of the line which causes an underestimate of the nuchal measurement. Do not use tissue harmonic imaging for measurement of nuchal translucency because this thickens the lines and underestimates the measurement. Care must be taken to distinguish between fetal skin and amnion.

3 **NT ≥3.5mm:** women/pregnant people with an NT measurement of 3.5mm or greater will activate Guideline 8.17 Care of Women with Suspected or Identified Fetal Abnormality, and her care should follow the relevant pathway.

3.1 Women/pregnant people with known twin pregnancies can be offered the combined test. Women/pregnant people with ‘vanished twin can be offered the modified combined or quad test (see section 6.2)

Appendix D: NT Screening

Nuchal Translucency	Chromosomal Defects	Normal Karyotype Fetal death	Major fetal anomalies	Alive and well
< 95th centile	0.2%	1.3%	1.6%	97%
95th-99th centile	3.7%	1.3%	2.5%	93%
3.5 - 4.4 mm	21.2%	2.7%	10.0%	70%
4.5 – 5.4 mm	33.3%	3.4%	18.5%	50%
5.5 – 6.4 mm	50.5%	10.1%	24.2%	30%
≥ 6.5 mm	64.5%	19%	46.2%	15%

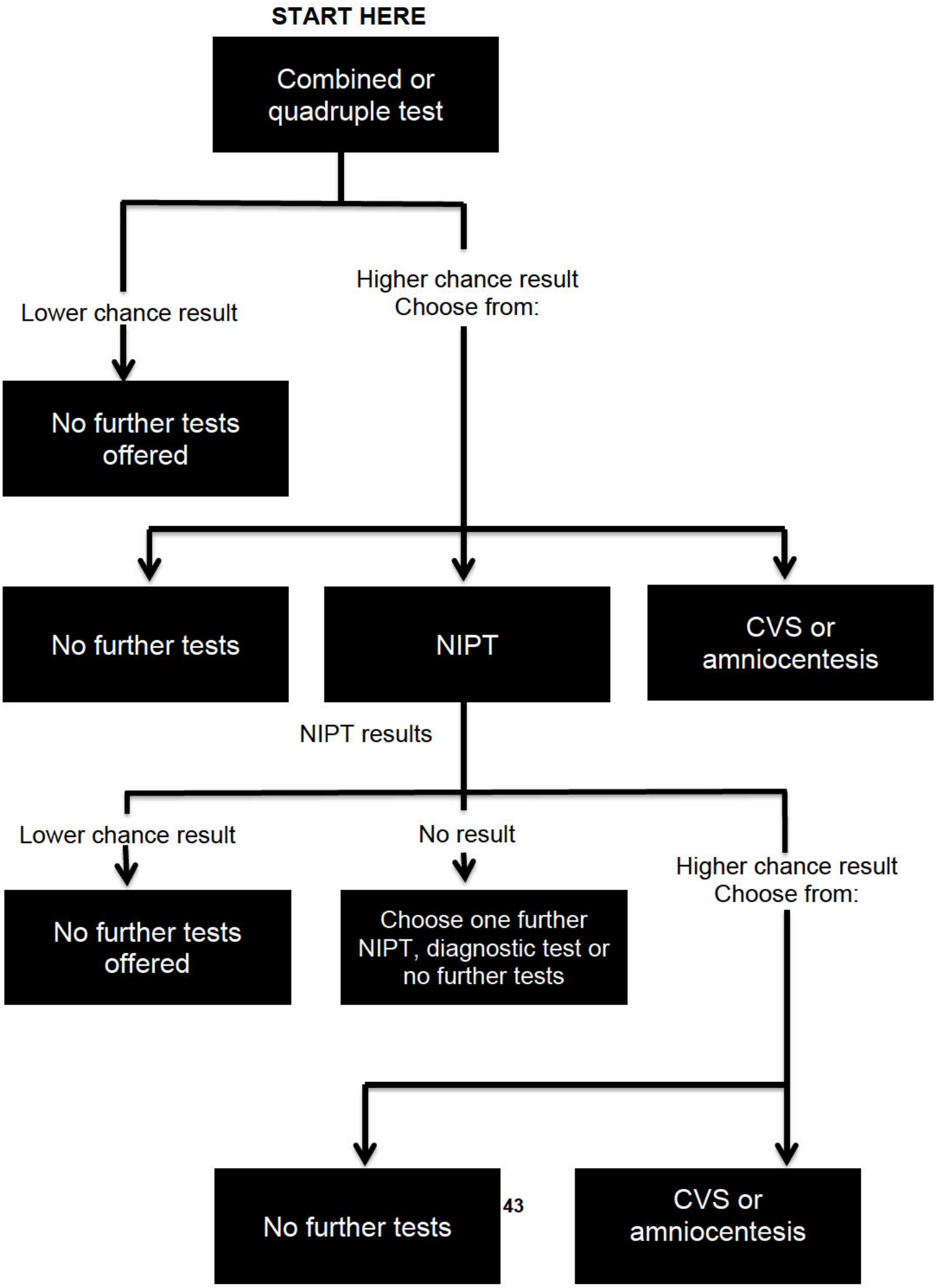
Table 1: View point fields to be completed during NT examination

Primary Field	Secondary Field	Option to be selected
Pt details	Name; Other name; Date of Birth; Address	
Indication	Department; **Type of Scan**	**First Trimester Screening**
First trimester *(for NT or delayed miscarriage)*	Department; Operator; Supervised by; U/S system; Scanned; View; Gest Age Findings – use drop down menu or [redacted] or free text	Fetal heart activity CRL; NT; Skull/brain Abdominal wall Four limbs
Growth *(when >14)*	Department; Operator; Supervised by; U/S system; Scanned; View; Gest Age Early anatomical check	HC; AC; FL Fetal heart activity Fill in early anatomical check as above
Conclusions	Findings: Use drop down menu or free text as appropriate. Offer screening for Down's syndrome in second trimester if too late for first trimester screening. Offer anomaly scan at 20 weeks.	Appropriate report

TABLE 2: Information to be included in discussion and the report template can be used following NT screening

Maternal age risk of Tri 21	Adjusted risk of Tri 21	To be included in discussion	View point report template	Anomaly scan
NT ≥ 3.5mm		**Risk of major fetal anomalies increased by 10%**		**Refer to** Guideline 8.17 Care of Women with Suspected or Identified Fetal Abnormality

Appendix E: Options following a high chance result from the combined or quad test.



Appendix F: DQASS NT/CRL Audit Standard Operating Procedures (SOP).

Written by Mr Marc Manzano – Advanced practitioner Ultrasound (SSS) 19-02-2019

DQASS NT/CRL Audit Standard Operating Procedures (SOP).

The Screening Support Sonographer (SSS) role is pivotal in ensuring local providers offer a safe and effective service and in meeting the national targets set out in the service specification http:// fetalanomaly.screening.nhs.uk/specification
Rationale: Departmental review of images is equally as important as the DQASS statistical analysis of an individual's NT and CRL measurements [p16 8.1 of handbook].

Image review:

- Perform quarterly departmental review of images
- Record results as per local organisational policy
- Feedback results of review to individual practitioners

Each practitioner must have three randomly selected paired images (NT and CRL) reviewed every three months, each image should be subjectively scored using the FASP image guidance tool, each practitioner should receive timely feedback from the SSS [p16 8.2 of handbook].

Random Selection - using the statistics component of [redacted], find the query 'MM – NT scans with CRL 45-84mm

[redacted]

[redacted]

[redacted]

[redacted]

Scoring process

For departmental review of images, the 12 components that make a good NT or CRL image are shown in *tables 3 and 4 [p14-15 of handbook]* and are scored using the image guidance tools: Table 6 and Table 7 that follow.

Table 6 - Image guidance tool for NT

Sections	Twelve Components to assess the NT image appearance
Midline section	1. Horizontal sagittal section of the fetus extending from crown to include at least the upper aspect of the heart* 2. Head in line with the body with the nuchal translucency visible along the length of the neck 3. Echogenic tip of the nose 4. Rectangular shape of the palate 5. Translucent diencephalon 6. Frontal process of the maxilla should not be visible (see Diagram 1)
Position	7. Pocket of fluid, at least equivalent in size to the width of the palate, should be visible between the fetal chin and chest 8. Angle of the palate relative to the horizontal should be between 30^0 and 60^0 9. Nasal tip should be level with, or above, the anterior chest wall.
Magnification	10. The section should fill over 60% of the screen
Calliper placement	11. Callipers should be placed on the upper and lower skin line (see Diagram 2) 12. Widest part of the NT should be measured

Calliper placement: Measurement should be taken with the inner border of the horizontal of the callipers placed ON the line that defines the NT thickness. The crossbar of the calliper should be such that it is hardly visible as it emerges with the white line of the border. It should not be visible in the nuchal fluid.

Table 7 - Image guidance tool for the CRL

Sections	Twelve Components to assess the CRL image appearance
Midline section	1. Sagittal section of the fetus with the head in line with the full length of the body 2. Echogenic tip of the nose 3. Rectangular shape of the palate 4. Translucent diencephalon 5. CRL axis should be between 0° and 30° to the horizontal 6. Clearly defined crown and rump
Position	7. Pocket of fluid, at least equivalent in size to the width of the palate, should be visible between the fetal chin and chest 8. Fetal palate angle should be 30° to 60° relative to the horizontal 9. Nasal tip should be level or above the anterior abdominal wall
Magnification	10. Entire CRL section should fill over 60% of the screen
Calliper placement	11. Correct calliper placement on outer borders of crown and rump 12. Longest measurement of the fetus taken

- A template for scoring the CRL and NT can be found on the shared drive.
- each image is rated as either 'good', 'acceptable' or 'poor' depending on the score obtained as shown in Table 5 below and see shared drive W:\MODALITIES\Ultrasound\DQASS

- for an image to be considered good or acceptable at least 9 out of the 12 components must be present (75%). In categories of more than one component, there should be no more than 2 components in each section absent

Management following image review

- when all images score either 'good' or 'acceptable' this demonstrates evidence of good clinical practice
- when any one image scores 'poor' it is recommended that a further three paired images are reviewed.

If a practitioner continues to score 'poor' when these images are reviewed, it is recommended that the ultrasound practitioner has an individualised training plan to support improvements to their imaging and measurement techniques [please discuss with SSS and Modality Lead].

Once the quarterly audit has been completed a copy of the results/analysis is forwarded to each respective sonographer by email for their records and cc the modality lead for their information too.

Table 5 - Scoring images

Number of components present	Overall Score
All 12 present	GOOD
9 – 11 present (no more than 2 absent in a section)	ACCEPTABLE
9 - 11 present (3 or more absent in a section) **or** **8 or fewer present**	POOR

In addition the results are cross referenced/recorded separately in a summary which can be found on the Radiology (W) shared drive: (W:)>MODALITIES>Ultrasound>DQASS>NT CRL Audit Summary.

Education compliance is also recorded on the Radiology shared drive: (W:)>MODALITIES>Ultrasound>DQASS>FASP Sonographer learning. Each sonographer will be given 1 months' notice by email diary function of certification expiry.

For further guidance please refer to the Fetal Anomaly Screening Programme Handbook for ultrasound practitioners April 2015 [link below] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443865/FASP_ultrasound_handbook_July_2015_090715.pdf]

East Sussex Healthcare NHS Trust

Clinical Guidelines for Obstetric Ultrasound in the Third Trimester and SGA management

Document ID/Reference:	**281**
Legacy ID/Reference:	**1182**
Version Number:	**V4.0**
Document Type (Clinical or Corporate):	**Clinical**
Target audience:	**Obstetricians, Midwives and Sonographers**
Senior Responsible Officer (SRO):	**Chair of the Guideline Implementation Group for Maternity Services**
Division and Department:	**Women and Children's / Maternity**
Date originally written:	**October 2011**
Date created / reviewed:	**November 2025**
Author of current version:	**Nicky Roberts, Dexter Pascall – Consultant Obstetricians** [redacted] **Antenatal and Newborn screening lead midwife** [redacted]**, Fetal Wellbeing lead midwife**
Ratifying Committee / Group:	**MATNEO Quality and Safety Forum**
Date ratified:	**December 2025**
Next Review Date:	**December 2028**

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Table of Contents

East Sussex Healthcare NHS Trust

Policy on a Page

Document title: **Clinical Guidelines for Obstetric Ultrasound in the Third Trimester and SGA management**

Key points of the Document	Applicable to	Key changes since the last version
• Appendix C SBL algorithm • Appendix D Oligohydramnios • Serial scan advice when and who should perform scan.	• All staff including Locum and Agency	• RGOC Green top Guideline 31 alignment and scan reviews

Key associated documents	Training requirement	Regulatory requirements:
• Clinical Guidelines for First Trimester Ultrasound and Down's syndrome Screening • Clinical Guidance for Second Trimester Obstetric Ultrasound • Policy for the use of Chaperones in the Trust	• All training is included in the Maternity training needs analysis	• Regulation 9 Person centred Care • Regulation 10 Dignity and Respect • Regulation 11 Need for Consent • Regulation 12 Safe Care and Treatment • Regulation 15 Premises and Equipment

Suggested search words: Growth, Liquor, SBL, membranes.

1. Introduction and Purpose

The third trimester ultrasound scan is an essential component of antenatal care with it's purpose to assess fetal growth , well being and presentation as well as to evaluate the placenta and amniotic fluid.

By having additional scans this can provide reassurance to the parents and to the obstetric and midwifery team caring for them and their baby provide valuable information for informed choice and decision making. Evidence based information has been gathered to provide recommendations to ESHT staff on when to perform additional ultrasound scans

2. Scope

To support all Midwifery, medical and Ultrasound staff in the management of women with the conditions discussed in this guidance.

These guidelines considers that staff take steps to ensure the patient has an understanding, even if English is not their first language or assessment of mental capacity may be indicated

3. Definitions used: Explanation of terms

Amniotic Fluid - Fluid around the baby

4. Key Accountabilities and Responsibilities

4.1 Midwives, Sonographers and Obstetricians

- To access, read, understand and follow this guidance
- To use their professional judgement in application of this guideline

4.2 Management

- To ensure the guideline is reviewed as required in line with the Trust and National guidance
- To ensure the guideline is accessible to all relevant staff
- To monitor the audit process

5. Procedure

5.1 Third trimester scan requests

A request form with the relevant clinical details needs to be completed it must be legible and complete.
A qualified obstetric Sonographer should triage the referrals.
If there is any doubt as to the appropriateness of the request, then the Sonographer should indicate this clearly and return to the woman's obstetric team.
The name and signature of the Sonographer who reviewed the form should be clear.
The returned form with request for additional information should be returned to the DAU ward clerk.
The DAU Midwife/Doctor can then address any concerns and/or escalate as required.

The aim of the scan is to assess:

- Fetal heart movement
- Amniotic fluid volume
- Fetal growth
- Presentation

When indicated

- Placental location
- Fetal wellbeing -dopplers

Measurements taken in third trimester:

- Head Circumference (HC)
- Abdominal Circumference (AC)
- Femur length (FL)
- Single Deepest Pool (SDP) of amniotic fluid
- Dopplers (if required)
- Estimated Fetal Weight (EFW) – (There may **be an error of +/- 10-15%).** *When indicated*
- Renal tract
- Stomach

All measurements are entered into [redacted] interval growth should be assessed where possible [redacted]

5.2 Abnormalities of Amniotic Fluid Volume

5.2.1 Assessment of Amniotic Fluid Volume

- Single deepest vertical pool measurement to be taken.
- Document in report.
- Normal range: 2 cm to 8 cm.

5.2.2 Oligohydramnios (See Appendix D)

Oligohydramnios is defined by a Single deepest vertical pool measurement of <2.0 cm
Fetal measurements should be checked for FGR and UA Doppler performed, if uteroplacenal insufficiency is suspected. The fetal renal tract should be checked for abnormalities.

If oligohydramnios is detected refer to DAU for a medical assessment.

Oligohydramnios is associated with an increased risk of perinatal morbidity and mortality. This is particularly so in cases diagnosed before 28 weeks when the mortality for severe oligohydramnios has been reported to be extremely high. This is contributed to by underlying fetal pathology but also by pulmonary hypoplasia developing secondary to lack of amniotic fluid. However, outcome is variable and oligohydramnios occurring for the first time in the third trimester with a normally grown baby is usually associated with a good prognosis.

A careful history should be taken about ruptured membranes. It is also associated with uteroplacental insufficiency, and renal tract abnormalities.

5.2.3 Pulmonary Hypoplasia and Oligohydramnios

This is a risk particularly with severe oligohydramnios present prior to 24 weeks as this is a crucial period for lung maturation.
See Clinical Guideline for the Management of Preterm Labour and Preterm Prelabour Rupture of Membranes (PPROM) PPROM guideline and provide information using the **Appendix E** and the following counselling link:

Information for women and families | Institute of Life Course and Medical Sciences | University of Liverpool

5.2.4 Polyhydramnios

Polyhydramnios is defined by a deepest vertical pool measurement of >8cm.
If the deepest pool is greater that 11cm it is termed moderate, and if more than 15cm, severe polyhydramnios.

Polyhydramnios is also associated with increased perinatal morbidity and mortality and around 20% of cases are associated with an underlying fetal anomaly. The fetus should be checked carefully for anomalies (e.g. gastrointestinal obstruction, mass lesion in the chest, brain abnormality causing inability to swallow, arthrogryposis, chromosomal abnormality).

If on ultrasound there are fetal anomalies, evidence of hydrops, rapid onset polyhydramnios or severe polyhdramnios with deepest pool > 15 cm then a fetal medicine referral should be done via the screening team.

Once polyhydramnios is confirmed symphysis fundal height measurement is no longer required.

If newly detected the woman should be referred to the DAU (see **Appendix G**)

Following medical review:

- Arrange a GTT if not performed within the last 6 weeks.
- If > 36 weeks email the Diabetes Multidisciplinary team. esht.mapletammidwives@nhs.net
- TORCH screen ONLY if other markers of fetal infection on USS
- Parvovirus serology only if history of exposure or fetal hydrops

5.3 Indications for fetal growth assessment

Indication/ referral (action on measurements)/ surveillance/Delivery
- Symphysis Fundal Height Discrepancy (SFHD)
- Slowing or Static growth

NICE recommends measuring the symphysis fundal height from 24 weeks. There should be a time interval of at least two weeks between measurements.

An USS is indicated as per ESHT Clinical Guideline for the Measurement of Symphysis Fundal Height (SFH) 00620_P.pdf (esht.nhs.uk). if:

- fundal height measurement is static, slowing growth as per growth calculator Laravel (perinatal.org.uk), (Please note we DO NOT use the growth calculator for accelerated growth)
- or a ≥3cm SFH discrepancy from the gestation in week (not in cases diagnosed polyhydramnios)

Scan requests must be fully completed and indication must be documented as follows to avoid delays in processing:

Indication	**Documentation on request form and additional info**
First plot below 10th centile	As indication
STATIC growth	As indication no measurements required

Slowing growth as per growth calculator	As indication, no measurements required however, the growth calculator MUST be used and there must be at least 2 weeks between measurements.
SFH ≥ 3cm or more *difference (plus measurements)*	The measurement and week must be included e.g. 33cm at 30 weeks (not required if polyhydramnios if diagnosed)
RFM persisting 1st episode	As indication – (these are first episode with no reassurance)
RFM no cCTG	As indication – (any episode in which a cCTG analysis has not been performed)
RFM recurrent episode	As indication - (second or subsequent episode)
Recurrent APH Undiagnosed abdominal pain	As indication plus consultant request. (These are at consultant discretion - either the consultant should complete the form or consultant request should be clearly indicated on the form)

The scan should be performed within the following time frame;

- Within 72 hours if static growth
- within 1 week if small for dates (SFD)
- within 2 weeks if large for dates (LFD)

If USS is not possible within the time frame for SFD a DAU appointment should be arranged for computerised CTG in the interim.

5.3.1 Serial growth scans

The indications for these scans are based on the following groups of factors in the SBLV3.2 initiative *(see Appendix C)*

- Pre-existing medical conditions
- Previous obstetric history
- Biochemical -from screening tests
- Fetal anomaly
- Inaccurate SFH measurement

These serial scans are usually performed at 4 weekly intervals for high and moderate risk women based on the Saving babies Lives algorithm (**see algorithm Appendix C**). Scans for fetal growth are performed a minimum of 14 days apart.

Please note that the timing of serial scans are at a minimum four week interval from 30 or 34 weeks as indicated by the algorithm

Additional obstetric indications:

Obstetric Cholestasis	**Scan every four weeks following diagnosis**
Fetal indications	
• Twins – Dichorionic	**Serial USS at 24, 28,32 & 36 weeks**
• Twins – Monochorionic	**Serial USS fortnightly from 16 weeks - anomaly scan for MCDA or MCMA twins to be done by fetal medicine consultant**

• Diabetes	**Serial USS at 28,32 & 36 weeks**
• IVF	**Serial USS 34 and 38 weeks**
• Unstable lie	**Scan after 36 weeks**
• Breech presentation	**USS 36 weeks check growth, type of breech and fetal attitude. Refer to DAU**
• Recurrent APH • Undiagnosed abdominal pain • *Reduced fetal movement (As per guideline)* • *Maternal antibodies (refer to Fetal medicine consultant)*	**Consultant discretion**
Any scans outside of these guidelines need to be requested by a Consultant Obstetrician	

5.3.2 Action on measurements

At the growth scan fetal biometry, liquor volume placental location and fetal dopplers should be performed

If the AC and HC are between the 10th and 95th centiles and the L.V. is normal then, no further scans need to be booked and the women returns to routine AN care.

If on USS assessment the AC and /or EFW is more than the 95th centile a GTT should be performed

- When the AC or EFW is below the 3rd centile (FGR), or has not changed for 2 weeks, proceed to perform umbilical Doppler.
- Refer the patient to DAU for further assessment. (as stated in 6.4.1)

If the growth rate is reduced i.e. crossing centiles (>50 centiles in 4 weeks) but still above the 10th centile, perform Doppler study. Arrange rescan and a consultant clinic appointment in 2 weeks.

If the estimate fetal weight (EFW) <10th centile and/or the AC measurement fails to show linear growth, refer to DAU for further assessment

If the A.C. and H.C. growth are below the 10th centile (symmetrical SGA/I.U.G.R.) or only the A.C. is below the 10th centile (asymmetrical SGA/I.U.G.R.) then do a full fetal assessment to include Doppler and Liquor Volume. Arrange rescan and ANC in two weeks. Refer to DAU

See Appendix G Action on Measurements Referral Pathways

5.4 Small for Gestational Age (SGA) / Fetal Growth Restriction (FGR)

A fetus is considered to be SGA when its size falls below a pre defined threshold for its gestational age

The most common definition of SGA is EFW < 10th centile and needs to be differentiated from FGR as an SGA fetus is not at increased risk of adverse pregnancy outcome

TABLE 1 Consensus based definitions for early and late fetal growth restriction (FGR) in absence of congenital anomalies[5]

Early FGR: Gestational age < 32 weeks, in absence of congenital anomalies	Late FGR: Gestational age ≥ 32 weeks, in absence of congenital anomalies
AC/EFW < 3rd centile or UA-AEDF	AC/EFW < 3rd centile
Or	**Or at least two out of three of the following:**
AC/EFW <10th centile combined with either:	1. AC/EFW <10th centile
1. UtA-PI >95th centile and/or	2. AC/EFW crossing centiles >two quartiles on growth centiles*
2. UA-PI >95th centile	3. CPR <5th centile or UA-PI >95th centile

*Growth centiles are non-customised centiles. AC, fetal abdominal circumference; CPR, cerebroplacental ratio; EFW, estimated fetal weight; PI, pulsatility index; UA, umbilical artery; UtA, uterine artery.

5.4.1 Diagnosis (For Flow charts see Appendix F)

Small for gestational age (SGA) Fetuses between 3rd – 10th centile will often be constitutionally small and therefore not at increased risk of stillbirth. Care of such fetuses should be individualised and the risk assessment should include Doppler investigations, the presence of any other high risk features for example, recurrent reduced fetal movements, and the mother's wishes. In the absence of any high risk features, delivery or the initiation of induction of labour should be offered at 39+0 weeks (NHS England SBLV2 2019).

Fetal growth restriction (FGR) is diagnosed with a value of less than 3rd centile. These babies have an increased risk of stillbirth. When detected these babies should be offered delivery from 37 weeks (NHS England SBLV3.2).

If detected the woman should be referred to the DAU

With early onset FGR <32 weeks, exclude fetal abnormalities, which may be present in up to 10-15%. Karyotyping offered in early onset growth restriction, especially when associated with structural anomalies (up to 25-30% risk of aneuploidy). If no structural abnormalities and low-risk combined screening, risk for aneuploidy will be much lower.

These women should be referred to the fetal medicine consultant for further review

5.4.2 Assessment of Fetal Wellbeing

Surveillance

A variety of tests are available for surveillance of the SGA fetus, including cardiotocography, Doppler and ultrasound to assess biophysical activity. The purpose of surveillance is to predict fetal acidaemia thereby allowing timely delivery prior to irreversible end–organ damage and in–utero death.

Umbilical Artery Doppler

Umbilical artery Doppler (UA) should be the primary surveillance tool in the SGA fetus and has been shown in randomised controlled trials to reduce perinatal mortality in high risk pregnancies.

It has not been shown to be useful in screening the general population and therefore should only be used in high risk pregnancies and when clinically indicated, Additional doppler parameters such as Middle cerebral artery (MCA), ductus venosus should be carried out in high risk pregnancies based on appendix G

The UA waveform is assessed using the pulsatility index (PI) and by noting present/ absent/reversed end diastolic flow (EDF). Absent EDF can be present for many weeks before fetal death. Reversed EDF is thought to usually be a pre-terminal sign heralding death within a few days.

Who should have umbilical artery Dopplers?

- It is good practice to perform an umbilical doppler for all growth scan requests to complete the examination and ensure fetal well being
- Growth scan for SFD
- Growth scan for reduced fetal movements.
- Small for gestational age if the AC is below the 10th percentile, crossed centiles/ slowing
- Oligohydramnios – SDP less then 2cm.
- Static growth / Serial scans with crossing percentiles (>50 centiles in 4 weeks)

When umbilical artery Doppler flow indices are normal it is reasonable to repeat surveillance every 14 days. In FGR, (AC or EFW <3rd centile) more frequent measurements may be indicated.
In high risk patients (e.g. SLE/APS) Umbilical Artery Doppler may be performed routinely with the serial growth scans.

All abnormal UA Dopplers should be referred to DAU for further assessment – MUST be discussed with a consultant.
When umbilical artery Doppler flow indices are abnormal (pulsatility or resistance index > +2 SDs above mean for gestational age) and delivery is not indicated, repeat surveillance twice weekly in fetuses with end–diastolic velocities present and daily in fetuses with absent/reversed end–diastolic frequencies.

Computerised CTG (cCTG) analysis & Amniotic Fluid Volume – however this should not be used in isolation as a form of surveillance in SGA fetuses.

Middle Cerebral Artery (MCA) Doppler
In the term SGA fetus with normal umbilical artery Doppler, an abnormal middle cerebral artery Doppler (PI < 5th centile) has moderate predictive value for acidosis at birth and should be used to time delivery.
Ductus Venosus (DV) Doppler

Ductus venosus Doppler should be used for surveillance in the preterm growth restricted fetus with abnormal umbilical artery Doppler by a consultant and used to time delivery.

Interventions

Women with a FGR/SGA fetus between 24+0 and 34+6 weeks of gestation, where delivery is being considered, should receive a single course of antenatal corticosteroids ideally within 7 days of delivery.

Timing of delivery

A senior obstetrician should be involved in determining the timing and mode of birth for all FGR/SGA pregnancies – ***see appendix F***

If delivery is being considered in a woman with FGR/SGA, Special Care Baby Unit (SCBU) should be informed.
FGR identified prior to 34+0 weeks must have an agreed pathway for management which includes network fetal medicine input (for example, through referral or case discussion by phone).

The SCBU at Conquest Hospital does not accept babies less than 31 weeks of gestation or less than 32 weeks with FGR/SGA. Therefore, it is important to make decisions regarding delivery in a timely fashion to allow for in utero transfer if necessary.

SGA - Fetuses between 3rd – 10th centile will often be constitutionally small and therefore not at increased risk of stillbirth. Care of such fetuses should be individualised and the risk assessment should include Doppler investigations, the presence of any other high risk features for example, recurrent reduced fetal movements, and the mother's wishes.

- In the absence of any high risk features, delivery or the initiation of induction of labour should be offered at 39+0 weeks, birth should be achieved by 39+6
- If high risk features or abnormal investigations are present earlier delivery will be indicated.

FGR - Accepting the proviso that all management decisions should be agreed with the mother in the cases of fetuses <3rd centile (or AC/EFW declining 50 percentiles in a 4 weeks period) with **no other concerning features**, initiation of labour and/or delivery should occur at 37+0 weeks and no later than 37+6 weeks gestation. Delivery <37+0 weeks can be considered if there are additional concerning features, but these risks must be balanced against the increased risks to the infant of delivery at earlier gestations.

- For an FGR fetus with normal Umbilical artery Doppler see:
  RCOG flow chart appendix F for delivery decisions based on doppler and cCTG

- For an FGR fetus with an abnormal umbilical artery Doppler, detected AFTER 32 weeks of gestation see:
  RCOG flow chart appendix F for delivery decisions
  .

For women/people who decline induction of labour or delivery after 39+0 weeks, counselling must include a discussion regarding evidence that there is no increase in risk for the baby or for the mother from delivery/induction at this gestation and that there is no evidence to determine how fetuses with SGA/FGR should be monitored if pregnancy continues

Mode of delivery

In the FGR fetus with umbilical artery AREDV, delivery by caesarean section is recommended.
In the FGR fetus with normal umbilical artery Doppler or with abnormal umbilical artery PI but end–diastolic velocities present, induction of labour can be offered but rates of emergency caesarean section are increased, and continuous fetal heart rate monitoring is recommended from the onset of uterine contractions.

Early admission is recommended in women in spontaneous labour with an SGA/FGR fetus to instigate continuous fetal heart rate monitoring at the onset of contractions.

5.5 Presentation scanning

If presentation is thought to be abnormal at the 36 week check the woman should be referred to DAU for USS assessment.

PLEASE NOTE: If the request is for a presentation scan only this should not be a departmental scan – DAU ONLY

If breech/transverse is confirmed the woman/person should be counselled about her options. If a woman/person with a breech presentation wishes an ECV, arrange department scan and date for procedure directly with the consultant performing the procedure. ***See Clinical Guideline for Breech Presentation including External Cephalic Version (ECV)***

5.6 Placental Location

If the placenta is thought to be low lying (less than 20 mm from the internal os) or praevia (covering the os) at the routine fetal anomaly scan, a follow-up ultrasound examination including a TVS is recommended at 32 weeks of gestation to diagnose persistent low-lying placenta and/or placenta praevia

Refer to placenta praevia guideline.

In women/people with a low lying placenta and a previous caesarean section then an urgent ANC appointment should be arranged with their Obstetric Consultant

Transvaginal USS is only contra-indicated in placenta praevia when there is heavy or active bleeding.
Any woman/person having a trans-vaginal scan by male Obstetrician / Sonographer will have a chaperone present for the procedure, please follow the ESHT Policy for the use of Chaperones in the Trust.

At 32 weeks –

- If the leading edge is > 2cm from os, the placenta is deemed NOT LOW
- If the leading edge is = 2cm from the os the placenta should be reported as LOW and rescan at 36/40.
- If the leading edge is < 2cms from the os, refer the women to her Consultant obstetrician in ANC to discuss the management of their pregnancy.

At 36 weeks –
If the leading edge is >2cm from the internal os, report as not low-lying

If at 36 weeks the leading edge is ≤2cm from the os, refer to Day Assessment Unit (DAU) or consultant clinic. The patient should be advised to attend DAU if an Antepartum haemorrhage (APH) occurs in the interim.
A provisional date for LSCS should be arranged
The woman should be advised that an option is to repeat the scan by the lead consultants for ultrasound scanning at 38-39 weeks as movement is still possible in the latter weeks.

5.7 Antepartum haemorrhage

One scan will be performed to assess the cause for APH and state placental position. Placental abruption is a clinical diagnosis and not an Ultrasound diagnosis, as the cause for bleeding may remain unseen on scan.

5.8 Fibroids

If the fibroids are high and do not involve the cervix, no rescan is required. If the fibroids are low (within 5cm from the cervix at 20 weeks is of significance) or involve the cervix, a rescan should be booked at approximately 36 weeks. Serial scans should not be performed for degenerating fibroids.

5.9 Interpreter

Anyone who does not speak fluent English should be accompanied by an interpreter.
A telephone interpreter should be used if there is no appropriate interpreter is not available. No family members should be used for interpretation

6. Equality & Health Inequalities Impact Assessment (EHIA)

See page 18

7. Sustainability Healthcare Principles

Sustainable healthcare meets the needs of our populations, without damaging the health or ability to meet the healthcare needs of vulnerable people now or in the future.

We can work towards sustainable healthcare by improving Sustainable Value: maximising positive health outcomes and reducing inequity, while minimising negative environmental, social and financial impacts. Some of the principles. **Prevention -** Promoting health and preventing disease by tackling the causes and inequalities of healthcare. **Patient empowerment and self care -** Empowering patients to take a greater role in managing their own health and healthcare, **Lean service delivery -** Streamlining care systems to minimise wasteful activities **Low carbon alternatives -** Prioritising treatments and technologies with lower environmental impacts.

8. Dissemination and Implementation

Guideline will be circulated to staff on approval and staff advised to familiarise themselves on the updates / changes. Where required it will be included in relevant training requirements led by the local / specialty training needs.

9. Competencies and Training Requirements

Training for SBL is provided to all midwives and doctors practicing at ESHT. Details are laid out in in the Maternity Training needs analysis , all training complies with SBL, MIS and Core competency framework .

10. Monitoring Compliance and Effectiveness

Element to be measured	Lead(s)	Tool for Monitoring	Frequency	Responsible Individual / Group for review of results/report	Responsible group for acting on recommendations/ action plan	Responsible group/ committee for ensuring action plan/lessons learned are Implemented
Failure to undertake any recommended USS according to this guidance	Clinical Unit Lead	[redacted]	As required	Labour ward forum and local steering screening group	Clinical Unit lead, Ultrasound department lead, Antenatal screening specialist midwife	Clinical Unit lead, Ultrasound department lead, Antenatal screening specialist midwife, service manager Matron's, PDM

11. References

Small-for-Gestational-Age Fetus and a Growth Restricted Fetus, Investigation and Care (Green-top Guideline No. 31) | RCOG

British Medical Ultrasound Society, 2008 www.fetalmedicine.com

The relevance of placental location at 20-23 gestational weeks for prediction of placenta previa at delivery: evaluation of 8650 cases.
Becker, R.H.; Vonk, R.; Mende, B.C.; Ragosch, V.; Entezami, M. Ultrasound in obstetrics & gynecology : the official journal of the International Society of Ultrasound in Obstetrics and Gynecology (0960-7692) 2001 Jun. Vol.17,Iss.6;p.496-501 Source: PubMed

Mid-trimester uterine artery Doppler screening as a predictor of adverse pregnancy outcome in high-risk women Coleman, MAG. ULTRASOUND IN OBSTETRICS & GYNECOLOGY (0960-7692) 2000. Vol.15,Iss.1;p.7-12 Source: Science Citation Index Expanded (Web of Science)

Clinical Application of Ultrasonic Fetal Measurements (1990). BMUS Fetal Measurements Working Party Report. BIR: London.

Cooper, N.P. and Okolo, S. (2005) Fibroids in pregnancy-common but poorly understood. *Obstetrical & Gynecological Survey* **60**(2), 132-138.

A comparison of manual and ultrasound measurements of fundal height. Euans, D.W.; Connor, P.D.; Hahn, R.G.; Rodney, W.M.; Arheart, K.L. The Journal of family practice (0094-3509) 1995 Mar. Vol.40,Iss.3;p.233-6

Fetal umbilical doppler in a population of 541 high-risk pregnancies: prediction of perinatal mortality and morbidity Journal of Perinatal Medicine (0300-5577) 2003-10-01. Vol.31,Iss.5;p.399

Symphysis-fundus height and pregnancy characteristics in ultrasound-dated pregnancies. Mongelli, M.; Gardosi, J. Obstetrics and gynecology (0029-7844) 1999 Oct. Vol.94,Iss.4;p.591-4 Source: PubMed

National Collaborating Centre for Women's and Children's Health (2008), Antenatal Care: routine care for healthy pregnant women, NICE

NHS England (2025), Saving Babies' Lives Version 3.2, A care bundle for reducing perinatal mortality, NHS England

Oppenheimer L, Holmes P, Simpson N, Dabrowski A. Diagnosis of low-lying placenta: can migration in the third trimester predict outcome? Ultrasound Obstet Gynecol 2001;8:100–2.

Poulain, P.; Palaric, J.C.; Paris-Liado, J.; Jacquemart, F. European Journal of Obstetrics & Gynecology and Reproductive Biology (0301-2115) 18 May 1994. Vol.54,Iss.3;p.191-196

Papageorghiou AT, Yu CK, Nicolaides KH. The role of uterine artery Doppler in predicting adverse pregnancy outcomeBest Practice Research Clinical Obstetrics Gynaecology. 2004 Jun;18(3):383-96.

Pilu G, Falco P, Gabrielli S, Perolo A, Sandri F, Bovicelli L. (1999) ((Meager & Davidson, 1996).

Appendix A: Governance section

Appendix A.1: Version Control Table

Version number and issue number	Date	Author & Job title	Reason for Change	Description of Changes Made
V1 2011266 (8.26 Guidelines for Obstetric Ultrasound in the Third Trimester)	Oct 2011	[redacted],	New Guideline	
V1.0 2015179	Sept 2015	Dexter Pascall and Nicky Roberts	Review	Changes to USS with raised BMI
V2.0 2018291	Oct 2017	Nicky Roberts	Clinical Review,	no changes at this time
V2.1	Mar 2021	Dexter Pascall	Clinical Review	SBL algorithm
V3	Nov 2021	Mini Nair, Dexter Pascall	Clinical Review	SGA Management
V3.1	Sept 2023	[redacted]	update	SBL alignment
V3.2	May	[redacted]	update	IVF added for scans and Appendix A update
V 4.0		Miss Roberts Dexter Pascall [redacted] [redacted]	Clinical Review	RGOC Green top Guideline 31 alignment and scan reviews

Appendix A.2: Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
[redacted]	Manager Obstetric Ultrasound Service	May 2011
Guideline implementation Group	Obstetrics and Gynaecology	May 2011
Women's Health Strategic Business Unit Operational meeting	Obstetrics and Gynaecology	May 2011
Guideline implementation Group	Obstetrics and Gynaecology	July 2014
Women's Health, Reproductive and Sexual Health Services Clinical Unit Business Meeting	Obstetrics and Gynaecology	Sept 2014
Women and Children's Guideline implementation Group		December 2017
Women and Children's governance and accountability		May 2018
USS lead		November 2017
USS lead		April 2021
Midwifery Sonographers		April 2021
Women and Children's Guideline implementation Group		November 2021
Women and Children's governance and accountability		February 2022
Women and Children's Guideline implementation Group		November 2025
MATNEO Quality and Safety Forum		December 2025

Appendix B: Equality and Health Inequalities Impact Assessment (EHIA)

SECTION A - ADMINISTRATIVE INFORMATION

This form is a central part of how the Trust makes sure and can demonstrate to others that we are meeting our legal duties; and how we can assure ourselves that all patients will get the best outcome for them from our services.

A completed copy of this form must be provided to the decision-makers in relation to your proposal. The decision-makers must consider the results of this assessment when they make their decision about your proposal. **Function/policy/service name and number:**	**Clinical Guidelines for Obstetric Ultrasound in the Third Trimester and SGA management**		
Main aims and intended outcomes of the function/policy/service and summary of the changes you are making (if existing policy/service):	The third trimester ultrasound scan is an essential component of antenatal care with it's purpose to assess fetal growth , well being and presentation as well as to evaluate the placenta and amniotic fluid. By having additional scans this can provide reassurance to the parents and to the obstetric and midwifery team caring for them and their baby provide valuable information for informed choice and decision making. Evidence based information has been gathered to provide recommendations to ESHT staff on when to perform additional ultrasound scans		
How will the function/policy/service change be put into practice?	Already in practice		
Who will be affected/benefit from the policy?	Staff caring for women experiencing an ectopic pregnancy at ESHT		
State type of policy/service	Policy	Service	Guideline ✓
	Business Case	Function	Existing
Is an EHIA required? NB: Most policies/functions will require an EA with few exceptions such as routine procedures	Yes x		
	No o (If no state reasons)		

Accountable Director: (Job Title)		
Assessment Carried out by:	Name: Gayle Clarke	
Contact Details:	[redacted]	
Date Completed:	12.11.25	

SECTION B ANALYSIS AND EVIDENCE

Analysis of the potential impact – Equality and Health Inequalities Duties

For this section you will need to think about all the different groups of people who are more likely to experience poorer access or have poorer outcomes from health and care services. For each group please describe in the first column the potential impact you have identified, in the second column explain how you have arrived at this conclusion and what information you used to identify the potential impact, and in the third column say what you are going to do to prevent it from happening, or which elements of a service or policy specifically address the potential impact. Key things to remember.

- Everyone has protected characteristics but some groups who share one or more protected characteristics may be more likely to have poorer outcomes or access compared with others – and it is this potential that the EHIA process seeks to identify and address.
- The information included here should be proportionate to the type and size of the policy/service/change.
- An update to a policy should demonstrate that you have considered the potential for the policy to impact differently on different groups and taken steps to address that.
- A minor policy update is likely to need to be much less comprehensive than an EHIA for a major service change.
- You will need to know information about who uses or could use your service/policy will apply to (the population). You can use information about current patients or staff, and about the general population the Trust serves.

3. PROTECTED CHARACTERISTICS - Main potential positive or negative impact of the proposal for protected characteristic groups summarised

Please write in the box below a brief summary of the main potential impact (positive or negative) Please state **N/A if your proposal will not impact adversely or positively on the protected characteristic groups listed below, but make sure you include information on how you know there will be no impact.**

N/A

Protected characteristic groups	Summary explanation of the *potential* positive or adverse impact of your proposal	How do you know this? (Include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Age: older people; middle years; early years; children and young people.	N/A		
Disability: physical, sensory, and learning impairment; mental health condition; long-term conditions.	N/A		
Gender Reassignment and/or people who identify as Transgender	N/A		
Marriage & Civil Partnership: people married or in a civil partnership.	N/A		
Pregnancy and Maternity: before and after childbirth and who are breastfeeding.	Positively supports the care women need when additional care required and extra monitoring in place for USS etc and surveillance	RCOG, NICE SBL care bundle	
Race:	N/A		
Religion and belief: people with different religions/faiths or beliefs, or none.	N/A		
Sex:	N/A		
Sexual orientation	N/A		
Veterans/Armed Forces Communities	N/A		

4. HEALTH INEQUALITIES -Potential positive or adverse impact for people who experience health inequalities summarised

Please briefly summarise the main potential impact (positive or negative) on people at particular risk of health inequalities (as listed below). **If the policy/procedure is unrelated to patients, this section does not require completion.**

Please state none if you have assessed that there is not an impact, but please make sure you complete the 'how do you know this' column to demonstrate that you have considered the potential for impact**. If you identify the potential for impact for one or more of these groups, please complete the full assessment in Section A**

Groups who face health inequalities[1]	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (Include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
This includes all groups of people who may have poorer access to or outcomes from healthcare services. It includes: People who have experienced the care system; carers; homeless people; people involved in the criminal justice system; people who experience substance misuse or addiction; people who experience income or other deprivation; people with poor health literacy; people living in rural areas with limited access to services; refugees or asylum seekers; people in or who have been in the armed force; other groups who you identify as potentially having poorer access and outcomes.	N/A		

SECTION C ENGAGEMENT

5. Engagement and consultation

a. Talking to patients, families and local communities can be a rich source of information to inform health care services. If you are making substantial changes, it is likely that you will have to undertake specific engagement with patients. For smaller changes and policies, you may have undertaken some engagement with patient groups, gained insight from routine sources e.g., patient surveys, PALS or Complaints information or information from Healthwatch, you may also have looked at relevant engagement that others have undertaken in the Trust, or locally.
Have any engagement or consultative activities been undertaken that considered how to address equalities issues or reduce health inequalities? Please place an x in the appropriate box below.

Yes	No X

b. If yes, please ensure all stakeholders are listed on the consultation table at the beginning of the policy.

SECTION D SUMMARY OF FINDINGS

Reflecting on all the information included in your review-

6. EQUALITY DUTIES: Is your assessment that your proposal will support compliance with the Public Sector Equality Duty? Please **add an x** to the relevant box below.

	Tackling discrimination	Advancing equality of opportunity	Fostering good relations
The proposal will support?			
The proposal may support?			
Uncertain whether the proposal will support?	x	x	x

7. HEALTH INEQUALITIES: Is your assessment that your proposal will support reducing health inequalities faced by patients? Please add an x to the relevant box below.

	Reducing inequalities in access to health care	Reducing inequalities in health outcomes
The proposal will support?		
The proposal may support?		
Uncertain if the proposal will support?	x	x

8. Outstanding key issues/questions that may require further consultation, research, or additional evidence. Please list your top three in order of priority or state N/A

Key issue or question to be answered		Type of consultation, research or other evidence that would address the issue and/or answer the question
1	N/A	

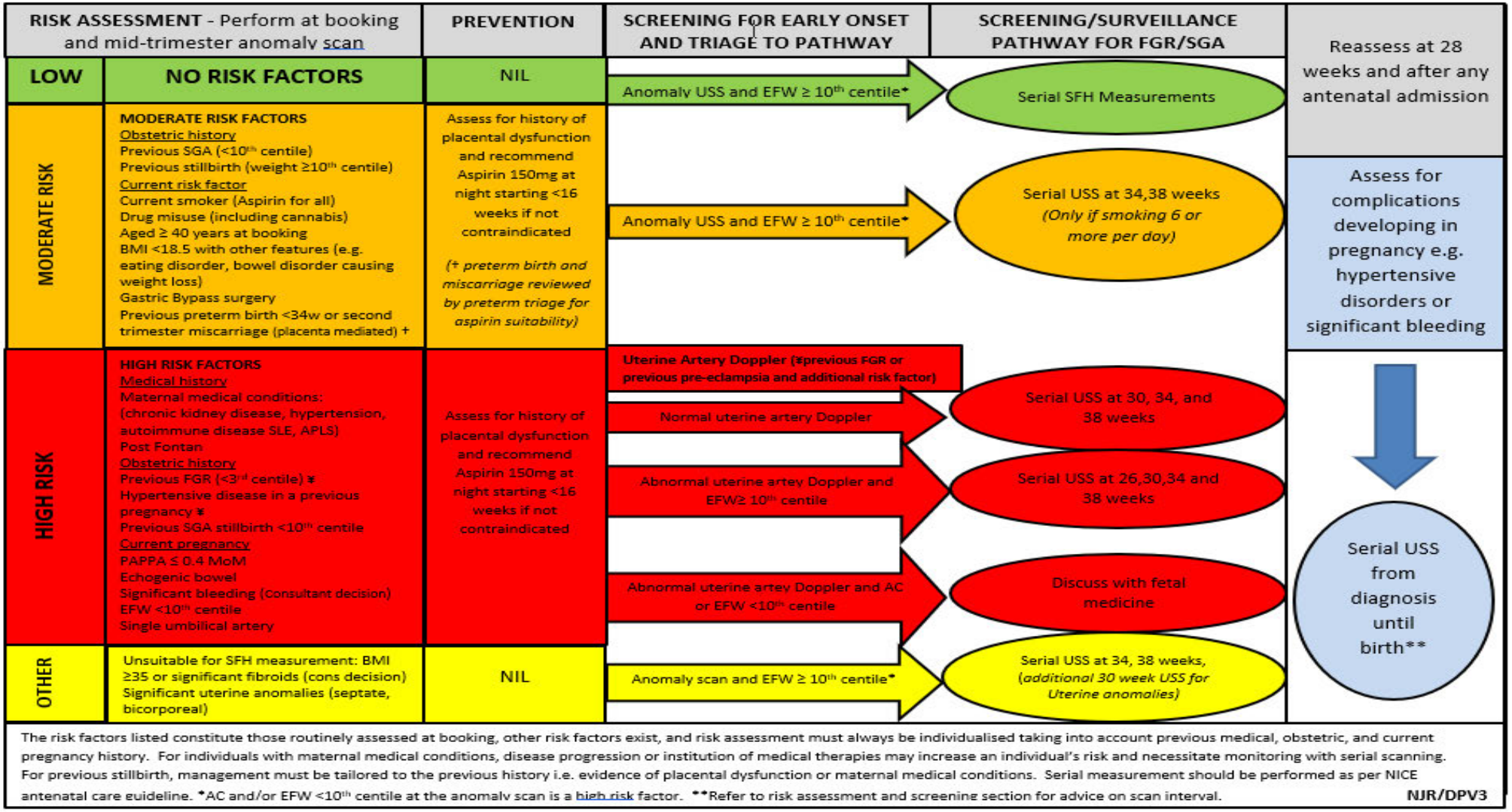
9. EHIA sign-off: (this section must be signed)

Person completing the EHIA:	**Gayle Clarke**	**Date: 12.11.25**
Line Manager of person completing:	[redacted]	**Date: 12.11.25**

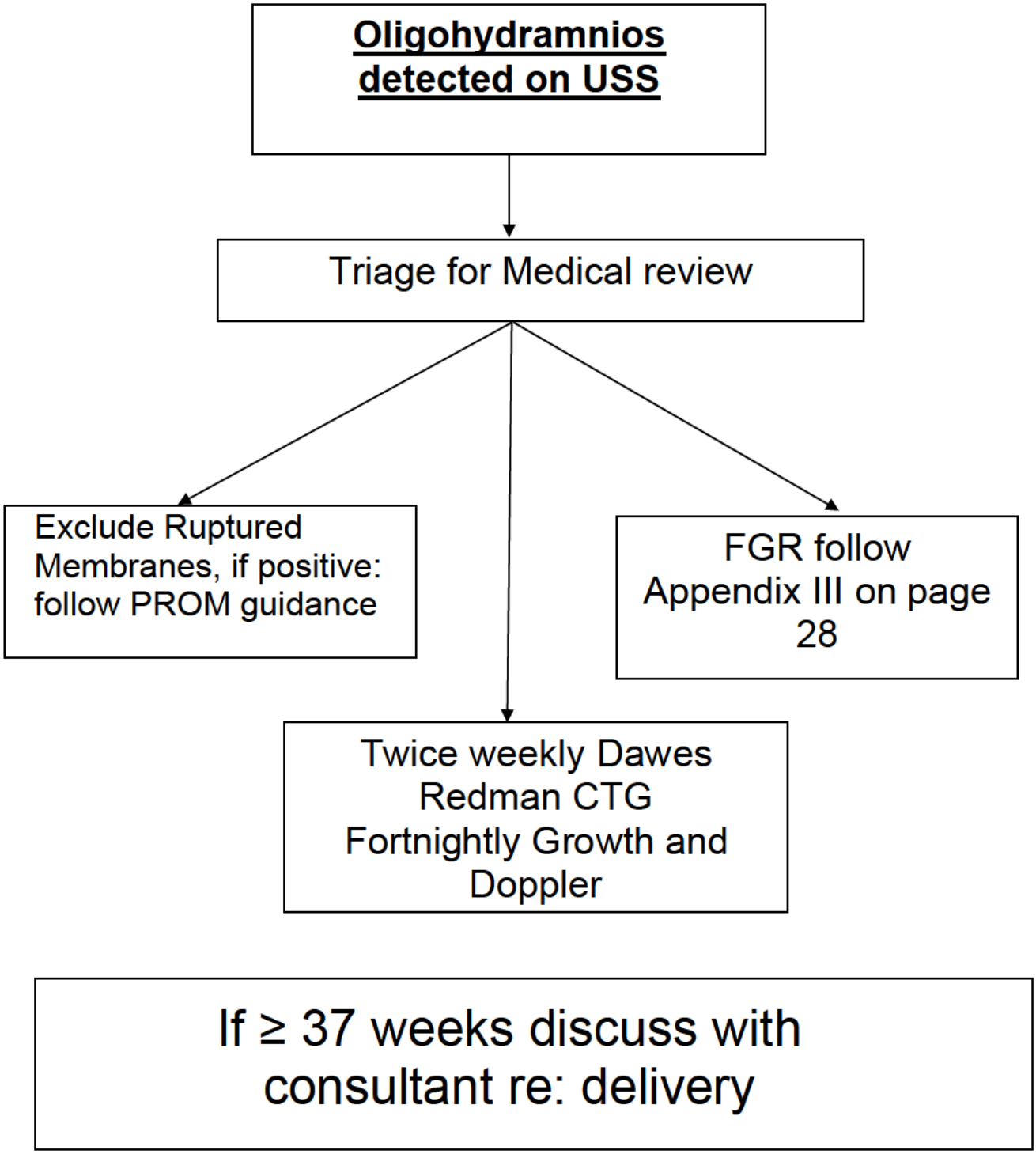
Breakdown of Groups who are more likely to experience health inequalities:

Groups who face health inequalities[2]	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (Include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Looked after children and young people	N/A		
Carers of patients	N/A		
Homeless people. People on the street; staying temporarily with friends /family; in hostels or B&Bs.	N/A		
People involved in the criminal justice system: offenders in prison/on probation, ex-offenders.	N/A		
People with addictions and/or substance misuse issues	N/A		
People or families on a low income	N/A		
People with poor literacy or health Literacy: (e.g., poor understanding of health services poor language skills).	N/A		
People living in deprived areas	N/A		
People living in remote, rural and island locations	N/A		
Refugees, asylum seekers or those experiencing modern slavery	N/A		
People who have served in the Armed Forces	N/A		
Other groups experiencing health inequalities (please describe)	N/A		

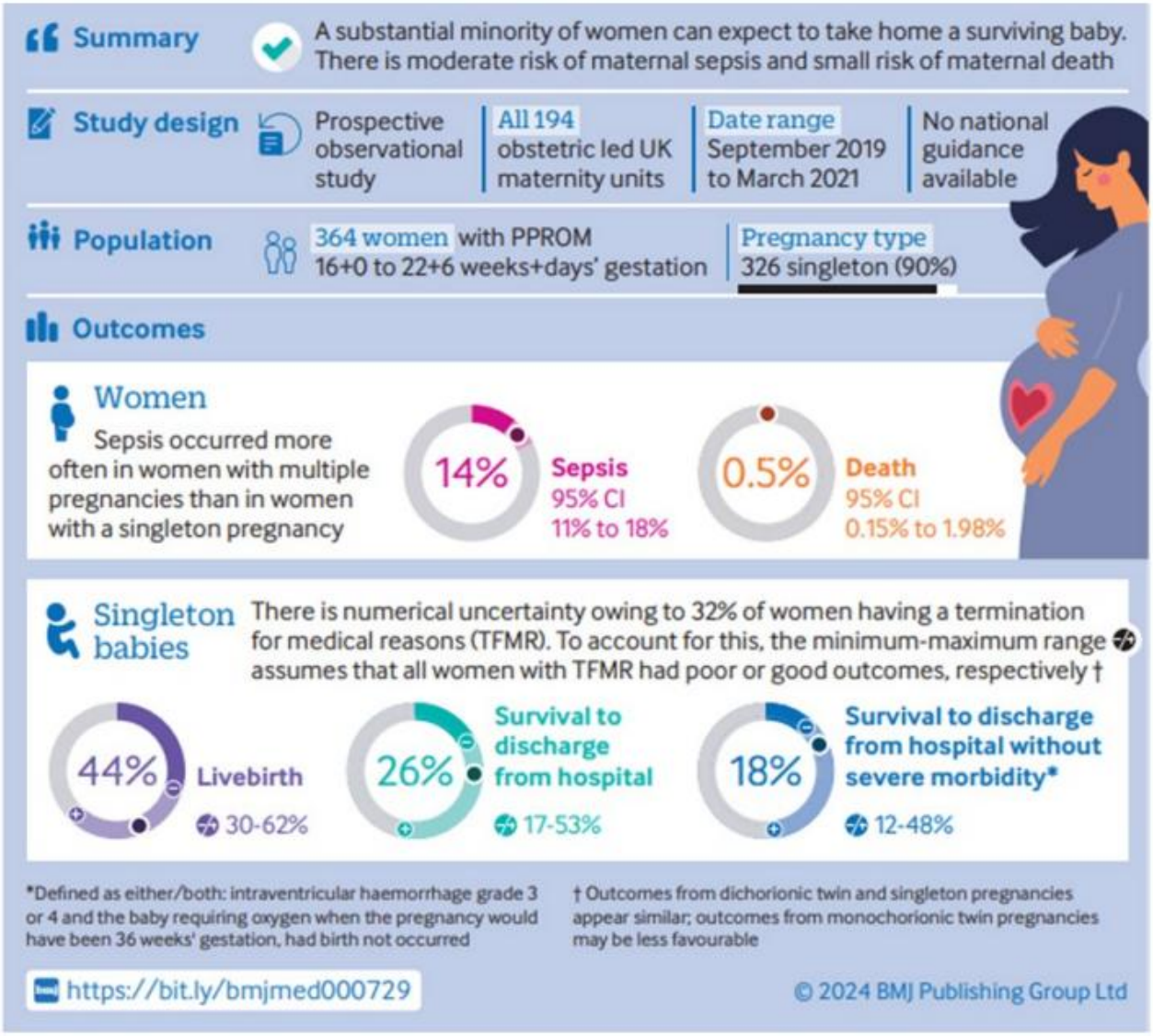
Appendix C: RCOG / Saving Babies Lives - Algorithm



Appendix D: Management of Oligohydramnious Flowchart



Appendix E: Preterm prelabour rupture of membranes (PPROM) before 23 weeks

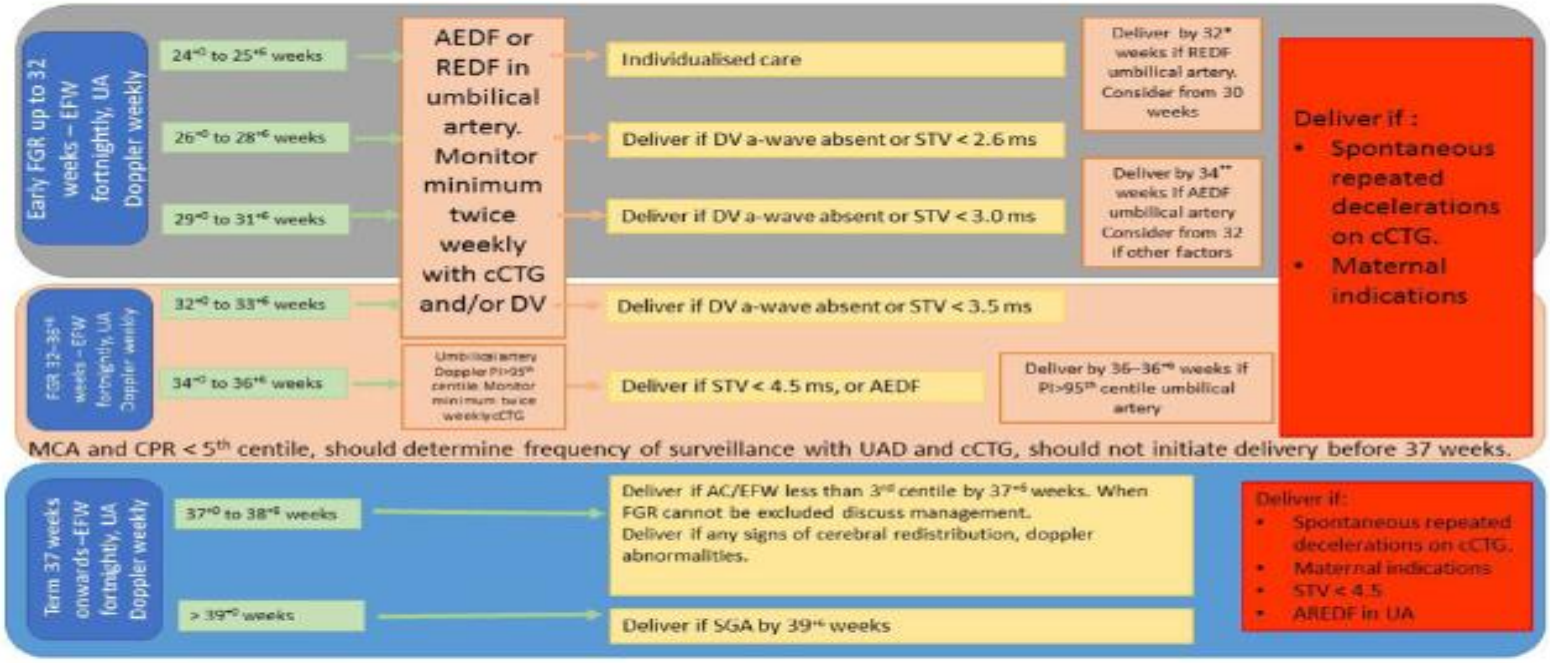


Appendix F: Management of fetal growth restriction, RCOG Green top Guideline 31

EFW or AC below the 3rd centile, EFW or AC below 10th centile with evidence of placental dysfunction (umbilical doppler PI> 95th centile , absent or reversed EDF, uterine artery dopplers> 95th centile at anomaly scan)

APPENDIX III

Management of fetal growth restriction (FGR)



*Consider after 30^{+0} weeks; **Consider after 32^{+0} weeks; EFW, estimated fetal weight; UA, umbilical artery; DV, ductus venosus; cCTG, computerised cardiotocograph; STV, short-term variation; ms, milliseconds; AC, abdominal circumference; PI, pulsatility index; AREDF, absent reversed end-diastolic flow.

Appendix G: Action on Measurements Referral Pathways

This guidance relates to scans performed prior to 38 weeks. Growth abnormalities detected after 38 weeks should be reviewed in DAU.

If the sonographers advise same day review based on their professional acumen, this must be honoured by the team at Triage/DAU.

If there is a finding/scenario not covered by the guidance - refer to DAU for medical advice.

DAU phone numbers – [redacted] Conquest, [redacted] EDGH

MW sonographers - To organise a glucose tolerance test please refer on Badgernet (Hastings area only) or email the Diabetes Multidisciplinary Team (Eastbourne area only or if > 34 weeks gestation)

Sonographers: Options if guidance advises antenatal clinic appointment;

1 - email booking clerks via generic email or

2- via a badgernet referral.

Sonographers to avoid requesting CMW to arrange appointments or review scans as this will cause unnecessary delay.

If Absent/Reverse EDF after 26 weeks	On call Consultant to review and decide on in utero transfer or local fetal medicine consultant review

Measurement Findings	Action							
	UA Doppler	MCA Doppler (ideally)	ANC	DAU or Triage	Rescan (weeks)	FMU referral	Midwife Sonographer Action	General Sonographer Action
All between 10th and 95th centile, liquor volume normal	X	X	X	X	X	X	No further scan required. If receiving serial scans these should continue.	
HC <10th centile	√	X	√	X	4	Refer if <5th	ANC and rescan in 4 weeks	
AC <10th centile	√	√	√	√ DAU	2	X	DAU and rescan in 2 weeks	
FL < 5th centile only	√	X	√	X	2	Refer if < 5th	ANC and rescan in two weeks. 6-10th centile FL and normal EFW and no other indication for serial scans then no follow up needed If <5th centile and < 32 weeks - Referral to screening team	
EFW ≤10th centile or Static growth	√	√	√	√ DAU	2	Refer if <23/40	DAU	
EFW < 3rd centile	√	√	√	√ TRIAGE	2	*See comments	BSOTS Yellow *If less than 30 weeks and normal dopplers refer to Fetal medicine	
Reduced growth Decrease ≥ 50 centiles in 4 weeks.	√	√	√	√ TRIAGE	2	X	BSOTS Yellow ANC and rescan in 2 weeks	
Oligohydramnios <2cm	√	√	√	√ TRAIGE	2	X	BSOTS yellow - (for Consultant review if additional risk factors)	

HC >95th centile	X	X	√	X	4	X	ANC and rescan in 4 weeks

AC >95th centile	X	X	√	√ >38 Weeks	4	X	ANC and rescan in 4 weeks If >36 weeks , rescan in 2 weeks Reassure if EFW and LV normal
FL >95th centile	X	X	X	X	X	X	No action if all else is normal.
Polyhydramnios	√	X	√ 2 weeks If previously diagnosed	√ DAU If new diagnosis or >36 weeks gestation	4 if <36 weeks or 2 if >36 weeks	X	Refer to DAU if new diagnosis or >36 weeks gestation. If previously diagnosed refer to ANC for appt within 2 weeks. **MW sonographer or DAU team** Arrange a GTT if not performed within the last 6 weeks. If > 36 weeks email the Diabetes Multidisciplinary team. TORCH screen ONLY if other markers of fetal infection on USS Parvovirus serology only if history of exposure or fetal hydrops
	UA Doppler	**MCA Doppler (ideally)**	**ANC**	**DAU or Triage**	**Rescan (weeks)**	**FMU referral**	

SCAN REVIEWS: LOCATION & FOLLOW UP			
Delivery suite	**Triage- BSOTS yellow**	**DAU < 72hrs**	**No DAU or Triage**
Abnormal Doppler with Reversed or Absent EDF	1. Abnormal dopplers with present EDF 2. Oligohydramnios 3. Static growth 4. FGR- (EFW < 3rd) at any gestation	1) New polyhydramnios or > 36 weeks 2) New SGA EFW 3rd-9th centile 3) EFW > 95th 4) AC > 95th- 5) Malpresentation > 36 weeks • **Email consultant** 6) Known AC < 10th with normal dopplers and < 38 weeks 7) Known EFW < 10th with normal dopplers and < 38 weeks	1) Normal growth no other risk factors 2) HC < 10th 3) FL <5th 4) FL >95th 5) HC >95th 6) Known polyhydramnios - clinic within 2 weeks

East Sussex Healthcare NHS Trust

Clinical Guideline for the Communication of Antenatal and New-born Screening Test Results in Maternity

Document ID Number	568
Version:	V7
Ratified by:	Women and Children's Governance and accountability members
Date ratified:	February 2024
Name of author and title:	[redacted] Specialist Midwife Antenatal & Neonatal Screening
Date Originally Written:	October 2003
Date of current version was completed	October 2023
Name of responsible committee/individual:	Chair of the Guideline Implementation Group for Women and Children's Division
Date issued:	07 March 2024
Review date:	February 2027
Target audience:	All Staff including TWF, Bank, Agency, and Locums
Compliance with CQC outcome	Regulation 9 Person centred Care Regulation 11 Need for Consent
Compliance with any other external requirements (e.g. Information Governance)	Public Health England

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of the policies and can only guarantee that the policy on the Trust website is the most up to date version.

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
1	Oct 2003	[redacted]		
2	Dec 2007	Nicky Mason		
3	Sept 2009	Gayle Clarke [redacted]		
V4 2013062	January 2013	Cathy O'Callaghan [redacted]		
V5.0 2016181	August 2016	[redacted]	Review and update	
V6	October 2020	[redacted]	Review and update	Flow charts updated
V7	October 2023	[redacted]	Clinical Review	Review

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Clinical Directorate Team		October 2004 Dec 2007
Professional Midwifery Forum		Oct 2004
Clinical Guidelines Group		Oct 2004
Obstetrics and Gynaecology Directorate		Oct 2004
Guideline Implementation Group		Aug 2009
Strategic Business Unit Women's Health Operational meeting		Oct 2009
Guideline Implementation Group	Obstetrics and Gynaecology	December 2012
Clinical Unit – Integrated Division	Obstetrics and Gynaecology	January 2013
Women, children's, and sexual health Guideline Implementation Group		July 2016
Women, children's, and sexual health Clinical unit accountability Meeting		July 2016
Women and Children's Guideline Implementation group		November 2020
Women and Children's Governance and Accountability		December 2020
Women and Children's Guideline Implementation group		February 2024
Women and Children's Governance and Accountability Members		February 2024

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of Contents

1. Introduction

Pregnant women/people will be offered many screening tests during her pregnancy and following delivery relating to her baby. Communication of tests results to pregnant women/people should be given within the time scale set by Public Health England (PHE, 2019) wherever possible.

2. Rationale

This document provides guidance to ensure that all antenatal and new-born screening tests are reported on and the results relayed to the appropriate people.

3. Scope

This document applies to all staff caring for women/people within the maternity services at East Sussex Healthcare Trust.

4. Accountabilities

4.1. Midwives and Obstetricians

- To access, read, understand, and follow this guidance
- To use their professional judgement in application of this guideline

4.2. Management

- To ensure the guideline is reviewed as required in line with the Trust and National guidelines
- To ensure the guideline is accessible to all relevant staff
- To monitor the audit process

5. Process

5.1. Process to Follow

Women/people should be informed about:

- Which tests are available to them?
- Confirmation about which tests have been performed
- How the results will be communicated and acted upon

If women/people move between care settings or professionals, there should be effective transfer of information to enable effective care.

Good communication and multidisciplinary and multi-agency working are vital for the continued care of the woman/person and her family.

5.2. Screening tests

Women/pregnant people should be given verbal and written information about the pregnancy and neonatal screening options available to her by the community midwife. The Public Health England 'Screening test for you and your baby' leaflet is attached to an email reply to women/pregnant people after they have self-referred for maternity care. If this has not been received it should be given prior to or at booking by the Midwife. Alternative languages are avail on the National Screening Committee website Screening tests for you and your baby - GOV.UK (www.gov.uk)

This information should be given prior to the optimum time of testing so that she can make informed decisions whether or not to have the tests. The community midwife should give the woman/pregnant person information about the detection rates and false positive rates with screening for Down's syndrome.

The woman/person can be offered the opportunity for further in-depth information if required from Specialist Midwife in Antenatal and Newborn (ANNB) Screening. The community midwife can arrange this as required by contacting the Antenatal and Newborn Screening Team.

If she is undecided about screening, testing and/or if the screening proves positive, she should be referred using the referral flow chart in guideline: Care of Women with Suspected or Identified Fetal Abnormality

Details of the discussion of screening tests and the decisions made should be documented in the woman's/person's maternal clinical record on Badgernet.

All booking blood results (HIV, Hepatitis B, Syphilis, Haemoglobinopathies, FBC and Group and Antibodies) should be checked by the health professional taking the sample (or requestor if the woman/person has attended phlebotomy) within 8 days of the sample being taken (PHE, 2019). The importance of checking blood results at this stage allows for errors / omissions to be identified and if required, repeats to be taken in a timely manner, to avoid undue delay in the screening pathway.

The woman/person should be given the results of all screening tests regardless of the result, and the method of communication should also be documented (i.e. face to face, phone call etc.). Normal ANNB screening results can be given by the community midwife. Abnormal / screen positive ANNB screening results will be given by the ANNB Screening Midwives (as detailed below).

At 16 weeks: Results available will be given to the woman/pregnant person at the antenatal appointment by the community midwife or in the antenatal clinic. The results are either documented, or printed results will be secured in the mother's/parent's maternal clinical record on Badgernet.

If the mother/parent does not attend this appointment and the results are normal, they can be given to her at the next antenatal contact. If the results are not available, the community should investigate and arrange, if necessary, for the tests to be repeated as soon as possible.

If a screening test has being been accepted at booking, but at the 16 week appointment the Midwife is informed that screening was later declined, please discuss and confirm the change of decision, advise that if they change their mind again, screening can take place for downs syndrome up to 20+0 days (quad test), or at any time in the pregnancy for the other

booking blood tests (HIV, Hepatitis B, Syphilis, Haemoglobinopathies, FBC and Group and Antibodies). Please document this discussion in the maternal clinical record on Badgernet.

Abnormal / screen positive results

When the results are abnormal or screen positive, the Specialist Midwife in Antenatal and Newborn Screening ensures that the woman/person is contacted and offered a face to face appointment, within 10 working days for infectious diseases, or 3 working days for combined screen positive results, and informed of the result and understands the implications of the results. The subsequent management options are discussed, including referral to tertiary centres. Any additional appointments, if appropriate, will be arranged. (For information on recommended time scales for referrals see flow chart appendix 2 in guideline 'Care of Women/people with Suspected or Identified Fetal Abnormality').

This conversation must be documented in a telephone record sheet, which is then later filed in the mother's/parents maternal clinical record on Badgernet by the community midwife or staff from antenatal clinic.

Liaison with the Health Visitor may be necessary with neonatal screening tests results, and guidance given where required in relation to abnormal results.

Miscarried pregnancies

If a woman/person has miscarried her pregnancy since having the routine booking blood samples taken, the sample taker still holds responsibility to check the results. The Antenatal and Newborn Screening Team will send a letter to the woman/person with details of the routine booking blood results (if normal) *. In the event of abnormal results, the Screening Team will contact the woman/person to discuss further and arrange referrals as required. In the event of sampling errors with the initial booking blood sample, the Screening Team will contact the woman/person to explain the situation and re-offer testing.

*NB: Low haemoglobin (Hb) – if Hb is low (<110g/l), the letter will advise women/people to contact their GP to discuss and consider repeat testing.

5.3. Diagnostic tests in pregnancy

The woman/pregnant person will be given information about diagnostic testing from a practitioner trained in antenatal screening.

Women/pregnant people with uncommon or rare conditions (or a family history) who enquire about the availability of antenatal testing should be referred to a Consultant Obstetrician as early as possible.

The woman/pregnant person should be offered the opportunity for further in-depth information from the Specialist Midwife in Antenatal and Newborn Screening if she is undecided about screening testing. This can be arranged by the community midwife or ANC obstetrician as required.

Referral to specialist units may be offered.

5.4. HIV and Hepatitis B

Refer to the 'Infectious Diseases in Pregnancy'.

5.5. Documentation

All tests performed should be clearly documented on the maternal clinical record on Badgernet along with information about how the woman/person was informed about the test results and any subsequent action.

6. Special Considerations

When using this guideline, you may need to refer to the appropriate guideline for the relevant flowcharts for dissemination of information and results.

7. Evidence Base/References

National Institute for Health and Clinical Excellence. 2008 (updated February 2019). *Antenatal Care for uncomplicated pregnancies. Clinical Guideline CG62*. London: NICE. Available online: https://www.nice.org.uk/guidance/cg62 [accessed 18/09/19].

Public Health England (PHE). 2019 Guidance: Infectious diseases in pregnancy screening standards. Available online: https://www.gov.uk/government/publications/infectious-diseases-in-pregnancy-screening-programme-standards [accessed 18/09/2019]

Public Health England (PHE). 2019 Guidance: Infectious diseases in pregnancy screening checks and audits. Available online: https://www.gov.uk/government/publications/idps-checks-and-audits-to-improve-quality-and-reduce-risks/infectious-diseases-in-pregnancy-screening-checks-and-audits#failsafe-in-screening-programmes [accessed 18/09/2019]

PHE. Population Screening programmes. Available online: https://www.gov.uk/topic/population-screening-programmes [accessed 18/09/2019]

8. Competencies and Training Requirements

Any practice changes that require training will be disseminated through the Specialist Midwife Practice Development.

9. Monitoring Arrangements

Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
T13, 18, 21 results given to women/people in a timely way	Specialist midwives for Antenatal and neonatal screening	Specialist Screening midwife database	daily	Specialist Antenatal and screening Midwives Screening Committee meetings	Specialist Antenatal and screening Midwives Service Manager	Specialist Antenatal and screening Midwives Service manager

Appendix A: EHIA Form

Equality and Health Inequalities Impact Assessment (EHIA) template

Undertaking EHIA helps us to make sure that our services and polices do not inadvertently benefit some groups more than others, ensuring that we meet everyone's needs, and our legal and professional duties.

This is important because:

- Assessing the potential for services and policies to impact differently on some groups compared with others is a legal requirement.
- People who find it harder to access healthcare services are more likely to present later when their disease may be more progressed, have poorer outcomes from treatment, and need more services than other groups who have better access.

The Equality Act 2010 legally protects people from discrimination in the workplace and in wider society. It is against the law to discriminate against anyone because of:

- age
- gender reassignment
- being married or in a civil partnership
- being pregnant or on maternity leave
- disability
- race including colour, nationality, ethnic or national origin
- religion or belief
- sex
- sexual orientation.

These are called 'protected characteristics'. The Act requires that public sector organisations meet specific equality duties in respect of these protected characteristics. This is known as the public sector equality duty.

Public Sector Equality Duty

Public bodies have to consider all individuals when carrying out their day-to-day work – in shaping policy, in delivering services and in relation to their own employees.

Public bodies must have due regard to the need to:

- eliminate discrimination
- advance equality of opportunity
- foster good relations.

Armed Forces Covenant Duty

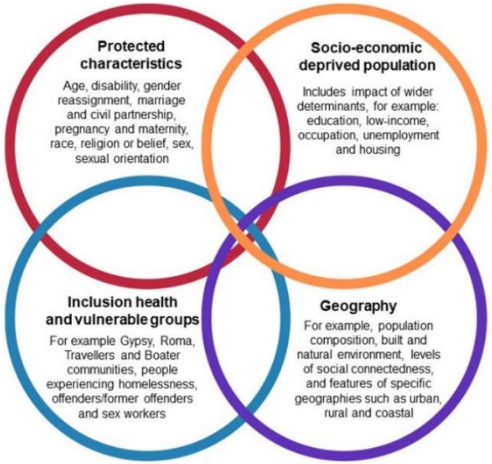
The new Covenant Duty raises awareness of how Service life can impact on the Armed Forces community, and how disadvantages can arise due to Service when members of that community seek to access key local services. The Duty requires organisations to pay due regard to the Covenant principles when exercising functions in healthcare. "Due regard" means that we need to consciously consider the unique obligations and sacrifices made by the Armed Forces; that it is desirable to remove disadvantages faced by the Armed Forces community; and that special provision may be justified in some circumstances.

Health Inequalities Duties- Equity for all
In addition to our legal duties in relation to Protected Characteristics, the Health and Social Care Act and other legislation, NHS Planning Guidance and sector specific recommendations require the NHS to have regard to the need to address health inequalities (or differences in access to or outcomes from healthcare) and take specific action to address them.

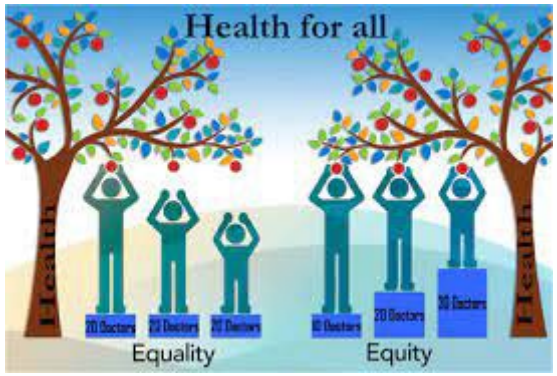
Figure 1 shows the different population groups, factors associated with where we live, or our individual circumstances, which separately, or when combined, influence access to and outcomes from health care.

Getting equal outcomes may require different inputs (or services). In completing an EHIA its important to think about whether a one size fits all approach will generate the same good outcomes for everyone, or whether we might need to make some tweaks or adjustments to enable everyone to benefit equally. The health tree diagram shows that unless we think about the needs of different people, equal services might generate unequal outcomes.

Factors associated with poorer health outcomes (PHE 2021)[1]



The Health Tree[1]



The following principles, drawn from case law, explain what we must do to fulfil our duties under the Equality Act:

- **Knowledge:** everyone working for the Trust must be aware of our equality duties and apply them appropriately in their work.
- **Timeliness:** the duty applies at the time of considering policy options and/or before a final decision is taken – not afterwards.
- **Real Consideration:** the duty must be an integral and rigorous part of your decision-making and influence the process.
- **Sufficient Information:** you must assess what information you have and what is needed to give proper consideration.
- **No delegation:** the Trust is responsible for ensuring that any contracted services which provide services on our behalf can comply with the duty, are required in contracts to comply with it, and do comply in practice. It is a duty that cannot be delegated.
- **Review:** the equality duty is a continuing duty. It applies when a policy/process is developed/agreed, and when it is implemented/reviewed.
- **Proper Record Keeping:** to show that we have fulfilled our duties we must keep records of the process and the impacts identified.

NB: Filling out this EHIA in itself does not meet the requirements of the equality and health inequalities duties. All the requirements above must be fulfilled or the EHIA (and any decision based on it) may be open to challenge. Properly used, an EHIA can be a tool to help us comply with

[1] https://www.researchgate.net/figure/Equality-and-equity-of-medical-resources-distribution_fig2_323266914

our equality and health inequalities duty and as a record that to demonstrate that we have done so. It is advised that you complete the short EHIA training session on MyLearn before completing this EHIA.

SECTION A ADMINISTRATIVE INFORMATION

This form is a central part of how the Trust makes sure and can demonstrate to others that we are meeting our legal duties; and how we can assure ourselves that all patients will get the best outcome for them from our services.

A completed copy of this form must be provided to the decision-makers in relation to your proposal. The decision-makers must consider the results of this assessment when they make their decision about your proposal. **Function/policy/service name and number:**	**Clinical Guideline for the Communication of Antenatal and New-born Screening Test Results in Maternity**		
Main aims and intended outcomes of the function/policy/service and summary of the changes you are making (if existing policy/service):	This document provides guidance to ensure that all antenatal and new-born screening tests are reported on and the results relayed to the appropriate people.		
How will the function/policy/service change be put into practice?	already current practice		
Who will be affected/benefit from the policy?	Staff within maternity services		
State type of policy/service	Policy	Service	Guideline ✓
	Business Case	Function	Existing
Is an EHIA required? NB :Most policies/functions will require an EA with few exceptions such as routine procedures	Yes ✓		
	No (If no state reasons)		
Accountable Director: (Job Title)	Specialist Midwife Antenatal & Neonatal Screening		
Assessment Carried out by:	Name: [redacted]		
Contact Details:	[redacted]		
Date Completed:	28.2.24		

SECTION B ANALYSIS AND EVIDENCE

Analysis of the potential impact – Equality and Health Inequalities Duties
For this section you will need to think about all the different groups of people who are more likely to experience poorer access or have poorer outcomes from health and care services. For each group please describe in the first column the potential impact you have identified, in the second column explain how you have arrived at this conclusion and what information you used to identify the potential impact, and in the third column say what you are going to do to prevent it from happening, or which elements of a service or policy specifically address the potential impact. Key things to remember.

- Everyone has protected characteristics but some groups who share one or more protected characteristics may be more likely to have poorer outcomes or access compared with others – and it is this potential that the EHIA process seeks to identify and address.
- The information included here should be proportionate to the type and size of the policy/service/change.
- An update to a policy should demonstrate that you have considered the potential for the policy to impact differently on different groups and taken steps to address that.
- A minor policy update is likely to need to be much less comprehensive than an EHIA for a major service change.
- You will need to know information about who uses or could use your service/policy will apply to (the population). You can use information about current patients or staff, and about the general population the Trust serves.

3. PROTECTED CHARACTERISTICS - Main potential positive or negative impact of the proposal for protected characteristic groups summarised

Please write in the box below a brief summary of the main potential impact (positive or negative) Please state **N/A if your proposal will not impact adversely or positively on the protected characteristic groups listed below, but make sure you include information on how you know there will be no impact.**

N/A

Protected characteristic groups	Summary explanation of the *potential* positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Age: older people; middle years; early years; children and young people.	N/A		
Disability: physical, sensory and learning impairment; mental health condition; long-term conditions.	N/A		
Gender Reassignment and/or people who identify as Transgender	N/A		
Marriage & Civil Partnership: people married or in a civil partnership.	N/A		
Pregnancy and Maternity: before and after childbirth and who are breastfeeding.	N/A		
Race:	N/A		
Religion and belief: people with different religions/faiths or beliefs, or none.	N/A		
Sex:	N/A		

Protected characteristic groups	Summary explanation of the *potential* positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Sexual orientation	N/A		
Veterans/Armed Forces Communities	N/A		

4. HEALTH INEQUALITIES -Potential positive or adverse impact for people who experience health inequalities summarised

Please briefly summarise the main potential impact (positive or negative) on people at particular risk of health inequalities (as listed below). **If the policy/procedure is unrelated to patients, this sections does not require completion.**

Please state none if you have assessed that there is not an impact, but please make sure you complete the 'how do you know this' column to demonstrate that you have considered the potential for impact**. If you identify the potential for impact for one or more of these groups please complete the full assessment in Appendix A**

Groups who face health inequalities[2]	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
This includes all groups of people who may have poorer access to or outcomes from healthcare services. It includes: People who have experienced the care system; carers; homeless people; people involved in the	N/A		

Groups who face health inequalities[2]	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
criminal justice system; people who experience substance misuse or addiction; people who experience income or other deprivation; people with poor health literacy; people living in rural areas with limited access to services; refugees or asylum seekers; people in or who have been in the armed force; other groups who you identify as potentially having poorer access and outcomes.			

SECTION C ENGAGEMENT

5. Engagement and consultation

a. Talking to patients, families and local communities can be a rich source of information to inform health care services. If you are making substantial changes it's likely that you'll have to undertake specific engagement with patients. For smaller changes and policies your may have undertaken some engagement with patient groups, gained insight from routine sources e.g. patient surveys, PALS or Complaints information or information from Healthwatch, you may also have looked at relevant engagement that others have undertaken in the Trust, or locally
Have any engagement or consultative activities been undertaken that considered how to address equalities issues or reduce health inequalities? Please place an x in the appropriate box below.

Yes	No
x	

b. If yes, please ensure all stakeholders are listed in the consultation table at the beginning of the policy.

SECTION D SUMMARY OF FINDINGS

Reflecting on all of the information included in your review-

6. EQUALITY DUTIES: Is your assessment that your proposal will support compliance with the Public Sector Equality Duty? Please **add an x** to the relevant box below.

	Tackling discrimination	Advancing equality of opportunity	Fostering good relations
The proposal will support?	x	x	x
The proposal may support?			
Uncertain whether the proposal will support?			

7. HEALTH INEQUALITIES: Is your assessment that your proposal will support reducing health inequalities faced by patients? Please add an x to the relevant box below.

	Reducing inequalities in access to health care	Reducing inequalities in health outcomes
The proposal will support?	x	x
The proposal may support?		
Uncertain if the proposal will support?		

8. Outstanding key issues/questions that may require further consultation, research or additional evidence. Please list your top 3 in order of priority or state N/A

Key issue or question to be answered		Type of consultation, research or other evidence that would address the issue and/or answer the question
1	N/A	
2	N/A	
3	N/A	

9. EHIA sign-off: (this section must be signed)

Person completing the EHIA:	[redacted]	**Date: 28.2.24**

Line Manager of person completing:	[redacted]	Date: *28.2.24*

Appendix A

Breakdown of Groups who are more likely to experience health inequalities:

Groups who face health inequalities[3]	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
Looked after children and young people	N/A		
Carers of patients	N/A		
Homeless people. People on the street; staying temporarily with friends /family; in hostels or B&Bs.	N/A		
People involved in the criminal justice system: offenders in prison/on probation, ex-offenders.	N/A		
People with addictions and/or substance misuse issues	N/A		
People or families on a low income	N/A		
People with poor literacy or health Literacy: (e.g. poor understanding of health services poor language skills).	N/A		

Groups who face health inequalities[3]	Summary explanation of the potential positive or adverse impact of your proposal	How do you know this? (include here a brief explanation of what information you have used to identify potential adverse impact e.g. NICE guidance, local data, evidence reviews, stakeholder or patient feedback	Action that will be taken to address the potential for negative impact.
People living in deprived areas	N/A		
People living in remote, rural and island locations	N/A		
Refugees, asylum seekers or those experiencing modern slavery	N/A		
People who have served in the Armed Forces	N/A		
Other groups experiencing health inequalities (please describe)	N/A		

Appendix B – EHIA Resources
Sources of Information on the East Sussex population and sources of community or patient insight.

Population Data
State of the County 2021 Focus on East Sussex

East Sussex JSNA

Community Insight

Further Reading on Equality and Health Inequalities

Training

East Sussex Healthcare NHS Trust

Care of Women with Suspected or Identified Fetal Abnormality

Document ID Number:	623
Version:	V2
Ratified by:	Women and Children's Division
Date ratified:	May 2022
Name of author and title:	[redacted] and [redacted], Antenatal and Neonatal Screening Specialist Midwives
Date Written:	January 2005
Date Current version completed:	April 2022
Name of responsible committee/individual:	Chair of the Guideline Implementation Group for Maternity Services
Date issued:	20 June 2022
Review date:	May 2025
Target audience:	All Staff
Compliance with CQC outcome	Regulation 9 Person centred Care Regulation 10 Dignity and Respect Regulation 11 Need for Consent Regulation 12 Safe Care and Treatment Regulation 15 Premises and Equipment Regulation 16 Receiving and Acting on Complaints
Compliance with any other external requirements (e.g. Information Governance)	National Screening Committee
Associated Documents	Clinical Guideline for Pregnancy Loss http://nww.esht.nhs.uk/wp-content/uploads/2018/08/01060_P.pdf

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of the policies and can only guarantee that the policy on the Trust website is the most up to date version

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1	2005	[redacted]	New Guideline	
V2	2008	Nicky Roberts Gayle Clarke	Clinical Update	
V3	2009	[redacted]	Clinical Update	
V1.0	2012	Cathy O'Callaghan	Clinical Update	
V1.1	2015	[redacted]	Clinical Review	Fail safe's added
V1.2	2018	[redacted]	Clinical Review	Process updated
V2	April 2022	[redacted]	Clinical Review	Minor updates

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Guideline Implementation Group	Maternity Services	October 2008
Strategic Business Unit Women's Health operational meeting		Sept 2009
Guideline Implementation Group	Obstetrics and Gynaecology	November 2012
Clinical Unit – Integrated Division	Obstetrics and Gynaecology	December 2012
Guideline Implementation Group	Obstetrics and Gynaecology	October 2015
Clinical Unit – Women, Children's and Sexual Health	Obstetrics and Gynaecology	October 2015
Women and Children's Guideline Implementation group		January 2019
Women and Children's Governance and Accountability		February 2019
Women and Children's Guideline Implementation group		May 2022

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of Contents

1. Introduction

Women undergoing screening tests should be informed about the principles of screening, and the procedures to be followed in the event that they are deemed as high risk. Appropriate information and advice should be available promptly in order to minimise anxiety and distress.

2. Rationale

This document provides guidance on caring for women who have had a fetal abnormality identified, and to ensure efficient assessment and management of a woman with a suspected fetal anomaly.

A robust system of early referral for specialist care should be in place to ensure that women are seen without delay to confirm the diagnosis and provide support**.** Care should be multidisciplinary and multiagency as appropriate.

Effective planning should ensure that the birth occurs in the most appropriate environment and that the most appropriate professionals are present at the birth (this should be planned antenatally)

3. Scope

This document applies to all staff caring for women within the maternity services at East Sussex Healthcare Trust.

4. Definitions

N/A

5. Accountabilities

5.1 Obstetricians, Screening Specialist Midwives, Midwives, Sonograghers and paediatricians

- To access, read, understand and follow this guidance
- To use their professional judgement in application of this guideline
- And that the specialist screening midwives will review the process for referral on a quarterly basis and report to the local screening steering group meetings.

5.2 Management

- To ensure the guideline is reviewed as required in line with the Trust and National guidelines
- To ensure the guideline is accessible to all relevant staff
- To monitor the audit process

6. Process

6.1 Guidelines of Care

All women should be given information about the principles of screening tests and understand the implications when being screened, of receiving a higher or a lower risk. This information should be both written and verbal (see guideline **'Clinical Guideline for Routine Care for Healthy Pregnant Women'** http://eshealthcare/guideline/561.pdf and information leaflet 'Screening test for you and your baby' https://www.gov.uk/government/publications/screening-tests-for-you-and-your-baby-description-in-brief

Women who receive a diagnosis of fetal abnormality or a high risk result following a screening test should be given clear information about the management options available and be referred to specialist services in a timely fashion. The report must be filed in the woman's Antenatal care record on Badgernet (electronic maternity record system).

Women who also fulfill the criteria as listed in Appendix A, should be referred to the Specialist screening midwives and the Consultant Obstetric Lead for Fetal Medicine.

Women booked with a suspected fetal anomaly or highrisk screening result should be referred to Specialist screening midwives and the Consultant Obstetric Lead for Fetal Medicine: refer to flow chart Appendix B.

The woman should be contacted by a member of the multidisciplinary team at the earliest opportunity (ideally within 24 hours see appendix B) for a full explanation of the implications of the risk and subsequent options for care. An appointment should also be offered within 72 hours to the Consultant Obstetric Lead for Fetal Medicine or 5 working days for a specialist tertiary centre appointment. This team may include Consultant Obstetrician/ Senior middle grade / Paediatrician/ Ultrasonographer/ Specialist Screening Midwife.

6.2 Referral to a tertiary centre

Women who require or request a referral to a tertiary centre for diagnosis or Consultation should have an appointment within 5 working days. The referral is electronically emailed to the referral centre, using the generic screening email address; esh-tr.ScreeningResults@nhs.net by the specialist screening midwife with assistance from the screening clerk or maternity support worker (where required). Referral packs facilitate this process and allow documentation of all actions, all communication and referral processes throughout the episodes of care. The referral centre contacts the woman to arrange the appointment at a mutually convienient time. The screening midwives chase the allocation of the appointment. All referrals are recorded on a spreadsheet 'fetal abnormality register / referral log', on the Trust 'S' drive, to enable effective tracking of appointments, outcomes and plans.

Women who are referred for further testing, including invasive procedures, should be given full information about the tests they may be offered so that they have time to prepare questions in order to make decisions. Women should be given written or electronic information where available (leaflets regarding invasive tests available).

Parents should be given information regarding the fetal abnormality from the UK national screening resources on the gov.uk website FASP: parent information on screening for conditions - GOV.UK (www.gov.uk)and they should be made aware of additional support from agencies such as Antenatal results and choices (ARC www.arc-uk.org

6.3 Following diagnosis of fetal abnormality

If a diagnosis of fetal abnormality is confirmed, ongoing multidisciplinary care needs to be planned. The Specialist Screening midwives will liaise with the tertiary referral centre for ongoing care with assistance and guidance by the named Consultant. The screening midwives will provide support and advocacy throughout the pregnancy and co-ordinate the care.

Parents should be given the opportunity to have paediatric, fetal medicine specialist or geneticist consultation in order for them to have information about the condition and the likely outcomes before they decide whether or not to continue with the pregnancy. It may be necessary to have repeated consultations to enable fuller understanding before a decision is made. Where necessary referral to another specialist service should be arranged, e.g. genetics, cardiology, and this must be documented in the maternal notes.

Time should be given for the information to be absorbed and for a decision to be made and all relevant contact details must be provided.

If a termination of pregnancy is requested, information about the termination process, including the possibility of fetocide for severe fetal anomaly, should be discussed. Please refer to Clinical Guideline for Pregnancy Loss http://eshealthcare/guideline/1060.pdf. The Maternity checklist with advice regarding documentation and the process can be found on the trust extranet, under maternity, under Bereavement, Called ‘Bereavement Checklist Maternity’ . All wishes and decisions taken by the parents should be clearly documented in the antenatal care record on Badgernet.

Where the pregnancy continues, frequent multidisciplinary meetings should take place with the parents to discuss pregnancy care, labour care, postnatal and neonatal care. These episodes will be documented in the antenatal care record on Badgernet.

Some women will share their care with tertiary centres. Special attention should be made to communications with the woman and the tertiary centre to ensure that she has access to a seamless service and all care options available. The Specialist screening midwives will co-ordinate this and ensure that all episodes of care are documented on Badgernet, and ensure that the woman and her partner are kept fully informed throughout the process. All discussions among the multidisciplinary team and the parents must be documented on Badgernet to ensure continuity of care, including letters from the multidisciplinary team and scan reports.

A clear plan with regard to place of birth will be needed to ensure the baby is delivered in an environment where there is access to appropriate facilities. Paediatric input should be maintained throughout the pregnancy after an initial referral has been sent to the neonatal lead specialist consultant and a plan of care established for the birth. This is to ensure that appropriately skilled staff are available and involved in the care provision.

At the monthly perinatal mortality and morbidity meeting, a representative from the screening team will present pregnancies over 24 weeks gestation where a severe fetal abnormality has been diagnosed or in the case of a high risk pregnancy where paediatric input is required. The list of these high risk pregnancies are circulated to: Paediatric Consultants, Maternity Triage, Delivery suite, SCBU.

When a paediatric plan is created the Antenatal and Newborn Screening Team will upload it to antenatal care record on Badgernet. An alert will also be added to Badgernetinforming staff of the presence of a paediatric plan. This can be identified by the 'ALERT' tab on the bottom of main Badgernet page turning red to notify all staff that actions need to be taken and where the paediatric care plan can be accessed.

In the postnatal period there should be close communication between practitioners providing postnatal care and the neonatal practitioners so that any identified problems can be managed promptly.

6.4 Failsafe

Fail safe Process	Opening the loop	Closing the loop	Ensuring the loop has been closed
Fetal anomaly suspected	Woman informed of scan findings and referred to specialist screening midwives and/or consultants named in Appendix B	Woman offered in house consultant scan appointment within 72 working hours or tertiary centre within 5 working days if no appointment available.	Scan report filed in notes and available on trust scan system. If normal no further action. If fetal anomaly confirmed (or second opinion required), relevant management implemented which may include referral to tertiary centre. Screening midwives are notified and 'fetal abnormality register / referral log' excel spreadsheet populated.
Fetal anomaly confirmed	Woman informed by consultant with full explanation of condition and subsequent management, supported with appropriate literature or web-site support group, as necessary and as available.	Referral to tertiary centre if required within 5 working days.	Screening midwives chase outcome of referral and birth, and populate 'fetal abnormality register / referral log' excel spreadsheet.
Referral to tertiary centre	Screening midwives generate, send and log referral to tertiary centre on 'fetal abnormality register / referral log' excel spreadsheet.	Outcome received from tertiary centre and follow up management organised either locally or at the tertiary centre and actions logged accordingly.	Screening midwives record outcome of birth on spreadsheet and also complete ' the paediatric alert' (a list of high risk pregnancies and their outcomes) which is presented and disseminated at the monthly perinatal mortality and morbidity meetings.

The Screening team have access to aexcel spreadsheet as mentioned above that provide information and are robust failsafe processes and checked weekly by the screening midwives. This is saved on a shared network folder with restricted access which is backed up by the trust IT system. The spreadsheet is called 'fetal abnormality register / referral log'.

This spreadsheet provides the following:

- For the screening midwives to ensure that all the relevant care has been undertaken in a timely manner and outcomes recorded.
- Auditable information for the annual report
- Auditable information for monitoring the pregnancies where severe fetal abnormalities are detected.
- The monthly Paediatric alert will ensure outcomes are followed up especially if the women deliver out of area.

7. Special Considerations

N/A

8. Evidence Base/References

Marteau, T.M. and E. Dormandy. 2001. Facilitating informed choice in prenatal testing: how well are we doing? American Journal of Medical Genetics. 106: 185-90

National Institute for Health and Clinical Excellence. 2021. *Antenatal Care NICE guideline NG201*. London: NICE.

PHE. 2013 (updated 2019). FASP: parent information on screening for conditions. Available ONLINE FASP: parent information on screening for conditions - GOV.UK (www.gov.uk)

Smith, D.K. and T.M. Marteau.1995. Detecting fetal abnormality: serum screening and fetal anomaly scans. *British Journal Medicine.* 3: 133-6

Tercyak, K.P. Psychological Response to prenatal genetic counselling and amniocentesis. *Patient Education & Counselling*. 43: 73-84

SANDS. 2016. Pregnancy Loss and the Death of a Baby: Guidelines for professionals. London: SANDS Available online: Sands2016-Guidelines-2016th-editionPDF.pdf (londonneonatalnetwork.org.uk)

Nursing and Midwifery Council (NMC). 2017 (updated 2021). Practising as a Midwife in the UK: An overview of midwifery regulation. London: NMC.

NHS England/Improvement. 2019. NHS public health functions agreement 2019-20 Service specification no.16 NHS Fetal Anomaly Screening Programme - Screening for Down's syndrome, Edwards' syndrome and Patau's syndrome (Trisomy 21, 18 & 13)

9. Competencies and Training Requirements

Any practice changes that require training will be disseminated through the Specialist Midwife for Antenatal & Neonatal Screening midwives through Mandatory training and other methods like newsletters and emails, and the maternity

10. Monitoring Arrangements

Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Compliance with the guideline, that all women are referred in the recommended time frame	Consultant Audit lead and Consultant Obstetrician CU lead	Audit / [redacted] investigations	Quarterly	Obstetrics and Gynaecology audit meetings / Local Screening steering group	Head of Midwifery Services Managers Midwifery matrons Clinical unit Obstetrics lead, local screening steering group	Consultant Obstetrician Audit lead Specialist Midwife Antenatal and Neonatal Screening
That the referrals that are generated are correct	Specialist screening Midwives	Audit	Monthly	Obstetrics and Gynaecology audit meetings / Local Screening steering group	Head of Midwifery Services Managers Midwifery matrons Clinical unit Obstetrics lead, local screening steering group	Consultant Obstetrician Audit lead Specialist Midwife Antenatal and Neonatal Screening
Outcomes of all babies born within ESHT	Specialist screening Midwives	Paediatric alert / NIPE SMART system	Monthly	Perinatal Mortality and morbidity meetings.	Head of Midwifery Services Managers Midwifery matrons Clinical unit Obstetrics lead, local screening steering group	Consultant Obstetrician Audit lead Specialist Midwife Antenatal and Neonatal Screening

6 Equality and Human Rights Statement

An assessment of this document has been carried out.

Appendix A

Indications for referral for fetal medicine clinics

Fetal Medicine Lead Consultant USS List (EDGH)

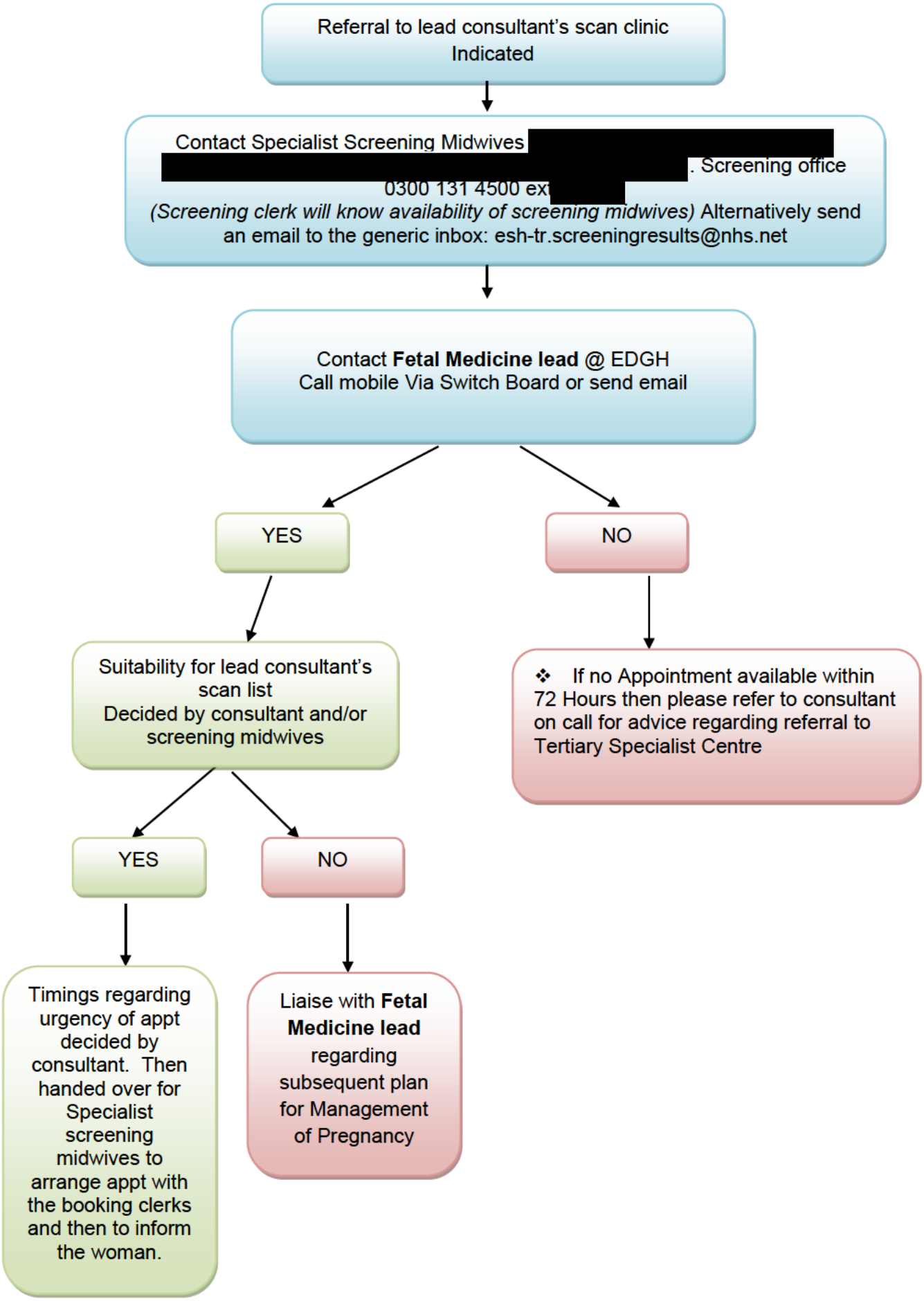
- Suspected fetal anomaly
- Fetal growth problems e.g. early onset IUGR, Twins
- Monochorionic twins
- Previous pregnancy problems e.g. early onset PET, recurrent preterm birth, recurrent mid-trimester loss
- Raised maternal auto-antibodies that could lead to fetal haemolysis
- Difficulty obtaining NT, anomaly view

Please follow Pathway in Appendix B

Indications for fetal cardiac scan with Fetal Medicine Lead Consultant

1. Suspected congenital heart disease on a scan (Fetal Medicine Lead Consultant	If there is any suspicion of a cardiac defect on an USS
2. Family history of congenital heart disease (CHD) in a first degree relative. Fetal Medicine Lead Consultant	First degree relative means that the mother, father or a previous child has a confirmed abnormality of the heart structure. A family history in more distant relatives does not qualify as a referral indication, nor does a history of a "heart murmur" or mitral valve prolapse.
3. Nuchal translucency above 3.5mm (99th centile)	The yield for scanning lesser degrees of NT does not greatly improve detection rates. If there are any concerns on scan about the structure of the heart in a fetus with lesser degrees of NT, this is managed as suspected CHD.
4. Diabetes Mellitus – mothers who are established diabetics on treatment	Only Type 1 or Type 2. Mothers with gestational diabetes do not require a fetal Echo
5. Mothers taking known teratogenic drugs	
6. Fetal hydrops	There is an acknowledged association between hydrops and abnormalities of the heart structure and/or rhythm. Please refer.
7. Fetal Arrhythmia	a. tachycardia (heart rate > 180 beats per minute) – please refer b. bradycardia (heart rate < 100 beats per minute) – please refer c. Irregular rhythm – this rhythm is usually benign and resolves spontaneously however depending on the clinical findings and gestation we will accept a referral
8. Maternal lupus	Mothers who have anti-Ro and /or La antibodies are candidates for fetal cardiology assessment in view of the risk of developing fetal heart block.

Appendix B Referral Flow chart



Appendix C – EIA Form

Equality Impact Assessment Form

1. Cover Sheet

Please refer to the accompanying guidance document when completing this form.

Strategy, policy or service name	Care of Women with Suspected or Identified Fetal Abnormality
Date of completion	May 2022
Name of the person(s) completing this form	[redacted] and [redacted], Antenatal and Neonatal Screening Specialist Midwives
Brief description of the aims of the Strategy/ Policy/ Service	This document provides guidance on caring for women who have had a fetal abnormality identified, and to ensure efficient assessment and management of a woman with a suspected fetal anomaly.
Which Department owns the strategy/ policy/ function	Women and Children's
Version number	V2
Pre Equality analysis considerations	
Who will be affected by this work? **E.g. staff, patients, service users, partner organisations etc.**	This document applies to all staff caring for women within the maternity services at East Sussex Healthcare Trust.
Review date	Leave this blank I'll fill in when it's done
If negative impacts have been identified that you need support mitigating please escalate to the appropriate leader in your directorate and contact the EDHR team for further discussion.	Name: Date:
Have you sent the final copy to the EDHR Team?	

2. EIA Analysis

<table>
<tr><td></td><td>☺ 😐 ☹</td><td>Evidence:</td></tr>
<tr><td>Will the proposal impact the safety of patients', carers' visitors and/or staff?

Safe: Protected from abuse and avoidable harm.</td><td>Choose:
Positive
Neutral
Negative</td><td></td></tr>
<tr><td>Equality Consideration
Highlight the protected characteristic impact or social economic impact (e.g. homelessness, poverty, income or education)</td><td></td><td>
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<tr><td>Race</td><td>Gender</td><td>Sexual orientation</td><td>Age</td><td>Disability & carers</td></tr>
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<tr><td>Is the proposal of change effective?

Effective: Peoples care, treatment and support achieves good outcomes, That staff are enabled to work in an inclusive environment. That the changes are made on the best available evidence for all involved with due regards across all 9 protected Characteristics</td><td>Choose:
Positive
Neutral
Negative</td><td></td></tr>
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<tr><td>What impact will this have on people receiving a positive experience of care?</td><td>Choose:
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Negative</td><td></td></tr>
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<tr><td>Does the proposal impact on the responsiveness to people's needs?</td><td>Choose:
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<tr><td>What considerations have been put in place to consider the organisations approach on improving equality and diversity in the workforce and leadership?</td><td>Choose:
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Neutral
Negative</td><td></td></tr>
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<tr><td colspan="3">Access
Could the proposal impact positively or negatively on any of the following:</td></tr>
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<tr><td>• Patient Choice</td><td>Choose:
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Negative</td><td></td></tr>
<tr><td>• Access</td><td>Choose:
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<tr><td>• Integration</td><td>Choose:
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<tr><td>Engagement and Involvement
How have you made sure that the views of stakeholders, including people likely to face exclusion have been influential in the development of the strategy / policy / service:</td><td>Choose:
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Neutral
Negative</td><td></td></tr>
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Duty of Equality Use the space below to provide more detail where you have identified how your proposal of change will impact.	Choose: Positive Neutral Negative	
Characteristic	**Rating** ☺ ☹ 😐	**Description**
Race	Choose: Positive Neutral Negative	
Age	Choose: Positive Neutral Negative	
Disability and Carers	Choose: Positive Neutral Negative	
Religion or belief	Choose: Positive Neutral Negative	
Sex	Choose: Positive Neutral Negative	
Sexual orientation	Choose: Positive Neutral Negative	

Gender re-assignment	Choose: Positive Neutral Negative	
Pregnancy and maternity	Choose: Positive Neutral Negative	Used for pregnant women
Marriage and civil partnership	Choose: Positive Neutral Negative	

Human Rights

Please look at the table below to consider if your proposal of change may potentially conflict with the Human Right Act 1998

A2	Right to life	**Y/N**
A3	Prohibition of torture, inhuman or degrading treatment	**Y/N**
A4	Prohibition of slavery and forced labour	**Y/N**
A5	Right to liberty and security	**Y/N**
A6 &7	Rights to a fair trial; and no punishment without law	**Y/N**
A8	Right to respect for private and family life, home and correspondence	**Y/N**
A9	Freedom of thought, conscience and religion	**Y/N**
A10	Freedom of expression	**Y/N**
A11	Freedom of assembly and association	**Y/N**
A12	Right to marry and found a family	**Y/N**
Protocols		
P1.A1	Protection of property	**Y/N**
P1.A2	Right to education	**Y/N**
P1.A3	Right to free elections	**Y/N**

East Sussex Healthcare NHS Trust

Clinical Guidance for Second Trimester Obstetric Ultrasound

Document ID number	1627
Version:	V2
Ratified by:	Women and Children's Governance and accountability members
Date ratified:	October 2021
Name of author and title:	Nicky Roberts Consultant Obstetrician and Gynaecologist [redacted] Ultrasound Manager
Date originally Written:	December 2016
Date of current version was completed	October 2021
Name of responsible committee/individual:	Chair of the Guideline Implementation Group for Women and Children's Division
Date issued:	02 November 2021
Review date:	October 2024
Target audience:	All staff including , TWF, Locum and bank staff
Compliance with CQC Fundamental Standard	Regulation 9 Person centred Care Regulation 11 Need for Consent Regulation 12 Safe Care and Treatment Regulation 15 Premises and Equipment
Compliance with any other external requirements (e.g. Information Governance)	N/A
Associated Documents:	ESHT Chaperone Procedure Clinical Guidelines for First Trimester Ultrasound and Down's Syndrome Screening Clinical Guideline for the Management of Placenta Praevia including Management of Placenta Accreta and Placenta Percreta section Saving Babies Lives Care Bundle Version 2, NHS England 2019.

Did you print this yourself?
Please be advised the Trust discourages retention of hard copies of the procedural document and can only guarantee that the procedural document on the Trust website is the most up to date version

Version Control Table

Version number and issue number	Date	Author	Reason for Change	Description of Changes Made
V1.0 2017053	October 2016	Nicky Roberts and [redacted]	New guideline	
V1.1	March 2017	Nicky Roberts and [redacted]	Review	
V1.2	January 2020	Nicky Roberts and [redacted]	Clinical Update Review	
V2	June 2021	Nicky Roberts, [redacted] and [redacted]	Clinical Update Review and Amended to include uterine artery Doppler	

Consultation Table

This document has been developed in consultation with the groups and/or individuals in this table:

Name of Individual or group	Title	Date
Obstetric USS lead		December 2016
Women, children's and sexual health guideline implementation group meeting		November 2016
Women, children's and sexual health Governance and accountability		January 2017
Women and Children's Guideline Implementation group		September 2020
Women and Children's Governance and Accountability		October 2020
Women and Children's Governance and Accountability		October 2021

This information may be made available in alternative languages and formats, such as large print, upon request. Please contact the document author to discuss.

Table of Contents

1. Introduction

The Women's Health ultrasound department endeavours to, in an effective, professional and timely manner, provide an excellent diagnostic ultrasound service to our service users. We aim to ensure that our service is patient centred, with the needs of service users foremost, whilst high standards are maintained.

FASP (2021) recommends a mid –pregnancy scan which is undertaken between 18^{+0} to 20^{+6} weeks of pregnancy to screen for major fetal anomalies which are either incompatible with life or have serious long term implications. This allows the detection of conditions that may benefit from treatment before birth, facilitate planned delivery in an appropriate hospital and the optimisation of treatment after birth. This allows pregnant women/people to make informed choices on any pre or post term intervention or termination.

These guidelines provide a framework for our service to operate

2. Rationale

In accordance with the NHS Fetal Anomaly Screening programme (FASP), this guideline details the screening for Edwards' syndro women/people me and Patau's syndrome and 11 physical conditions as part of the 20-week scan, and is offered to all pregnant women. It takes place between 18^{+0} and 20^{+6} weeks of pregnancy. Scans can be completed up to 23^{+0} weeks of pregnancy. (PHE 2021)

Aims:

- offer all eligible pregnant women/people screening for Edward's syndrome, Patau's syndrome and 11 physical conditions between 18+0 – 20+6 weeks gestation.
- Provide a service which meets national recommendations
- Provide appropriate, accessible information in a range of formats for women/pregnant people to enable them to make an informed choice about their screening options and management
- Provide a pathway including the management of care and options available to the woman/pregnant person if anomalies are detected and the way in which results are communicated
    - diagnostic testing (amniocentesis) is offered if there are unexpected findings at the time of the ultrasound scan.

In addition to FASP screening programme requirements above, this guideline also gives information for sonographers regarding the Uterine artery Doppler scan which should be performed for those women defined as high risk as per the Saving Babies Lives Care Bundle**.** Uterine artery Doppler can be used in the second trimester (20 – 24 weeks alongside routine fetal anomaly scan) to further determine the risk of placental dysfunction and therefore risk of hypertensive disorders or early onset FGR for women/pregnant people at high risk (NHSE 2019).

3. Scope

The following guidance is designed to aid the management of pregnant women/people referred to and reviewed in the Women's Health Ultrasound department for assessment in the second trimester of pregnancy.

4. Definitions

AC – Abdominal circumference
CRIS - Clinical Record Interactive Search
CRL - Crown Rump Length
DNA – Did not attend
FASP – Fetal Anomaly Screening Programme.

FL – Femur Length
HC - head circumference
IVF - In vitro fertilisation
LMP - Last Monthly Period LMP
NHSE – NHS England
PHE – Public Health England
PI - pulsatility indices
Teratogenic - substances or other factors that can cause congenital abnormalities

5. Accountabilities

- Sonographers, Obstetricians and Midwives:
  - To access, read, understand and follow this guideline
  - To use their professional judgement in the application of this guidance
- Managers:
  - To ensure that the guideline is reviewed as required in line with trust and national recommendations
  - To ensure that the guideline is accessible to all relevant staff

6. Process

6.1 Pre-scan Counselling – responsibilities:

6.1.1 Midwives

Women/pregnant people should be given verbal and written information about the pregnancy (and neonatal) screening options available by the community midwife in the form of the Public Health England 'Screening test for you and your baby' leaflet. The online link to access the booklet is attached to an automatic email reply the women/pregnant people receive following their online self-referral to maternity care. If this is not received, it is given prior to or at booking by the midwifery team and will be available via the Badgernet portal.

This information should be given prior to the optimum time of testing so that the woman/pregnant person can make informed decisions whether or not to have the tests/scan. All pregnant people should have discussed the implications of having a mid-pregnancy ultrasound scan with their midwife prior to attending the ultrasound department.

The purpose and implications of the scan must be clearly understood by the woman/pregnant person and verbal consent obtained. Consent should be documented by the booking midwife on the booking entry on Badgernet.
If English is not the pregnant person's first language please see section 6.3 of this protocol.

All women/pregnant people who wish to have an 18^{+0} to 20^{+6} fetal anomaly ultrasound scan, but do not wish to be informed if abnormalities are found, must be advised that all significant findings will be included in the report and therefore should consider not having fetal anomaly ultrasound screening other than for placental location.

Women can be offered the option of having their scan at either site (Eastbourne District General Hospital or Conquest Hospital). The anomaly scan appointment is booked after the first trimester screening scan (if completed), if the pregnant person booked late, the USS appointment team make the appointment on receipt of the request from the community midwifery team. The appointments are 30 minutes for singleton pregnancies and 60 minutes for multiple pregnancies.
The Antenatal and Newborn Screening Team track the booked cohort of pregnant people, receive Did Not Attend (DNA) notifications and follow up when necessary to ensure the

anomaly scan is completed in accordance with Fetal Abnormality Screening Programme (FASP) national guidance.

6.1.2 Sonographers

The woman's identity must be verified. The sonographer has a verbal discussion with the pregnant person regarding the reason for the scan and confirm they wish to proceed with the scan. Consent should be documented by the sonographer on the ultrasound scan entry on Badgernet.

The sonographer must confirm that the woman/pregnant person is aware that the scan is a screening tool and that they understand its limitations and benefits.

The pregnant person should also be aware that if an abnormality is identified that referral for further management and/or tests will be offered.

If the anomaly scan is declined a record must be made on [redacted] and the pregnant person's hand-held maternity notes.

In the case of late bookers (defined for this protocol as ≥ 23 weeks) the pregnant person should be made aware that not all fetal structures can be seen clearly and a full anomaly scan may not be possible.

Any limitations of the scan must be recorded in the report.

If English is not the woman's first language please see refer to 6.3 of this protocol.

6.2 Patient Chaperones

No more than one adult may accompany the pregnant person into the scan room. Ideally, children should not be present however, if this is unavoidable, children must be supervised by an accompanying adult. The trust cannot take responsibility for the supervision of children during an examination. ESHT ***Chaperone Procedure***
http://eshealthcare/guideline/1413.pdf

If maternal age is less than 18 years the above statement applies with the additional allowance of a person with parental responsibility.

6.3 Interpreters

Communication needs (includes preferred languages, sign language; needs relating to impairment, such as lip speakers; use of communication aids) should be assessed and necessary arrangement made to ensure the woman / pregnant person understands the reason for the scan and also the information relayed to them at the end of the appointment. If English is not the woman's first language, or they require alternative aids to support their understanding, an arrangement should be made for an interpreter to be present at the scan (a family member should not be used for this role), or provided with resources to assist, for example the Screening Tests for You and Your Baby Leaflet which is available in alternative languages. If no interpreter is available, the scan should be rebooked with one arranged. However, this will be at the sonographer's discretion.

6.4 Fetal Sexing

The trust does not offer ultrasound examinations for fetal sexing. However, if at the 18^{+0} to 20^{+6} scan the pregnant person wishes to know the sex of their baby and visualisation is possible, this may be divulged. The sonographer must make aware that this is not 100% accurate.

It is the pregnant person's decision whether the fetal sex is to be divulged. If one partner wishes to know the fetal sex and the other does not, the final decision is the pregnant person's.

Repeat scans will not be performed to ascertain fetal sex. Fetal sex is not to be documented on the scan report or for other purposes unless an abnormality of the genital tract is suspected.

6.5 Thermal Images

Parents often wish to have scan images printed. The sonographer must make aware that, if obtainable, there is a charge for these images. The sonographer may use their discretion where there is an issue of affordability.

6.6 Filming

The trust does not allow the use of video cameras, cameras, or telephones during ultrasound examinations.

6.7 Use of 3D imaging

3D/4D ultrasound is not part of the routine anomaly scan but may be used for specific diagnostic purposes. As per the European Committee for Medical Ultrasound Safety[1] (ECMUS 2006, endorsed by BMUS Council, 2007) the use of 3D/4D ultrasound for non-diagnostic purposes is not justified and therefore, must not be performed unless for a specific diagnostic purpose and the risk/benefit ratio has been assessed.

6.8 Assessment of gestational age

All pregnancies must be dated using ultrasound parameters only (not Last Monthly Period LMP).

For pregnancies later than 14 weeks or with a Crown Rump Length (CRL) greater than 84 mm gestational age should be estimated using fetal head circumference (HC)[2].

Please refer to ESHT's ***Clinical Guidelines for First Trimester Ultrasound and Down's Syndrome Screening*** *(section. 6.1)* for further information about the estimation of gestational age in In vitro fertilisation (IVF) and multiple pregnancies.

Women/pregnant people attending for their anomaly scan without previous screening (who have not previously declined this service) will be offered and consented for screening (Quadruple test) if they are less than or equal to 20 weeks and 0 days gestation. The woman/pregnant person must be informed that the quad test only screens for trisomy 21 (Downs Syndrome). The screening test for Trisomy 13 (Patau Syndrome) and Trisomy 18 (Edwards Syndrome), is the fetal anomaly scan.

6.9 Late Bookers

Defined as women/pregnant people who have their first scan ≥ 23 weeks. The HC and femur length (FL) will be used to assess the gestational age[3]. As the assessment of gestational age after 23 weeks can be inaccurate a further scan will be arranged in 2-4 weeks to assess growth velocity (depending on gestation).

---

[1] European Committee of Medical Ultrasound Safety (ECMUS) (2006, updated 2013) *Statement on the Use of Diagnostic Ultrasound for Producing Souvenir Images or Recordings in pregnancy.* European Federation of Societies for Ultrasound in Medicine and Biology.

[2] NICE guidelines [CG62] (2008) *Antenatal Care for uncomplicated Pregnancies.*

[3] Loughna P, Chitty L, Evans T and Chudleigh T (2008) *Fetal Size and Dating: charts recommended for clinical obstetric practice.* Ultrasound

A single attempt will be made to assess fetal anatomy at this scan. The following sentence should be included on the report: "*It is difficult to complete a full anomaly scan at this late gestation, however on this occasion the following were visualised:"*

If the woman has had a full anomaly scan performed at another UK NHS trust it does not need repeating.

6.10 Structures to be examined/required measurements

The following guidelines are taken from the FASP base menu[4]. Image references can be found in the FASP programme handbook 2021, available at: 20-week screening scan - GOV.UK (www.gov.uk)
National guidance, information and processes for the NHS fetal anomaly screening programme (FASP) can be found in the programme handbook:
Fetal anomaly screening programme handbook - GOV.UK (www.gov.uk)

Conditions screened for

- Edwards' syndrome (T18)
- Patau's syndrome (T13)
- anencephaly
- spina bifida
- cleft lip
- congenital diaphragmatic hernia
- gastroschisis
- exomphalos
- congenital heart disease
- bilateral renal agenesis
- lethal skeletal dysplasia

6.10.1 Head and Neck

Technique:

- Assess skull, brain and neck
- Measure head circumference (HC) using a derived ellipse around the outer border of the skull.
- Assess presence of cavum septum pellucidum (CSP).
- Assess the atrium of the lateral ventricle (posteriorly) and measure at the level of the glomus of the choroid plexus from inner wall to inner wall.
- In the suboccipito-bregmatic view assess shape and presence of the cerebellum and measure the transcerebellar diameter (TCD) from outer border to outer border.
- Subjectively assess the nuchal fold. If it appears large, measure the distance between the outer border of the occipital bone and the outer skin edge.

Normal Measurement Ranges:

- Ventricular atrium - ≤ 10 mm
- Nuchal fold - < 6 mm

Images/measurements to Archive:

- Section showing CSP and posterior horn including HC and measurement of the ventricular atrium.
- Suboccipito-bregmatic view including measurement of the TCD

[4] NHS Screening Programmes (2021) *Fetal Anomaly Screening Programme . Programme Handbook.* Public Health England Fetal anomaly screening programme handbook - GOV.UK (www.gov.uk)

- Nuchal fold if measurement ≥ 6 mm.
- Any other abnormalities identified.

6.10.2 Facial Features

Technique:

- Coronal view of lips and nasal tip
- Assessment of facial profile
- Alveolar ridge is desirable but not essential

Images/measurements to archive:

- Coronal view of lips and nasal tip
- Profile View
- Any abnormalities identified.

6.10.3 Lungs and Heart

Technique:

- Assess visceral **situs**/laterality of the heart – stomach and heart on left, with the cardiac apex pointing towards the left.
- Assess **size** – occupies 1/3 of the thorax.
- Assess **shape** - equal sized atria, equal sized ventricles, and patent AV valves.
- Assess **rhythm** – synchronous atrial and ventricular contractions.

For the following, colour Doppler can be helpful but is not essential:

- Assess four chamber view (FCV) – transverse section including a single complete rib and the crux of the heart. Moderator band seen at the apex of the right ventricle.
- Assess the Aorta (Ao) – arising from the left ventricle.
- Assess the pulmonary artery (PA) – arising from the right ventricle, **or** the three vessel view (3VV).
- Assess the three vessel and trachea view (3VT)
- Assess lung echogenicity.

Images/measurements to archive:

- Visceral situs – split screen demonstrating heart and stomach annotated “LT” and “RT”.
- Four chamber view
- Left ventricular outflow tract
- Three vessel view
- Three vessel and trachea view
- Any abnormalities identified.

6.10.4 Abdominal content

Technique:

- **Abdominal section** - transverse section through the abdomen at the level of the stomach and short (proximal third) intrahepatic segment of the umbilical vein with visualisation of a single rib.
- Measure abdominal circumference (AC) using the anterior-posterior abdominal diameter (APAD) and the transverse abdominal diameter (TAD). For APAD, callipers are to be placed on the outer borders from the posterior aspect of the skin covering

the spine to the anterior abdominal wall. The TAD is measured across the widest point of the abdomen, 90° to the APAD[5].
- Presence, size and shape of the fetal **stomach.**
- Assess **abdominal wall** and cord insertion.
- Assess the **diaphragm** in sagittal section demonstrating the stomach below and heart above.
- Assess size and shape of the **kidneys** including the renal pelvis bilaterally. If a renal pelvis appears large in the transverse plane, measure AP diameters from the inner border of the anterior wall to the inner border of the posterior wall.
- Assess the size and shape of the **bladder** in sagittal and transverse sections.
- Assess the echogenicity of the **bowel** in comparison with bone.

Normal measurement ranges:
- Renal pelvis in AP diameter - < 7 mm.

Images/measurements to archive:
- Abdominal section with measurements and stomach.
- Cord insertion.
- Kidneys if renal pelvis measures > 7 mm.
- Any abnormalities identified.

6.10.5 Spine

Technique:
- Examine cervical, thoracic, lumbar and sacral vertebrae in transverse, sagittal and coronal planes.
- Assess skin coverage of the above.

Images/measurements to archive:
- Image sagittal plane with the fetus in prone position, demonstrating the full length of the spine with skin covering, the abdominal aorta and the bladder.

- The coronal plane is desirable but not essential.

6.10.6 Limbs

Technique:
- Assess the presence, size and shape of the femur, tibia, fibula, humerus, radius and ulna.
- Measure the length of a single femur from the central end point of each metaphysis. To do this, the whole femur should visible and positioned as close to horizontal as possible so the angle of insonation of the ultrasound beam is 90°.
- If the femur length plots at or below the 5th centile measure the humeral length and assess all limbs for mineralisation and evidence of fracture.
- Identify the presence of hands, feet, metacarpals and metatarsals.
- Assess the relationship of the feet to the tibia and fibula.

Images/measurements to archive:
- Femur length.
- Humeral length (if required).

[5] Loughna P et.al. (2009) *Fetal size and dating: charts recommended for clinical obstetric practice.* Ultrasound (17:3)

- Any abnormalities identified.

6.10.7 Uterine cavity

Placenta

- Please see ***Clinical Guideline for the Management of Placenta Praevia including Management of Placenta Accreta and Placenta Percreta section*** 6.14 of this guideline
- Assess placental position in longitudinal and transverse planes.
- Document placental location within the uterus and the relationship of the leading edge to the cervical os.
- If the placenta is more than 2 cm away from the cervical os, document the placenta as "anterior/posterior high on scan report.
- If the placenta is "low", include the measurement in the report.
- **Archive** a single image demonstrating the leading placental edge and its relation to the internal cervical os.

Umbilical Cord

- Identify three vessels in the cord - two arteries and one vein.
- Can also be assessed using colour Doppler at the fetal bladder.

Liquor

- Subjectively assess liquor – if believed to be reduced or increased perform and document a single deepest pool measurement.
- Normal range: 2 to 8 cm.

Uterus and Maternal Adnexa

- Document presence, size and position of any fibroids. Ensure antenatal clinic appointment is arranged if fibroids are detected.

Assess both adnexa and document the presence, size and echogenicity of any cysts or masses.

6.11 Uterine Artery Doppler

- Uterine artery Doppler should be performed for those women defined as high risk as per the Saving Babies' Lives algorithm (See appendix D). A table of indications for Uterine Artery Doppler (UtAD) can be found below:

INDICATIONS FOR UTERINE ARTERY DOPPLER
Maternal Medical History: Chronic kidney disease Hypertension Autoimmune disease (SLE, APLS) Cyanotic congenital heart disease Pre-existing Diabetes **Obstetric History**: Previous FGR (<3rd Centile) Hypertensive disease in previous pregnancy Previous SGA stillbirth **Current Pregnancy**:

Low PAPP-A (<0.04 MoM) Echogenic bowel Significant bleeding (consultant Decision) EFW <10th centile

Technique:

- Obtain Doppler of three similar and consecutive waveforms for each uterine artery
- Measure pulsatility indices PI using a combination of automatic and manual tracing techniques to ensure accurate measurement
- Record the mean PI of the right and left Uterine artery in the scan report

Directions and further information can be found in Appendix E.

Images/measurements to archive:

- Doppler image for both left and right uterine arteries with relevant measurements

Normal measurement range:

- Singleton pregnancy PI <1.5
- Multiple pregnancy PI <1.21

https://www.isuog.org/uploads/assets/uploaded/1c577d7a-ae11-415d-bfeb911e2cafcf11.pdf

Management:

High risk women/pregnant people requiring uterine artery Doppler require further growth scans to be arranged. Please make these arrangements for Management of high risk women requiring Uterine Artery Doppler as per the flow chart in Appendix F.

6.12 Normal Variants

FASP (2021) recommend that if one or more of the normal variants listed below are seen, the woman/pregnant person does not need referral for further assessment as part of the NHS FASP.

- choroid plexus cyst(s)
- dilated cisterna magna
- cardiac echogenic foci
- two vessel cord

T21, T18 and T13 chance results must not be recalculated following the 20-week screening scan

However, the following findings **should be reported and the woman referred for further assessment by a Fetal Medicine Consultant:**

- nuchal fold greater than 6 mm
- ventriculomegaly (atrium greater than or equal to 10 mm)
- echogenic bowel (with density equivalent to bone)
- renal pelvic dilatation (AP measurement greater than 7 mm) – refer for 32 weeks scan for reassessment.
- small measurements of HC, AC and FL when compared to dating scan (significantly less than 5th centile on national charts).

Markers	Normal	Abnormal & Referral
Renal pelvis dilatation	≤ 7 mm	> 7 mm reassess at 32^{+0}
Choroid plexus cysts	single or multiple	do not refer
Cardiac echogenic foci	single or multiple	do not refer
Nuchal fold	< 6 mm	≥ refer to screening co-ordinator
Ventricular atrium	≤ 10 mm	As above
Echogenic bowel	Echogenicity less than bone	≥ bone, As above
Short Femur	≥ 5^{th} centile	≤ 5^{th} centile, As above
Cord vessels	3 vessels	2 vessels, see below

6.12.1 Two vessel cord

If a two vessel cord is found at the anomaly scan, assess the fetal heart and urinary tract as per above guidelines. If found to be normal, document the following sentence in the report and arrange a further scan at 34 weeks to monitor fetal growth:

"*A 2 vessel cord was seen on today's scan. The fetal heart and urinary tract did not appear to have any structural problems, and the remaining anatomy showed no further abnormality."*

6.13 Fetal Measurements

- The HC, AC and FL should be used to assess fetal growth where the gestational age has previously been determined.
- If fetal measurements plot towards the lower centiles, an interval growth scan in 2-3 weeks should be arranged.
- If fetal measurements plot below the 5^{th} centile, refer to obstetrician for review.

For late bookers please see guidelines detailed in section 6.9 – Late Bookers.

6.14 Placenta

- Assess placental position in longitudinal and transverse planes.
- Document placental location within the uterus and the relationship of the leading edge to the internal cervical os.
- If the placenta is "low", include the measurement in the report.
- If the placenta is more than 2 cm away from the cervical os, document the placenta as "anterior/posterior high on scan report.
- **Archive** a single image demonstrating the leading placental edge and its relation to the internal cervical os.
- Placental lakes are a normal variant and should not be commented on.

6.15 At the anomaly scan

- If the leading edge is > 2 cm from the cervical os, deemed not low.
- If the leading edge is 2 cm from os or overlaps by ≤ 2 cm the placenta should be reported as low and rescanned at 32 weeks.
- If the leading edge extends > 2 cm over the os, note this on the report and refer to a consultant obstetrician for review in ANC. These women/pregnant people should be advised to contact the Triage Midwife should a bleed occur.

Clinical Guideline for the Management of Placenta Praevia including Management of Placenta Accreta and Placenta Percreta**,** Consider vasa praevia if there is a velamentous

cord insertion, low lying placenta, bilobed placenta and perform a TVS. Refer to fetal medicine if concerns regarding vasa praevia, caesarean section and a low lying placenta

6.16 At 32 weeks

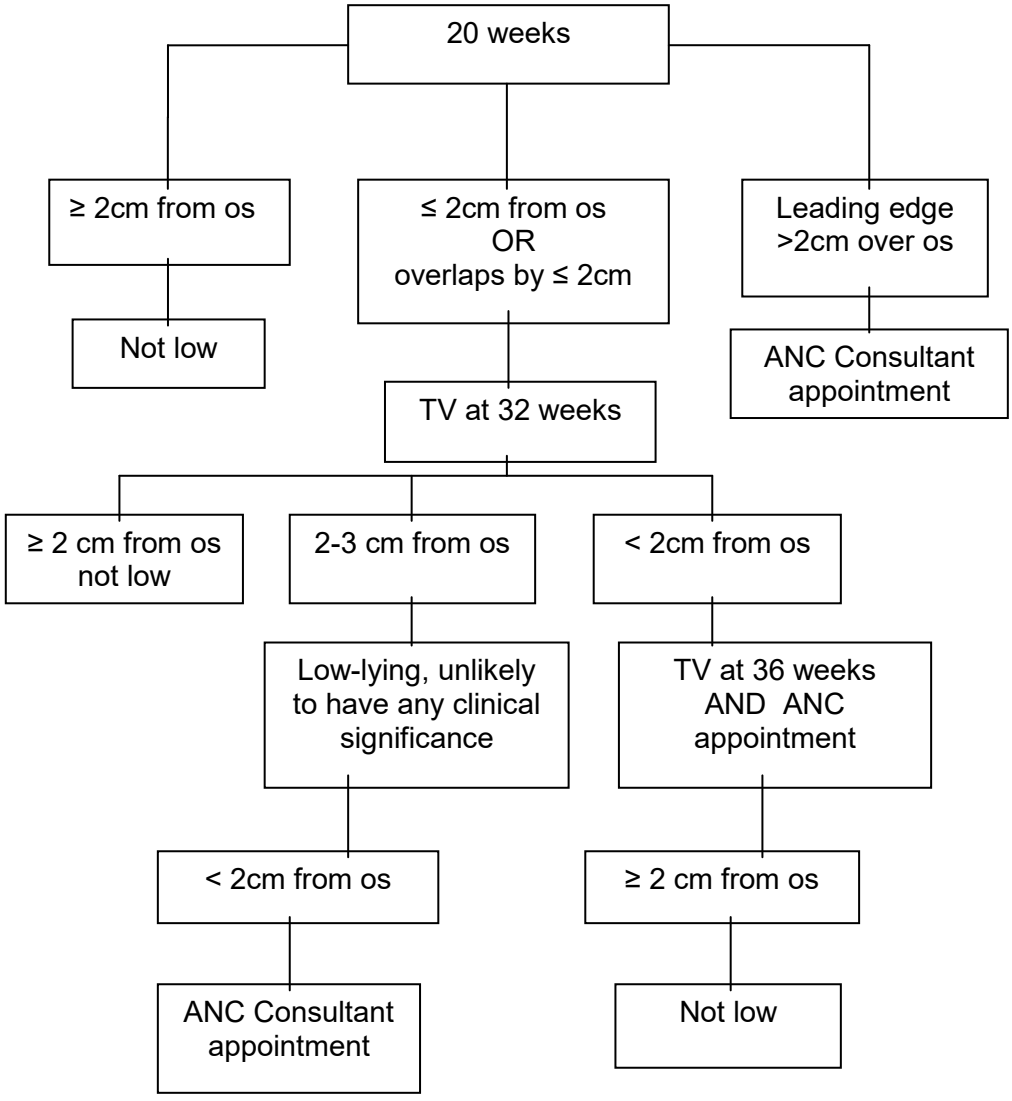
Assessment using **transvaginal** ultrasound:

- If the leading edge is ≥ 2 cm away from the os, report as not low.
- If the leading edge is ≤ 2 cm from the os, rescan at 36 weeks and arrange a consultant appointment for review in ANC. The patient should be advised to contact the Triage Midwife should a bleed occur.

6.17 At 36 weeks

- If the leading edge is ≥ 2 cm from the os, report as not low.
- If the leading edge is < 2 cm from the os, refer to a consultant for review in ANC.

Below is a flow chart for the above guidelines:



CHECK PLACENTAL DISTANCE AT 32 WEEKS

6.18 Rescans

If the anomaly scan is compromised due to one of the following a single further scan must be offered at and completed by 23^{+0} weeks gestation.

- increased maternal BMI
- uterine fibroids
- abdominal scarring
- sub-optimal fetal lie

If after the second attempt the assessment of fetal anatomy remains compromised the woman should be told that the screening is incomplete and the following should be documented in the report:

"Two scans have been performed but due to (insert relevant statement) *we have been unable to complete the full anomaly scan."*

When a woman / pregnant person attends for a 'completion of anomaly scan', please check who performed the previous scan. If you yourself performed the initial scan AND you are unable to assess the remaining anatomy at the second attempt please refer to the consultants undertaking specialist scan lists for a second opinion, via the screening team. This is not required where the initial attempt was performed by a different Sonographer.

If a rescan to complete the anomaly scan cannot be arrange by 23^{+0}, this should be escalated to the Lead sonographer. They will endeavour to identify an appointment within the time frame stipulated.

6.19 Post scan counselling/referral pathways

The sonographer is responsible for informing the woman/pregnant person of scan results after the scan is completed.

6.19.1 Reports and Images

- A printed copy of the written report should be filed in the patient's hand-held notes.
- An electric copy must be stored on the [redacted] system.
- Images detailed in section 11 should be stored onto the hospital PACS system. Other images can be taken at the sonographer's discretion.

6.19.2 Abnormalities

- All women/pregnant people should be informed of the presence of any abnormalities or inconclusive results before leaving the scan room by the sonographer.
- Any abnormal anatomical conditions identified at this stage **must be referred to the screening midwives at: esh-tr.ScreeningResults@nhs.net**
- **Follow "care of women with suspected or identified fetal abnormality" guidelines. http://eshealthcare/guideline/623.pdf**

FASP standards (2018 – updated 2021) require local referral to have taken place within 3 working days, and referrals to tertiary centres within 5 working days.

6.20 Screening Incidents

All incidents that arise from a screening programme should be reported via:

- The Trust incident reporting process
- The Public Health England process: Managing Safety Incidents in NHS Screening

- Programmes. The following link provides further information https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/672737/Managing_safety_incidents_in_National_screening_programmes.pdf

7. Special Considerations

8. Evidence Base/References

Behide, A. et al (2013). ISUOG Practice Guidelines: use of Doppler ultrasonography in obstetrics. *Ultrasound Obstet Gynecol.* 41, pp.233-239. DOI: 10.1002/uog.1237/

Mental Capacity Act 2005 c.9 legislation.gov.uk Mental Capacity Act 2005 (legislation.gov.uk)

NHS England 2019 Saving Babies Lives Care Bundle Version 2. Available online: Saving-Babies-Lives-Care-Bundle-Version-Two-Updated-Final-Version.pdf (england.nhs.uk) [accessed 21/09/2021]

PHE (2018) Fetal anomaly screening standards valid for data collected from 1 April 2018. Available online: Fetal anomaly screening standards valid for data collected from 1 April 2018 - GOV.UK (www.gov.uk)

PHE (2019) *NHS public health functions agreement 2019/20, Service specification no.17. NHS Fetal Anomaly Screening Programme – 18^{+0}-20^{+6} week fetal anomaly scan.* NHS England NHS public health functions agreement 2019-20 (england.nhs.uk)

PHE (2021) *Fetal Anomaly Screening Programme . Programme Handbook*. Available online: Fetal anomaly screening programme handbook - GOV.UK (www.gov.uk)

9. Competencies and Training Requirements

The NHS Fetal Anomaly Screening Programme (Service Specification no.17) recommends that any person undertaking ultrasound scan on pregnant women/people, for the purpose of screening and diagnosis of a related condition should hold, as a minimum, one of the following:

- Certificate or Diploma in Medical Ultrasound (CMU/DMU) of the College of Radiographers (CoR) with evidence of appropriate continuous professional development (CPD).
- Post Graduate Certificate in Medical Ultrasound (PgCert) in obstetric ultrasound approved and validated by a Higher Institute of education and accredited by the Consortium for Sonographic Education (CASE or equivalent).
- Royal College of Obstetricians and Gynaecologists (RCOG) Royal College of Radiologists (RCR) Diploma in Obstetric Ultrasound or the Advanced Skills Training Module
- Sonographers with non-UK qualification should register on the Voluntary Register of Sonographers (SCoR)
- An annual professional development review should be undertaken for each health professional performing ultrasound screening.
- Compulsory on-line FASP training courses must be completed as per directed.

10. Monitoring Arrangements

11. Document Monitoring Table

Element to be Monitored	Lead	Tool for Monitoring	Frequency	Responsible Individual/Group/ Committee for review of results/report	Responsible individual/ group/ committee for acting on recommendations/action plan	Responsible individual/group/ committee for ensuring action plan/lessons learnt are Implemented
Undetected Rate of fetal abnormality	Consultant Obstetrician lead in Fetal Medicine and Screening Lead Midwife	[redacted] Audit, Annual Report	Ongoing and Yearly for the Annual Report	Screening Steering Group, Directorate Unit Meeting	Screening Steering Group Directorate Unit Meeting	Lead consultant in fetal medicine. Screening Lead Specialist Midwife and her team and Head of Midwifery

Appendix A – EHRA Form

A Due Regard, Equality & Human Rights Analysis form must be completed for all procedural documents used by East Sussex Healthcare NHS Trust. Guidance for the form can be found here on the Equality and Diversity Extranet page.

Due Regard, Equality & Human Rights Analysis

Title of document: Clinical Guidance for Second Trimester Obstetric Ultrasound
Who will be affected by this work? Women in the second trimester of pregnancy.
Please include a brief summary of intended outcome: The following guidance is designed to aid the management of women referred to and reviewed in the Women's Health Ultrasound department for assessment in the second trimester of pregnancy. Professional judgement may be used in the application of this protocol.

		Yes/No	Comments, Evidence & Link to main content
1.	**Does the work affect one group less or more favourably than another on the basis of:** (Ensure you comment on any affected characteristic and link to main policy with page/paragraph number)		
	• Age		
	• Disability (including carers)		
	• Race		
	• Religion & Belief		
	• Gender		
	• Sexual Orientation (LGBT)		
	• Pregnancy & Maternity	Yes	Pregnant women
	• Marriage & Civil Partnership		
	• Gender Reassignment		
	• Other Identified Groups		
2.	**Is there any evidence that some groups are affected differently and what is/are the evidence source(s)?**		N/A
3.	**What are the impacts and alternatives of implementing / not implementing the work / policy?**	N/A	
4.	**Please evidence how this work / policy seeks to "eliminate unlawful discrimination, harassment and victimisation" as per the Equality Act 2010?**	N/A	
5.	**Please evidence how this work / policy seeks to "advance equality of opportunity between people sharing a**	N/A	

	protected characteristic and those who do not" as per the Equality Act 2010?	
6.	**Please evidence how this work / policy will "Foster good relations between people sharing a protected characteristic and those who do not" as per the Equality Act 2010?**	N/A
7.	**Has the policy/guidance been assessed in terms of Human Rights to ensure service users, carers and staff are treated in line with the FREDA principles (fairness, respect, equality, dignity and autonomy)**	N/A
8.	**Please evidence how have you engaged stakeholders with an interest in protected characteristics in gathering evidence or testing the evidence available?**	N/A
9.	**Have you have identified any negative impacts or inequalities on any protected characteristic and others? (Please attach evidence and plan of action ensure this negative impact / inequality is being monitored and addressed).**	No

Appendix B

Indications for referral to the consultants undertaking the specialist scan **clinics**

- Suspected fetal anomaly
- Fetal growth problems e.g. early onset IUGR, Discordant growth in twins
- Monochorionic twins where there is suspicion of TTTS, NT discrepancy, growth discordance
- Previous pregnancy problems e.g. early onset PET, recurrent preterm birth, recurrent mid-trimester loss, previous abnormality
- Raised maternal auto-antibodies that could lead to fetal haemolysis
- Suspicion of placenta accreta, vasa praevia

Indications for fetal cardiac scan with Miss Roberts

1. Suspected congenital heart disease on a scan – Sonorapher referral
If there is any suspicion of a cardiac defect on an ultrasound scan

2. Family history of congenital heart disease (CHD) in a first degree relative - midwife.
First degree relative means that the mother, father or a previous child has a confirmed abnormality of the heart structure. A family history in more distant relatives does not qualify as a referral indication, nor does a history of a "heart murmur" or mitral valve prolapse.

3. Nuchal translucency above 3.5mm (99th centile) - Sonographer
The yield for scanning lesser degrees of NT does not greatly improve detection rates. If there are any concerns on scan about the structure of the heart in a fetus with lesser degrees of NT, this is managed as suspected CHD.

4. Diabetes Mellitus – mothers who are established diabetics on treatment – ANC Team
Mothers with gestational diabetes do not require a fetal Echo

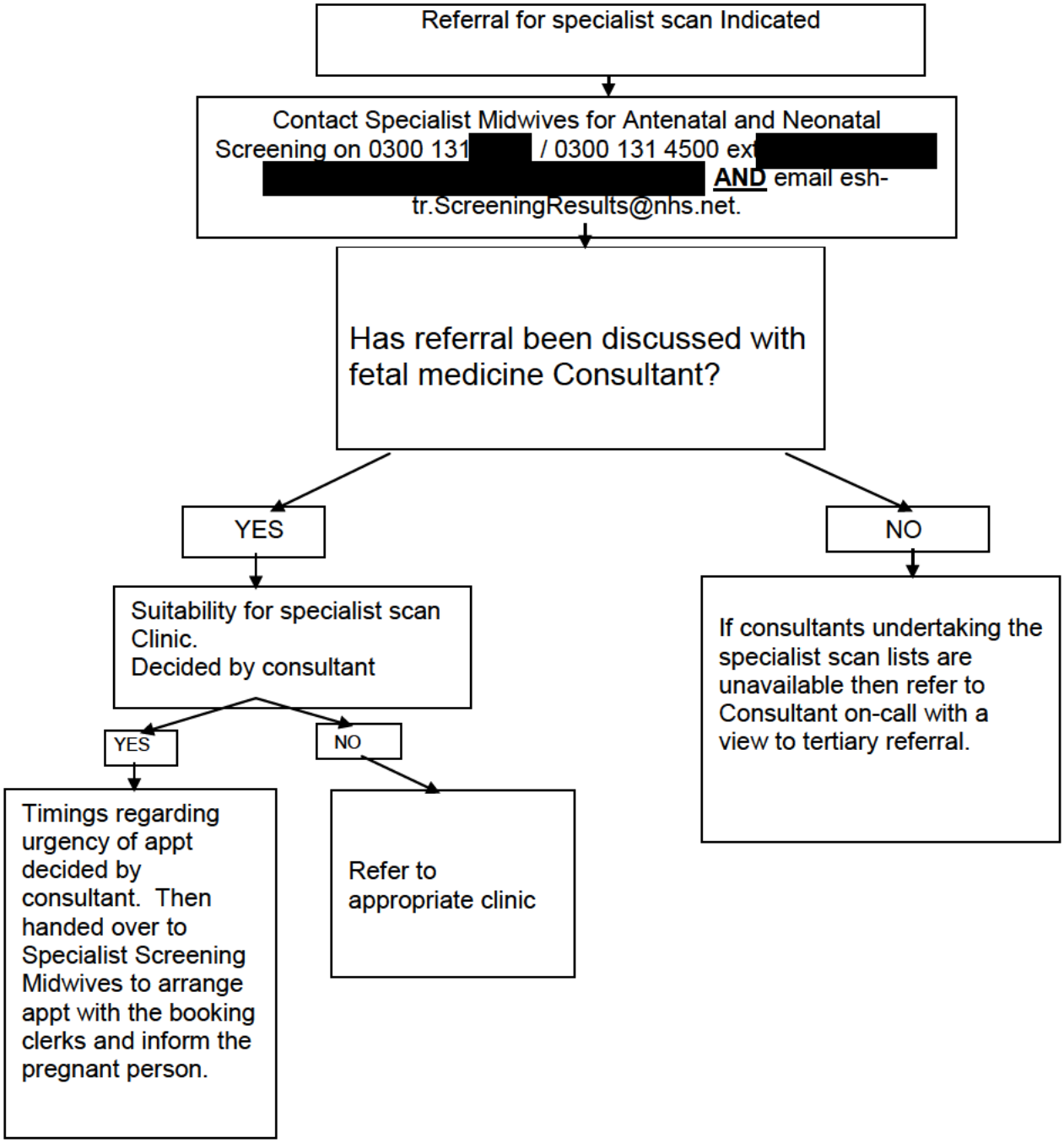
5. Mothers taking known teratogenic drugs – ANC Team/Midwife to liaise with Screening Team regarding specific drug and timing of USS

6. Fetal hydrops - Sonographer
There is an acknowledged association between hydrops and abnormalities of the heart structure and/or rhythm. This is a referral indication

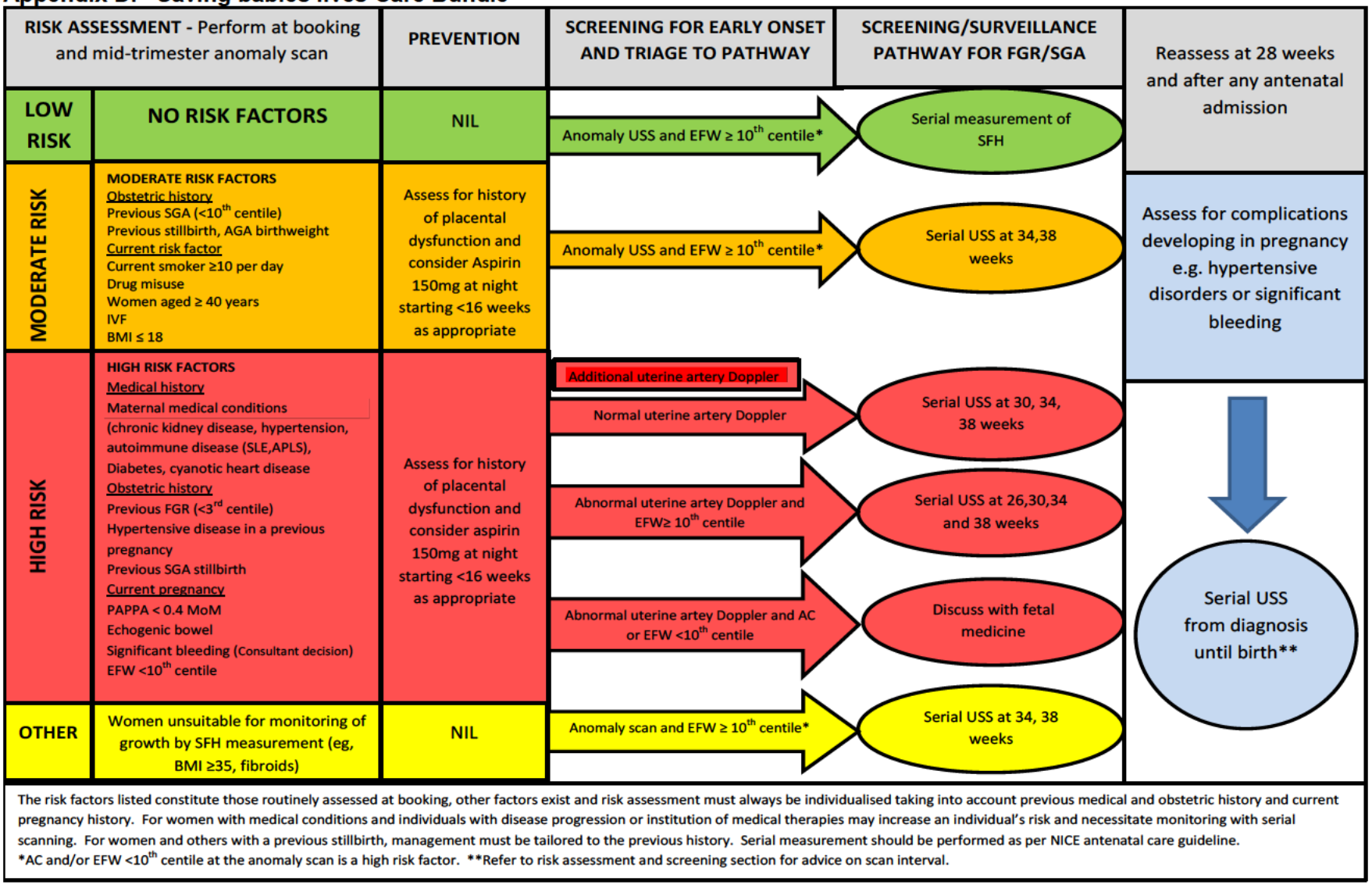
7. Fetal Arrhythmia – midwife via Day Assessment Unit (DAU)
a. tachycardia (heart rate > 180 beats per minute) – please refer
b. bradycardia (heart rate < 100 beats per minute) – please refer
c. Irregular rhythm – this rhythm is usually benign and resolves spontaneously however depending on the clinical findings and gestation we will accept a referral

8. Maternal lupus – ANC
Mothers/pregnant people who have anti-Ro and /or La antibodies are candidates for fetal cardiology assessment in view of the risk of developing fetal heart block.

APPENDIX C Referral pathway



Appendix D. Saving babies lives Care Bundle



The risk factors listed constitute those routinely assessed at booking, other factors exist and risk assessment must always be individualised taking into account previous medical and obstetric history and current pregnancy history. For women with medical conditions and individuals with disease progression or institution of medical therapies may increase an individual's risk and necessitate monitoring with serial scanning. For women and others with a previous stillbirth, management must be tailored to the previous history. Serial measurement should be performed as per NICE antenatal care guideline.
*AC and/or EFW <10th centile at the anomaly scan is a high risk factor. **Refer to risk assessment and screening section for advice on scan interval.

Appendix E: Uterine Artery Doppler Examination for High Risk Pregnancies

Introduction:
The Department of Health Governments mandate to NHS England in 2016-2017 was an overall goal to significantly reduce the rate of stillbirth in England. The NHS Long Term Plan reiterates the NHS's commitment to a 50% reduction in stillbirth, maternal mortality, neonatal mortality and serious brain injury and a reduction in preterm birth rate, from 8% to 6%, by 2025. NHS maternity services in England have never been safer. However, stillbirth rates in the United Kingdom continue to be among the highest of high income countries. The UK stillbirth rate (4.7/1000) is more than double that of the best performing nation Iceland (1.3/1000). There is also a 25% variation in stillbirth rate across different regions. Saving Babies Lives maternity initiative incorporates the use of uterine artery Doppler examination within the algorithm in order to assist in achieving the aforementioned goal.

The use of uterine artery Doppler screening for women/people whose pregnancies are at high risk for placental dysfunction will require training of the ultrasonography workforce but allows triage to pathways which require fewer third trimester scans.

Pregnancies considered high risk for early onset Fetal growth restriction (FGR) should have Uterine artery Doppler assessment at the anomaly scan. Risk factors for high risk pregnancies and indications for Uterine artery Doppler can be found in the table below.

INDICATIONS FOR UTERINE ARTERY DOPPLER
Maternal Medical History: Chronic kidney disease Hypertension Autoimmune disease (SLE, APLS) Cyanotic congenital heart disease Pre-existing Diabetes **Obstetric History**: Previous FGR (<3rd Centile) Hypertensive disease in previous pregnancy Previous SGA stillbirth **Current Pregnancy**: Low PAPP-A (<0.04 MoM) Echogenic bowel Significant bleeding (consultant Decision) EFW <10th centile

Technique:

The probe is placed longitudinally in the lower lateral quadrant of the abdomen, and angled medially

Use Colour flow mapping to identify the uterine artery as it appears to cross the external iliac artery.

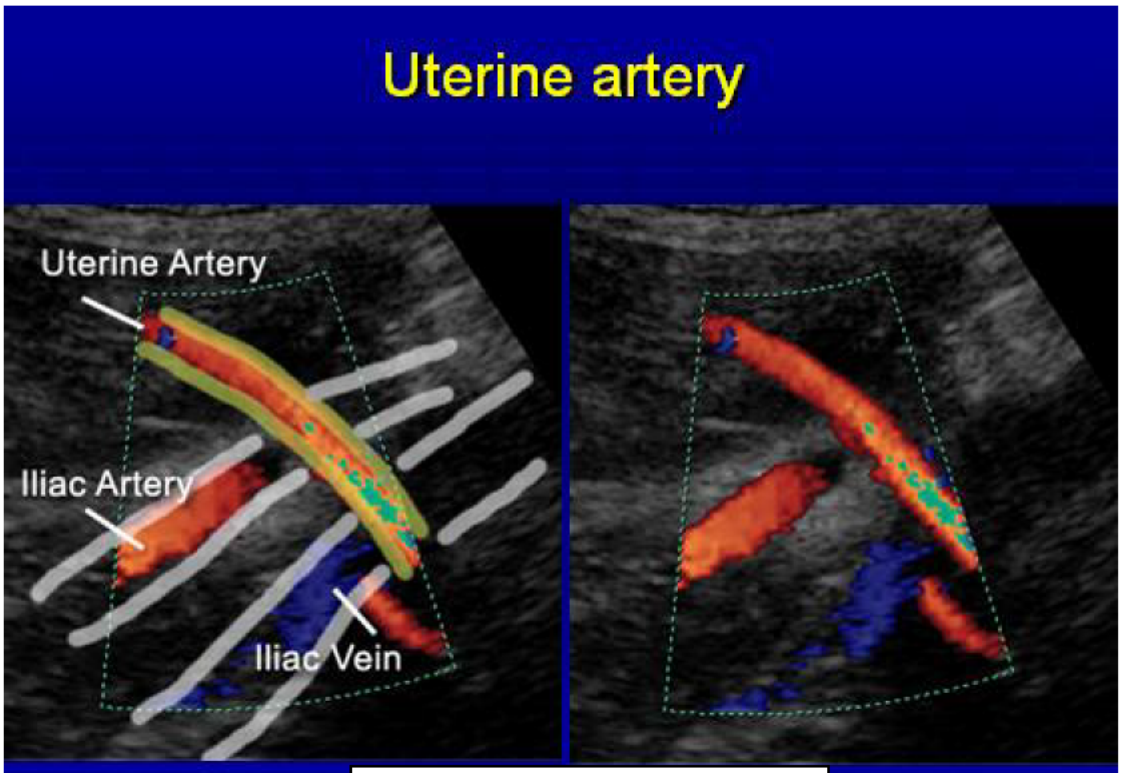


Figure 1: Uterine Artery with CFD.

The sample gate set at 2mm is placed approximately 1cm downstream from the crossover point. Care should be taken that the angle of insonation is less than 30 degrees

Occasionally the uterine artery branches before the intersection of the external iliac artery; in this case the sample volume should be placed on the main artery just before the bifurcation.

The same process is repeated for the contralateral uterine artery.

N.B It is important to note that with advancing gestational age, the uterus usually undergoes dextrorotation. Thus, the left uterine artery does not run as lateral as does the right.

Measuring
Capture 3 consecutive waveforms that are similar over 3 times on both sides.

It is important that the peak systolic velocity (PSV) is over 60cm/s to ensure that the uterine artery, rather than arcuate is being measured.

Choose uterine artery Doppler measurements. If using autotracing ensure no wrapping. If there is wrapping then use a manual trace. When using autotracing be careful to not to over measure.

The PI is used; its advantage over RI in evaluation of the uterine artery Doppler waveform is that PI includes in its calculation the averaged value of all maximum velocities during the cardiac cycle rather just two points. The use of PI and notching is the most predictive marker.

The mean PI of both uterine arteries is used: (right PI + left PI) / 2 = mean PI

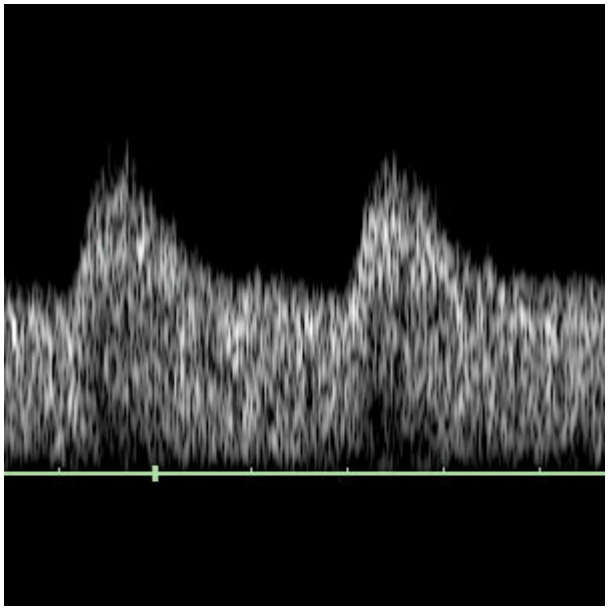


Figure 2. Normal flow velocity waveform from the uterine artery

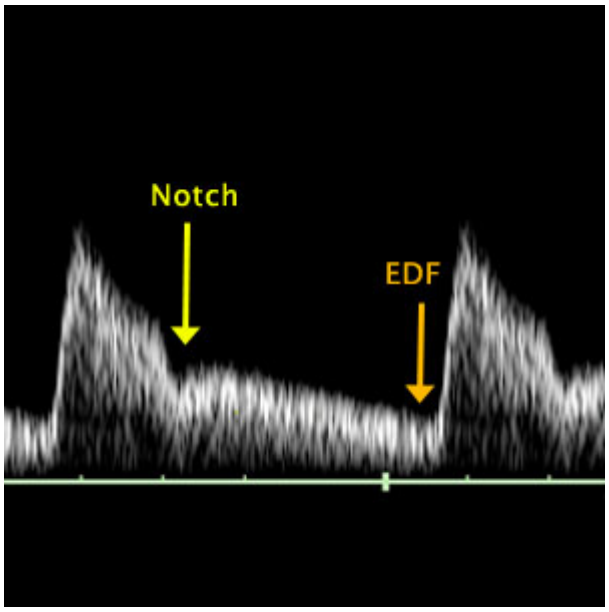


Figure 3: Flow velocity waveform from the uterine artery with impaired placentation; in early diastole there is a notch (yellow arrow) and in late diastole there is decreased flow (orange arrow).

Uterine artery PI >1.5 (95th percentile) can provide further information for the prediction of these adverse outcomes, in order to conduct appropriate clinical interventions, to avoid perinatal morbidity.

Multiple pregnancies

Due to increased placental mass in multiple pregnancy, resulting in lower mean resistance in the uterine arteries, multiple specific reference ranges should be used for Doppler examinations. In a study of DCDA pregnancies the normal PI mean was 1.21. However there is no significant difference between monochoronic and dichorionic (ref Ultrasound in Obstetric and Gynaecology Volume 44, Issue 5 Rizzo G et al 20 Feb 2014)

Images to archive:

- Doppler image for both left and right uterine artery with relevant measurements.

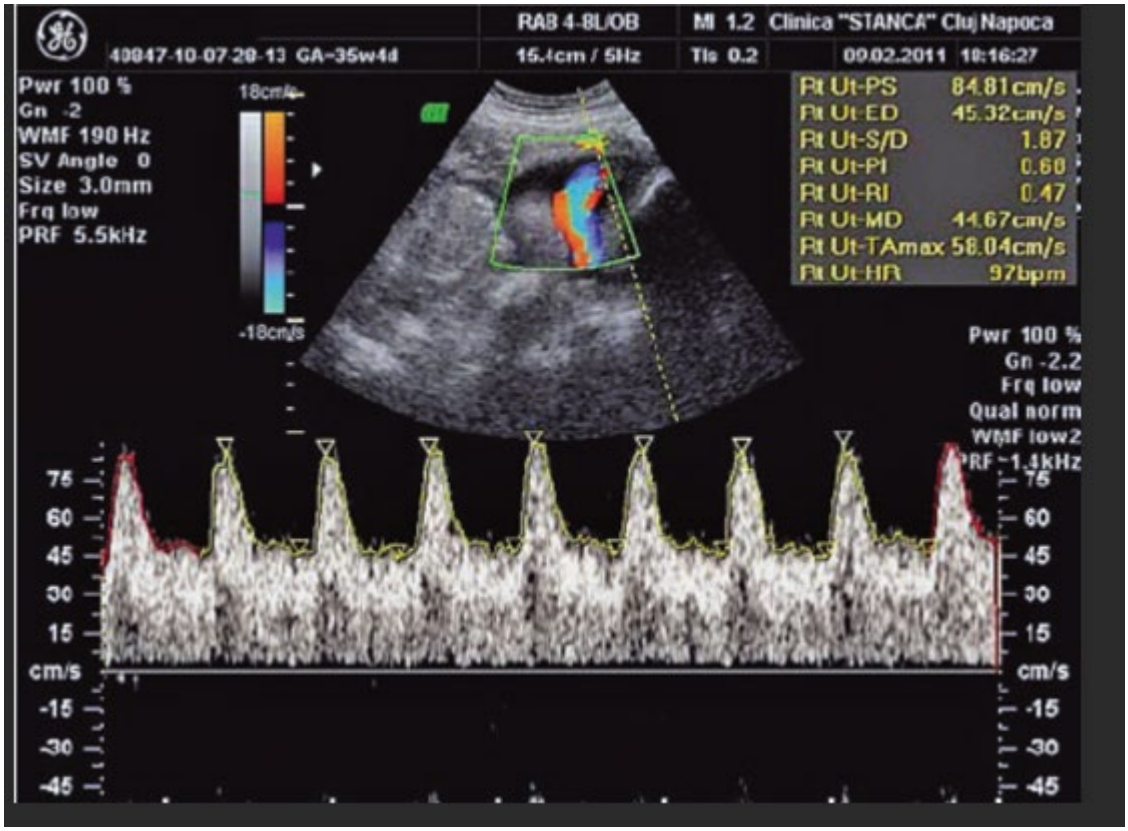


Figure 5 Example of image that should be archived. (researchgate)

References:

https://www.england.nhs.uk/wp-content/uploads/2019/07/saving-babies-lives-care-bundle-version-two-v5.pdf

https://www.isuog.org/uploads/assets/uploaded/14e78edc-7c46-4e3f-a13d6f563be6a9cb.pdf

https://www.isuog.org/uploads/assets/uploaded/1c577d7a-ae11-415d-bfeb911e2cafcf11.pdf

https://www.isuog.org/uploads/assets/uploaded/7e1c5791-8e87-49e1-97656eeb69c8bba9.pdf

https://www.crd.york.ac.uk/crdweb/ShowRecord.asp?LinkFrom=OAI&ID=12008008128&LinkFrom=OAI&ID=12008008128

Behide, A. et al (2013). ISUOG Practice Guidelines: use of Doppler ultrasonography in obstetrics. *Ultrasound Obstet Gynecol.* 41, pp.233-239. DOI: 10.1002/uog.1237/

Appendix F Management of high risk women requiring Uterine Artery Doppler