Worcestershire Acute Hospitals NHS Trust

Antenatal Care
(including referral, booking & risk assessment)

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

This Guideline outlines the schedule of antenatal care expected throughout pregnancy including referral criteria and processed for women with complex care.

This guideline is for use by the following staff groups:

All staff providing antenatal care in community, clinic and hospital settings.

Lead Clinician(s)

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Key amendments to this guideline

Date	Amendment	Approved by:
17/03/2023	Guideline Review. New Referral Pathways outlined.	MGM

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Contents and page numbers

1. Introduction

For women in the United Kingdom, giving birth remains very safe - 9.8 of every 100,000 women die in pregnancy or around childbirth. Most women who died had pre-existing physical or mental health problems (MBRRACE 2018). Forward planning for the care of women with known pre-existing medical or mental health problems can make a real difference to saving women's lives.
Inadequate utilisation of antenatal care services has been shown to be independently associated with increased risk of maternal death in the UK (Nair, Kurinczuk et al. 2015, Nair, Knight et al. 2016). Just over a quarter (26%) of women who died who received antenatal care, received the recommended level of care according to NICE antenatal care guidelines, therefore, early contact and an appropriate plan of care should be instigated. (MBRRACE 2018).

The vision set out in Better Births (2016) is for maternity services across England to become safer, more personalised, kinder, professional and more family friendly; where every woman has access to information to enable her to make decisions about her care; and where she and her baby can access support that is centred around their individual needs and circumstances. Personalised care, centred on the woman, her baby and her family, based around their needs and their decisions, where they have genuine choice, informed by unbiased information. Every woman should develop a personalised care plan (which will be recorded in Badgernet and updated at each contact), with her midwife and other health professionals, which sets out her decisions about her care, reflects her wider health needs and is kept up to date as her pregnancy progresses.

2. Body of Guideline

2.1 Definitions

Midwifery Led Care
The woman's lead care professional will be a midwife. Midwives plan, coordinate and provide care with the woman where no complex risk factors are identified.

Obstetric Led Care
The woman's lead care professional will be a consultant or consultant led team, e.g. fetal medicine or maternal medicine. The members of the medical team plan, coordinate and provide care with the midwives for women where a risk factor has been identified on antenatal risk assessment or is identified during pregnancy.

N.B Some women may be suitable for midwifery led care but may require an opinion from a consultant obstetrician, an appointment should be made as early as possible to ensure that the correct pathway is followed.

Women are seen at booking, either in a hospital or community setting, by an obstetrician with consultant input and a care plan developed – antenatal care is delivered by a midwife in community with easy access to a named obstetrician for advice / review and the woman should return to the consultant clinic at term or just before.

2.2 General Principles for Antenatal Care (NICE 2018)

Pregnant woman should be offered information based on the current available evidence together with support to enable them to make informed decisions about their care. This information should include where they will be seen and who will undertake their care.

Information should be given in a form that is easy to understand and accessible to pregnant women with additional needs, such as physical, sensory or learning disabilities, and to pregnant women who do not speak or read English.

Antenatal care should be provided by a small team of healthcare professionals with whom the woman feels comfortable. The aim should be to provide continuity of care and carer throughout the antenatal period where possible.

Regardless of the care pathway, all women should have a named community midwife as a point of contact.

At each antenatal appointment, healthcare professionals should offer consistent information and clear explanations, and should provide pregnant women with an opportunity to discuss issues and ask questions.

Information about antenatal screening should be provided in a setting where discussion can take place; this may be in a group setting or on a one-to-one basis. This should be done before the booking appointment.

Information about antenatal screening should include balanced and accurate information about the condition being screened for.

Where possible, the environment in which antenatal care appointments take place should enable women to discuss sensitive issues such as domestic violence, sexual abuse and psychiatric illness- see individual guidelines.

Where a sensitive issue requires discussion, it is important to seek clarification with the woman regarding confidentiality and discussion regarding their care.

Women's decisions should be respected, even when this is contrary to the views of the healthcare professional.

Pregnant women should be informed about the purpose of any test before it is performed. The healthcare professional should ensure the woman has understood this information and has sufficient time to make an informed decision. The right of a woman to accept or decline a test should be made clear.

Throughout the entire antenatal period, midwives and medical staff should remain alert to risk factors, signs or symptoms of conditions that may affect the health of the mother and baby, such as domestic violence, pre-eclampsia; fetal growth restriction and diabetes- see individual guidelines.

If a woman is under midwifery led care, there will be a continuous assessment of a woman's suitability to remain under the care of a midwife.

If the midwife has any concerns or queries regarding whether the woman remains suitable for midwifery led care, it is their responsibility at each assessment, to seek advice from the most appropriate senior midwifery or obstetric colleague.

Some women may present physically well but have significant social/ safeguarding requirements. Liaison with the safeguarding team, vulnerable women's team and any appropriate agencies may be indicated.

In the case of a woman not speaking English, a link-worker/ interpreter should be booked in her chosen language for all consultations. Staff should not routinely use family members to interpret. Translation by family may be less accurate and/or information not expressed correctly.

2.3 Referral to maternity services

Community midwives can receive referrals for booking from a number of sources, for example a GP surgery, the woman contacting the midwife directly or via the unbooked women pathway.

A brief triage should take place on the phone by the community admin support/MSW/Midwife and include information such as the woman's lifestyle, family, social medical and obstetric history including anaesthetic history. The triage should be completed based on individual risk and forwarded to the most appropriate location.

Once notified through GP/self-referral, the community midwife will contact the woman by phone and arrange for the booking history to be completed at a convenient location for the woman. When an unbooked patient referral is received from the hospital the community midwife will contact the woman and arrange the booking within 3-5 days of hospital contact. This should be performed before ten weeks of pregnancy to allow sufficient time for the sickle cell and thalassaemia screening to be completed.

At this point any migrant women who have not previously had a full medical examination in the United Kingdom (UK) should have a full medical history taken and clinical assessment of their overall health. If she is initially seen by a midwife an appointment should be made with her General Practitioner (GP) for this medical examination to be undertaken. Referral to GP should be documented on the referral form. Migrant and refugee women should also be referred to the specialist midwife for homeless, refugee and migrant women.

Women who book for care at 20 weeks or later

- These women are referred to as 'late bookers' and should be referred for consultant led care.

NB. If a woman has transferred her care but has had a dating scan and early pregnancy care at another trust this does not constitute a late booker and consultant care is not required unless there are other risk factors evident.

Women who present at the Maternity Unit for care but are unbooked for Antenatal care at any other NHS trust

- These women should be cared for following the unbooked women pathway (see flowchart 2.1)

2.4 Planning Place of Birth / Lead Care Provider

- All women should be offered the choice of planning birth at home, in a midwife led unit or in an obstetric unit and their choice should be supported. This should be discussed at each contact.

All women should be provided with the following information, including local statistics, about all local birth settings:

- Access to midwives, including:
  - The likelihood of being cared for in labour by a familiar midwife
  - One-to-one care throughout labour (not necessarily being cared for by the same midwife for the whole of labour).
- Access to medical staff (obstetric, anaesthetic and neonatal).
- Access to analgesia, including birthing pools, Entonox, other drugs and regional analgesia.
- The likelihood of being transferred to an obstetric unit (if this is not the woman's chosen place of birth), the reasons why this might happen and the time it may take.

The most appropriate place for birth depends on a completed risk assessment (See Appendix 1). If the woman wishes to plan for a birth which is not recommended a referral must be made to a consultant midwife/consultant obstetrician. An individual management plan is made to support the woman's choice and to also provide support to the midwifery team. All plans are documented on BadgerNet to share the required information with the obstetric and midwifery team.

Women with identified risk factors:

- Women with any medical/obstetric/social risk factors identified require further assessment or support and should have a Consultant Obstetrician as the lead professional sharing care with midwives, GP's and other care providers as appropriate e.g. anaesthetists, endocrinologists, neonatologists, psychiatrists and allied health professionals.

An individualised management plan must be made by an obstetrician (consultant or ST4 and above) for all women in whom risks are identified.

Referral to Maternal Medicine

Women who suffer from pre-existing health conditions or have significant past medical or surgical history may need to be referred to the maternal medicine team. This is particularly relevant if the condition affects pregnancy or the pregnancy affects the condition and a multi-disciplinary, cross-speciality team approach is required.

All women with complex pregnancies must have a named lead consultant

Such conditions include;

- intracranial tumours
- cystic fibrosis
- severe asthma or respiratory disease
- congenital cardiac disease or history of corrective cardiac surgery
- severe vascular disease
- any endocrine disorder including diabetes mellitus (hypothyroidism can be managed through obstetric antenatal clinic)
- autoimmune conditions such as SLE
- chronic renal disease
- transplant patients
- inflammatory bowel disease
- cancer (not treated or in remission)
- haematological conditions
- severe epilepsy
- genetic/ chromosome problems
- viral conditions such as HIV

Please note this list in not exhaustive and referral to the maternal medicine team should be made by the consultant obstetrician responsible for the woman or woman's midwife. Please see Appendix 1 tables for maternal medicine criteria lists.

Specialist endocrine, cardiac, pre-term prevention and multiple pregnancy ANC are run across the trust. The maternal medicine team work closely with medics from each speciality with a special interest in obstetrics. An antenatal anaesthetic clinic is run for those with anaesthetic specific risks.

Some patients with complex conditions, may be managed under joint care with our tertiary centre (Birmingham Women's Hospital). Referral for tertiary care made by the maternal medicine team or obstetric consultant responsible for the patient. See Appendix 1. Women requiring tertiary centre care will need early intervention, so early referral (prior to 14 weeks', following viability USS) is required.

In circumstances where regular travel to a tertiary clinic is not possible, ongoing care should be planned via regular (4-6 weekly) MDT discussion with the MMC (Maternal Medicine centre) throughout the pregnancy.

2.5 The first contact with a midwife
2.5.1 Booking appointment

The booking history appointment can take place either at home, GP surgery, clinic or Children's Centre. However, if there are known safeguarding issues the booking appointment should ideally take place in the woman's home, this will allow for a home assessment to be carried out which can take into consideration living conditions.

An initial contact to obtain screening bloods must be completed by 10 completed weeks. A full booking history must be completed by 12+6.

When initially referred, women who are already 12 weeks pregnant or more, should be seen as a priority within 2 weeks.

During the booking visit a full history should be taken and an antenatal risk assessment completed and documented on BadgerNet. Information should include:

- Relevant family history
- Lifestyle history; nutrition, exercise, smoking, drug use and alcohol (the safest approach is not to drink alcohol at all as drinking in pregnancy can lead to long-term harm to the fetus.
- Medical history including anaesthetic and mental health history
- Previous pregnancy details; any information from previous pregnancies is obtained from the hospital records. (If previous pregnancy care was in another hospital, a letter is sent by obstetrician or midwife, requesting a copy of the records or a summary of care. If previous deliveries were in another country, details can be sought from the GP or overseas hospital if required/feasible)
- Whether the women who will decline blood and blood products.

The woman will receive information about her pregnancy and be given an opportunity to discuss issues and ask questions regarding the following:

- **Influenza Vaccine** -Women requiring the 'flu vaccine will be referred to their GP or maternity service <28 weeks for discussion and administration.

- **Whooping cough vaccine**
  It is recommended that vaccination should be offered between gestational weeks 16 and 32 to maximise the likelihood that the baby will be protected from birth. Women should be offered the whooping cough vaccine by their GP or maternity services from their 20th week of pregnancy, or soon after their scan. Women may still be immunised after week 32 of pregnancy but this may not offer as high a level of passive protection to the baby.

- **Smoking Cessation Advice**
  At the first contact with the woman, discuss her smoking status; provide information about the risks of smoking to the unborn child and the hazards of exposure to second hand smoke. Pregnant women should be informed about the specific risks of smoking during pregnancy (such as the risk of having a baby with low birthweight and preterm birth). The benefits of quitting at any stage should be emphasised. Offer personalised information, advice and support on how to stop smoking. Encourage pregnant women to

use local NHS Stop Smoking Services and the NHS pregnancy smoking helpline, by providing details on when, where and how to access them. Discuss the risks and benefits of nicotine replacement therapy (NRT) with pregnant women who smoke, particularly those who do not wish to accept the offer of help from the NHS Stop Smoking Service. (NICE PH26 2010) See Smoking in Pregnancy Guideline.

- **Vitamin D**
  All women should be informed at the booking appointment about the importance for their own and their baby's health of maintaining adequate vitamin D stores during pregnancy and whilst breastfeeding. In order to achieve this, women should be advised to take a vitamin D supplement (10 micrograms of vitamin D per day throughout the pregnancy), as found in the Healthy Start multivitamin supplement. Women who are not eligible for the Healthy Start benefit should be advised where they can buy the supplement. Particular care should be taken to enquire as to whether women at greatest risk are following advice to take this daily supplement. These include:
    - women of South Asian, African, Caribbean or Middle Eastern family origin
    - women who have limited exposure to sunlight, such as women who are housebound or confined indoors for long periods, or who cover their skin for cultural reasons. (NICE PH56 2008)

- **Folic Acid**
  Pregnant women should be advised that folic acid prior to conception and throughout the first 12 weeks, reduces the risk of neural tube defect. The recommended dose is 400mcg per day (if previous neural tube defect, diabetic or epilepsy 5mg needs to be prescribed).

- **Exercise**
  Routine exercise in pregnancy should be encouraged. Women should be advised to continue with any exercise as long as they feel well.

- **Hygiene** - Good hygiene is important in preventing acquisition of infections including group A streptococcus, and also in protecting against transferring the bacterium to the genital tract where it is likely to cause serious infection. Women should be advised to:
    - Wash their hands carefully before and after going to the toilet or changing pads
    - Seek medical advice if they or another household member develops cellulitus, or has a sore throat that is unusually severe &/or persists for more than 48 hours.
    - Avoid close contact with anyone who has been diagnosed with group A streptococcal infection until they have received antibiotics for at least 24 hours

- Lifestyle advice, including recreational drug use and alcohol consumption
- How the baby develops during pregnancy.
- Planned pregnancy care pathway
- Discussion about place of birth options
- Antenatal classes, including breast feeding workshops
- Maternity benefits.

At this appointment the midwife will:

- Document information on previous pregnancies to assess obstetric risk, this should also include the birth weight (and centile). This should be completed at the beginning of the booking appointment and a growth chart generated (this can be amended later once the EDD is confirmed by dating scan).
- Complete an assessment to review suitability for midwifery led care and transfer to consultant led care if appropriate.
- Offer antenatal screening for trisomy's 13,18 and 21 (Patau's Edward's and Down's syndrome)
- Offer early ultrasound scan for gestational age assessment
- Offer ultrasound screening for structural anomalies
- Offer screening for gestational diabetes as required
- Ask about any past or present mental illness or psychiatric treatment
- Ask about mood to identify possible depression and anxiety.
- Ask about the woman's occupation to identify potential risks
- Booking bloods should be taken or a phlebotomy appointment should be arranged for women who choose to have screening and the following tests should be offered:
  - Haemoglobin (Hb)
  - Group specific
  - Rhesus
  - Antibodies
  - Sickle cell and Thalassaemia
  - Infectious diseases – HIV, Hepatitis B, Syphilis

- Offer and discuss the free fetal DNA (ffDNA) screening service for fetal RHD blood group DNA in RhD negative pregnant women. If accepted the test will be taken between 11+2 and 16 weeks- out of area women should have an appointment made to attend the hospital ANC or to attend a blood clinic.

- Obtain blood pressure to obtain a baseline reading.

  - If Blood Pressure is 140/90mmHg or higher, refer to the GP for urgent review. **A follow up appointment should be made for within 1 week of the booking appointment to repeat blood pressure and reassess risk factors (refer to obstetric antenatal clinic if appropriate).**

- Maternal Weight and Height should be obtained at the initial first contact/booking appointment to be able to calculate BMI. BMI at this early stage is important for care planning and pathways throughout pregnancy. This MUST be completed prior to risk assessments and generation of the GROW chart.

- Discuss and offer carbon monoxide (CO) monitoring in pregnancy, Routine CO (carbon monoxide) monitoring is offered at booking to all women and allows a woman to see a physical measure of her smoking and exposure to second hand smoke. Refer to smoking cessation guideline

- Obtain a mid-stream specimen of urine (MSU) and send to Microbiology for screening for asymptomatic bacteriuria. Identification of asymptomatic bacteriuria

and treatment reduces the risk of pyelonephritis. (NICE 2018, WHO 2017) Positive results should be treated with antibiotics in accordance with the sensitivities and trust antibiotic policy for women who are pregnant. She should be advised that after she has completed the course she should have a repeat MSU sent either via her community midwife who should follow up the result, or via the hospital. If she becomes febrile, develops loin pain or vomiting she should contact triage for review of suspected pyelonephritis. If the MSU remains positive the woman should be asked if she completed the course and microbiology advice sought. If the sensitivities are only intravenous alternatives and/or the organism is atypical, microbiology advice should be sought. – MSU Guideline to be Linked

- Discuss and offer/ signpost for Healthy Start Vitamins, eligible women (those in receipt of benefits or at the low income threshold) will be given information on how to apply for healthy start vouchers. Once applied, women will receive information from the Department of Health regarding applicable supermarkets and how to apply. All women who receive healthy start vouchers are also eligible for healthy start vitamins. Every eight weeks' voucher beneficiaries are sent a green vitamin voucher, which they can swap for either Healthy Start women's vitamin tablets or Healthy Start children's drops locally.

- Ensure that the woman is aware of her appointment schedule

- Signpost to Parent Education Classes

2.5.2 Routine Enquiry:

- Routine enquiry should be asked with regard to domestic abuse if the woman is alone and it is safe to do so. Document response under management plan: if negative to screening (no domestic abuse disclosed) enter RE NEG, if positive to screening (domestic abuse disclosed) enter Re POS.

- Women who are known to suffer domestic abuse should be offered care that involves other agencies and disciplines as needed for the individual's situation, within a supportive environment (CMACE, 2011). If they choose midwifery-led care, the midwife should receive support and advice from an experienced colleague, for example the Domestic Violence specialist midwife.

2.5.3 Safeguarding:

Any social risk factors such as domestic violence, substance misuse, mental health, previous child protection concerns should be noted in as much detail as possible. A child protection referral to social services should be made if required; advice can be obtained from a member of the Safeguarding team.

2.5.4 Risk assessment:

- During the booking history a formal risk assessment will be completed. Please refer to Appendix 2 for further guidance for details of conditions to be considered as part of the risk assessment.
- The following additional risk assessments should be considered and completed if applicable:

  - Thromboprophylaxis assessment:

This will be documented as part of the management plan on BadgerNet. All women are assessed and if required will be referred to a haematology clinic.

  - Glucose Tolerance Test (GTT):

All women should be assessed as to whether they require a GTT. Those women with history of gestational diabetes in previous pregnancy should be referred for a Glucose Tolerance Test (GTT) between 16-18 weeks' gestation and again at 24-28 weeks' gestation. For women deemed at risk of developing gestational diabetes a GTT is carried out between 24-28 weeks, ideal gestation being 28 weeks. This will be documented as part of the management plan on BadgerNet

  - Aspirin risk assessment:

The NICE guideline on Hypertension in pregnancy recommends that aspirin is taken by women at high risk or with more than one moderate risk factor for developing pre-eclampsia. This will be documented as part of the management plan on BadgerNet and if there are no identified risk factors 'Criteria for Aspirin not met' should be documented. If the woman is identified as being at risk explain the importance of taking Aspirin and then arrange a prescription to be issued by the GP.

  - SGA risk assessment:

At booking, a detailed history should identify women who have pre-existing risk factors for development of SGA/FGR. This will be documented as part of the management plan on BadgerNet. This should include the documentation of the birth weights of any previous children (and birth centiles calculated on badger).

All information, discussions with the woman and action taken is to be documented on BadgerNet.

2.5.5 Women who live out of area

Women who live outside the catchment area of the hospitals will require their booking history to be taken by their named community midwife. Other Trust's may use different pregnancy records. These will be brought (or faxed if electronic) to the woman's first appointment to enable the midwives in Antenatal Clinic (ANC) to review and complete the Badgernet record. These women will be sent a booking appointment in ANC. This appointment will confirm the details obtained in the initial booking visit, obtain the booking bloods and complete the remainder of the pregnancy care record.

2.5.6 Outcome of booking appointment

Following a detailed assessment, the woman will either:

- Remain under the care of a midwife on a low risk pathway (Midwifery-Led Care)
- Require High risk pathway and transfer of care from midwife to obstetrician (Consultant Led Care)

NB: Some women may be suitable for midwifery led care but may require an opinion from a consultant obstetrician; an appointment should be made as early as possible to ensure that the correct pathway is offered.

2.5.7 Opinion/referral to Consultant Midwife:

Women can be referred by an obstetrician, midwife or another Health Care Professional via Badgernet or self-refer for a consultation with a Consultant Midwife; the most common reasons for referral are:

- Women who wish to develop a personalised birth plan and explore their choice about place of birth with a consultant midwife if there are risk factors that may affect birth choice. This should initially be discussed with the community midwife.
- Women who would like a multi professional opinion about birth planning as their initial plan does not meet their needs
- Women who are requesting a caesarean section because they have anxieties about vaginal birth and wish to explore this option further.
- Women who wish to explore their birth experience.

The reason for referral should be recorded on BadgerNet.

2.6 Documentation of Lead Care Provider

- The Lead Care Professional will be either a Midwife or Consultant.
- The lead care professional must be documented on BadgerNet.

2.7 Individualised Management Plan

- Women with no identified risk factors will follow the standard low risk antenatal care pathway.
- For women where risks are identified at booking or during pregnancy, an individual management plan will be developed and documented on BadgerNet and reviewed at each visit. Further information may be added to an individualised management plan throughout the pregnancy as required.
- Women with complex health history or co-morbidities may require input from additional Consultant team/clinics e.g. Fetal Medicine, Diabetic, Endocrine, Renal, Respiratory, Rheumatology, Haematology, Immunology, Neurology, Multiples.

Decision making tool
Women are central decision makers in their care and discussions about birth timing/planning must include their preferences, wishes and a full, documented discussion of the risks/benefits of any alternative treatments/actions (NICE NG138).

Therefore, healthcare professionals must explain the following points to women being offered induction of labour and these must be documented on Badgernet. They must be given in an unbiased way that the woman can understand. The 'BRAIN' acronym can be used to assist with counselling.

B - benefits	The reasons for intervention being offered and the possible benefits.
R - risks	The possible risks of intervention/investigation and the potential to affect the woman's birth options and their experience of the pregnancy and birth process. **Absolute and relative risks should be quoted where available**
A - alternatives	What are the alterative options to the proposed intervention/investigation?
I - intuition	The woman should be allowed time to: • Discuss the information with her partner before coming to a decision • Encouraged to look at a variety of sources of information and pointed in the right direction for this • Invited to ask questions, and encouraged to think about her options
N - nothing	What would happen if we did nothing? What would happen if we wait an hour? a day? a week? You might apply the first part of the BRAIN acronym to doing nothing: What are the benefits of doing nothing? What are the risks? What are the alternatives? What does intuition say?

- The woman should be supported in whatever decision she makes, even if the healthcare professional disagrees with it. The woman's decision should be recorded on Badgernet (NICE NG207)
- It may be possible to reach a compromise or a further discussion may need to take place after the woman has had time to think about her options. Consideration can also be given to referring to the Consultant Midwife for further support.
- Women are the final decision makers about their care once all of the options have been discussed

2.8 Frequency of Antenatal Contacts & suggested timings

- At the booking history appointment, all women should receive information about the likely number, timing and content of antenatal appointments.
- For nulliparous women with an uncomplicated pregnancy a schedule of 10 appointments should be adequate. For multiparous women with an uncomplicated pregnancy, a schedule of 7 appointments should be adequate. (NICE 2018).

The stages listed below are in line with NICE (2018) guidance for the times women should be seen antenatally. **However, this is merely a guide and women deemed at risk will need individualised plans of management for the antenatal period**. Each woman's pregnancy is

unique and her journey through the antenatal process aims to reflect this. If additional visits are required, please document the reason for the extra visit(s) using BadgerNet.

2.8.1 10-12 week's gestation

Women who are assessed as high risk i.e. any condition requiring maternal medicine centre care (Right hand column of tables in appendix 1) at the initial assessment should attend the hospital antenatal clinic for review by an obstetrician, as early as possible – in some cases it may be appropriate to await viability scan; where an individualised management plan is initiated for antenatal care. Some women may be referred back to midwifery led care (MLC) from obstetric care if this is deemed appropriate, or referred to other specialities for input e.g. cardiologists. All women need clear allocation of a Consultant, risk factors and a plan placed on BadgerNet.

Dating scan appointment:

- All women should be offered a dating USS appointment between 11 weeks and 2 days and 14 weeks and 1 day
- All rhesus negative women who accept ffDNA testing should have the blood test taken between 11+2 and 16 weeks' gestation (refer to Trust Free fetal DNA (FFDNA) for Fetal RhD screening guideline)
- Choice regarding antenatal screening to be confirmed and completed as required. Refer to the Antenatal Screening Guideline for details on screening tests and reporting of screening results.
- If a woman has accepted combined screening but consent has not been confirmed, this should take place at the start of the dating scan.
- Check to ensure all booking bloods have been completed prior to dating scan appointment. If they have, the results are to be recorded on BadgerNet and actioned accordingly. If the booking bloods have not previously been obtained, then they are to be taken with consent.
- Offer Carbon Monoxide (CO) monitoring if not done at booking appointment.
- Complete an initial ultrasound scan (USS) to determine viability, gestational age, multiple pregnancy, and nuchal translucency measurement if combined screening requested.
- If dating scan is performed in the community**,** dating at 14 weeks and over (with CRL greater than 84mm) should be dated by Head Circumference.
- If the CRL is less than 45mm – book a repeat nuchal translucency (NT) Scan as appropriate.
- If the woman has consented to First Trimester Fetal Anomaly Screening but the CRL is more than 84mm or the fetus was in an unfavourable position, book a Quadruple Test appointment from 15 weeks' gestation.
- If not already done so at the booking history appointment maternal height (M^2) and weight (Kg) should be measured to calculate body mass index (BMI). This will be documented on BadgerNet. If BMI is found to be below 18kg/m2 or above 35kg/m2, a referral to consultant care is required.

- Ethnic origin, parity plus estimated due date (EDD) and birth weights of previous babies will be used to produce a customised GROW chart which is inserted into the pregnancy record.
- Arrange ultrasound screening for structural anomalies, normally between 18 weeks 0 days and 20 weeks 6 days.
- If the woman is being seen in ANC, her individual consultant/medical team may review care at this point and make a management plan.
- For women not reviewed at the 'Booking' appointment', the Consultant will decide the gestation at which they feel is appropriate to review the woman and make a plan of care.
- Changes to the woman's pathway may be initiated at this stage due to USS results i.e. multiple pregnancy

2.8.2 15-16 weeks' gestation

- Review, discuss and record the results of all screening tests undertaken; reassess planned pattern of care for the pregnancy and identify women who need additional care. Consider if a quad test needs to offered if not already undergone screening.
- Advise and prescribe iron supplementation if haemoglobin level below 110g/L with ongoing treatment until haemoglobin level is above 110g/l.
- Measure blood pressure and test urine for proteinuria
- Initial place of birth discussion to completed.
- Remind the woman regarding the flu and pertussis vaccination.

2.8.3 18 - 20+6 weeks' gestation

- Between 18 to 20 weeks, if the woman chooses, an ultrasound scan should be performed for the detection of structural anomalies. Anomaly Ultrasound Scan (18+0 - 20+6)
- If any abnormality is detected on scan, follow Fetal anomaly suspected/identified (Management of)
- For women whose placenta is found to extend across the internal cervical os at this time, an appointment will be made for a follow up scan at 32 weeks.

All women should be provided/signposted to a patient information leaflet on reduced fetal movements (Saving Babies Lives 2016) by this appointment.

2.8.4 25-26 weeks gestation (usually Primips ONLY)

- Measure blood pressure and test urine for proteinuria.
- Offer and complete MAT B1 form.

2.8.5 28 weeks gestation

- Offer a second screening for anaemia and atypical red-cell alloantibodies.
- Offer anti-D prophylaxis to rhesus-negative women (this should be given following any relevant blood tests as it may alter blood levels)
- Measure blood pressure and test urine for proteinuria

- From 26/28 weeks' gestation and onwards fundal height measurements should be recorded on the GROW chart in Badgernet at each antenatal contact but not more frequently than every 2 weeks. SFH should be plotted on the customised growth chart.

Estimated Fetal Weight will be plotted on the GROW chart in Badgernet when growth scans are performed. For further information regarding GROW charts and their completion, please refer to the Perinatal Institute Website at www.perinatal.org.uk

If a woman is unsuitable for SFH (Raised BMI, Fibroids etc.) fundal height measurements are not required as she will be on the scanning pathway from 32 weeks.

For women who are suitable for SFH (and eligible for serial scans) it is appropriate to start measuring SFH at 26-28 weeks before they commence on the scanning pathway. However, once serial growth scans have commenced, SFH is not required.

- From this point on it is important to educate women about the significance of fetal movements (FM) and inform them that they are an indicator of fetal well-being and question FM at each antenatal contact. This conversation should include advising women who to contact and where to go if they experience reduced FM or a change in the pattern of their FM
- Re-weigh women with a booking BMI more than 35kg/m2 (for bariatric equipment and moving and handling assessment) and all Diabetic patients – do not recalculate BMI. Booking BMI should be used to inform medical decisions. Arrange Anaesthetic Review if indicated.
- Community midwives are required to liaise with the Health Visitors to discuss plans for women who are 28 weeks pregnant and over, to ensure all relevant information is shared where there are concerns.
- Discussion regarding infant feeding and the importance of skin to skin to be completed.
- Ensure parent education is booked where required. If not already received give verbal information with an opportunity to discuss issues and ask questions.
- Ensure that if indicated a GTT test has been performed between 24-28 weeks

2.8.6 - 31-32 weeks gestation (usually Primiparous women ONLY)

- Measure blood pressure and test urine for proteinuria
- Measure and plot symphysis–fundal height on the customised GROW chart (unless having serial growth USS at recommended intervals up until delivery)
- Discuss the importance of monitoring fetal movements.
- Review, discuss and record the results of screening tests undertaken at 28 weeks; reassess planned pattern of care for the pregnancy and identify women who need additional care
- Advise and prescribe iron supplementation with a haemoglobin level below 105 g/l with ongoing treatment until haemoglobin level is above 105g/l. Refer to Antenatal Screening Guideline

2.8.7 34 weeks gestation

- Measure blood pressure and test urine.

- Measure and plot symphysis-fundal height on the customised GROW chart (unless having serial growth USS at recommended intervals up until delivery
- Discuss the importance of monitoring fetal movements.
- Review, discuss and record the results of screening tests undertaken at 28 weeks if not done so already
- Give verbal information (supported by written information if possible), with an opportunity to discuss issues and ask questions. Topics covered should include:
    - preparation for labour and birth, including information about coping with pain in labour and the birth plan
    - recognition of active labour.
- Discuss infant feeding, responsive, close and loving relationships.

2.8.8 36 weeks gestation

- Measure blood pressure and test urine for proteinuria
- Measure and plot symphysis-fundal height on the customised GROW chart (unless having serial growth USS at recommended intervals up until delivery)
- Discuss the importance of monitoring fetal movements.
- Check the position of baby
- For women whose babies are in the breech presentation, a referral to the hospital is made by the midwife to discuss plan of care, mode of birth or external cephalic version (ECV) as appropriate
- Give verbal information (supported by written information) with an opportunity to discuss issues and ask questions. Topics covered should include:
    - breastfeeding information, including technique and good management practices that would help a woman succeed, such as detailed in the UNICEF Baby Friendly Initiative
    - care of the new baby
    - vitamin K prophylaxis and newborn screening tests
    - postnatal self-care
    - awareness of 'baby blues' and postnatal depression.
- Re-weigh women with a ‘Booking’ BMI more than 35 (for bariatric equipment and moving and handling assessment) and all Diabetic patients – do not recalculate BMI. Booking BMI should be used to inform medical decisions.
- Confirm intended place of birth with the woman.
- Check contact details for labour have been given.

2.8.9 38 weeks’ gestation

- Measure of blood pressure and test urine for proteinuria
- Measure and plot symphysis-fundal height on the customised GROW chart (unless having serial growth USS at recommended intervals up until delivery)

- Discuss the importance of monitoring fetal movements
- Information giving, including options for management of prolonged pregnancy, with an opportunity to discuss issues and ask questions; verbal information supported by antenatal classes and written information. (NICE 2018)

2.8.10 40 weeks' gestation

Primiparous women are seen at term.

- Measure blood pressure and test urine for proteinuria
- Measure and plot symphysis-fundal height on the customised GROW chart (unless having serial growth USS at recommended intervals up until delivery)
- Discuss the importance of monitoring fetal movements
- Offer a membrane sweep

2.8.11 41 weeks' gestational age and above

- Measure blood pressure and test urine for proteinuria
- Measure and plot symphysis-fundal height on the customised GROW chart (unless having serial growth USS at recommended intervals up until delivery)
- Discuss the importance of monitoring fetal movements
- Offer a membrane sweep as per Trust Induction of Labour Guideline from 39 weeks in uncomplicated pregnancies.
- Discuss and offer induction of labour from 41 weeks' gestation and above (refer to Induction of labour guideline).

2.8.12 Consultant led care pathways.

In addition to the antenatal visits above, these women will have additional visits depending on clinical need. These may include additional scans, discussion regarding mode and place of birth for example. These must be clearly documented and the individual management plan of care completed on BadgerNet and reviewed at each visit.

Refer to relevant clinical guidelines and care pathways for ongoing individual antenatal management and care.

2.9 Transfer of care during pregnancy

Some women will require transfer of care during pregnancy.

- The midwife should clearly document the reason for transfer of care on BadgerNet
- The midwife should make an appointment in the next available consultant clinic/appropriate medical clinic by calling the maternity reception/Antenatal clinic.
- If in community, the appointment can be made and given to the woman.
- If in hospital, the transfer of care will be completed in antenatal clinic and the appointment will be generated at point of contact of care.
- Ensure the woman understands the reason for transfer.
- If an ultrasound scan is required, a scan request form should be completed.

2.10 Referral for urgent medical review

Possible reasons for urgent referral:

- Hypertension or suspicion of Pre-eclampsia/Eclampsia
- Concerns regarding SFH measurement
- Reduced fetal movements or no fetal movements
- Concerns regarding fetal heart auscultation
- Development of other obstetric or medical complications

(This list is not exhaustive)

If at any point during the antenatal period a woman requires urgent medical review, the midwife must:

- explain their concern to the woman and document this on BadgerNet
- contact the most appropriate personnel/department e.g. Triage, Antenatal Clinic or Day Assessment Unit to arrange for the woman to be seen at the earliest opportunity.
- Following assessment by a suitably experienced clinician in the hospital, a decision will be made regarding the woman's subsequent management. This will be documented on BadgerNet.
- If a follow up appointment(s) is required, this must be made at the time and given to the woman by the midwife or clerk.

2.11 Referral back to midwifery led care

If a deviation from normal resolves and no further additional consultant care is required, the woman should be referred back to midwifery care.

- The woman should be informed of the transfer
- The transfer should be documented on BadgerNet.
- Follow up appointments with the community midwife must be arranged.

2.12 Fetal movements in pregnancy

Confidential enquiries into stillbirth have consistently described a relationship between episodes of reduced fetal movement (RFM) and stillbirth incidences. From the CESDI reports to the first MBRRACE report in 2015, unrecognised or poorly managed episodes of reduced fetal movement have been highlighted as contributory factors to avoidable stillbirths.

An information and advice leaflet on reduced fetal movement (RFM), based on current evidence, best practice and clinical guidelines, is to be provided to all pregnant women by, at the latest, the 24th week of pregnancy and RFM discussed at every subsequent contact.

Flow Chart 1: Booking appointment & Risk assessment pathway following confirmation of pregnancy.

This flowchart is merely a guide and women deemed at risk will need individualised plans of management for the antenatal period.

Booking prior to 10 weeks – either at home, clinic or children's centre

LOW RISK PATHWAY

At booking appointment discuss:

- Mood, lifestyle, Exercise, diet, food hygiene
- Routine enquiry
- Information on screening & blood tests
- Discuss free fetal DNA (ffDNA) for fetal Rhesus D testing
- Options on place of birth
- Obtain Blood pressure (BP) , Urinalysis (Mid-Stream Urine sent) and Carbon monoxide testing
- Weight & height (Body mass index (BMI) calculated)
- Record history on BadgerNet
- Folic acid & Vitamin D
- Make any referrals necessary
- Management plan & risk assessments

HIGH RISK PATHWAY

As low risk booking, plus:

- Aim for Consultant antenatal clinic prior to 14 weeks if high risk maternal medicine
- Review previous pregnancy notes if available / request if not readily available
- Management plan to be made for antenatal care relevant to individual needs, including routine scans

Consider shared care

(Refer to relevant trust guidelines for additional management)

Perform Dating Ultrasound scan (USS) between 11+2 – 14+1 weeks and offer Nuchal Screening

Following scan generate customised growth chart & place in hand-held notes.

Low Risk Pathway

High Risk Pathway

Booking appointment at hospital - INDIVIDUALISED PLAN OF CARE DEPENDING ON HISTORY **BY OBSTETRICIAN (Consultant or ST4 and above)**

Additional scheduled appointments in hospital to be organised as set out in the individualised management

Perform an Antenatal check at 15-16 weeks' gestation

Refer to section 3.8.2

Perform an Antenatal check at 18 – 20+6 weeks' gestation (USS)

Refer to section 3.8.3

Perform an Antenatal check at 25 -26 weeks gestation (Primips ONLY)

Refer to section 3.8.4

Perform an Antenatal check at 28 Weeks gestation

Refer to section 3.8.5

Also:

- Repeat blood for Haemoglobin & antibodies. Offer Anti-D prophylaxis to Rhesus negative women if indicated & administer if accepted
- Ensure a glucose tolerance teat (GTT) is performed for women at risk of gestational diabetes mellitus (GDM)

information.

Continue….

Perform an Antenatal check at 31 – 32 weeks gestation (Primips ONLY)
Refer to section 3.8.6
Also:
- Review blood tests taken at 28 weeks, with anomalies referred to Consultant for discussion & management plan

Perform an Antenatal check at 34 weeks gestation
Refer to section 3.8.7
Also:
- Discuss signs of labour & preparations

Perform an Antenatal check at 36 weeks gestation
Refer to section 3.8.8
Also:
- Check fetal position. If unstable lie/breech refer to Consultant ASAP for mode of delivery/External Cephalic Version (ECV)
- Review risk factors & ensure allocated to appropriate pathway

Perform an Antenatal check at 38 weeks gestation
Refer to section 3.8.9
Also:
- Options for management of postdates
- Review risk factors (completing risk assessment form on BadgerNet) & allocate to appropriate pathway

Perform an Antenatal check at 40 weeks gestation (Primips ONLY)
Refer to section 3.8.10
Also:
- Review risk factors & ensure allocated to appropriate pathway
- Discuss labour& signs of labour/birth/prolonged pregnancy &induction of labour (IOL)/postnatal care
- Offer membrane sweep & undertake if accepted

Perform an Antenatal check at 41 weeks gestation
Refer to section 3.8.11
Also:
- Discuss labour & signs of labour/birth/postnatal care
- Offer membrane sweep & undertake if accepted
- Offer IOL and arrange date for admission.

Documentation:
Each visit & action taken should be legibly documented on BadgerNet. This includes the declining of services i.e. antenatal screening tests

Throughout pregnancy remain alert to risk factors, signs and symptoms of conditions that may affect the health of the mother and baby.
Referral to an Obstetrician can be made at any time if any risk factors identified.

Worcestershire Acute Hospitals NHS Trust

Flow Chart 2: Unbooked appointment & Risk assessment pathway following confirmation of pregnancy. This flowchart is merely a guide and women deemed at risk will need individualised plans of management for the antenatal period.

Unbooked woman presents to Maternity

- **Create Patient on Badgernet**
- **MEWS, Urinalysis and MSU, Booking bloods including 2x Group and Save**
- **Auscultate FH and if applicable perform CTG**

Safeguarding

Screen for unborn child protection register information on Child Protection Information Service (CPIS) with ward clerk support via smartcard.
If ***concerns*** following screening and AN assessment:

- Liaise with Safeguarding team for advice
- Perform lateral checks and refer to children's services and Health Visitor, inform GP, CMW, safeguarding team (Consider admission to ensure all safeguarding checks are completed prior to discharge)
- You **must** complete a CASS referral and notify the **safeguarding team**: if out of hours EDT should be contacted.

Scan

- Refer for scan as per clinical indication: this will be dependent on clinical situation and can be at the bedside or departmental
- Scan referral to be sent via badgernet 'dating scan' referral – **Unbooked Pregnancy** should be written in the additional information as well as a known/estimated gestation.
- *For women presenting at less than 30/40 gestation by LMP or USS for departmental scan within 4 weeks*
- *For women presenting at greater than 30/40 gestation by LMP or USS for a departmental scan*

Documentation

- Set up maternity notes on Badgernet to enable woman to access the maternity portal
- Complete booking information on Badgernet. Minimum information required; contact details, next of kin, current pregnancy details (LMP and previous children information) and routine enquiry.
- Email patient name, NHS number and date of birth to relevant community midwives team and state **unbooked patient**. Community midwife to contact woman to arrange booking within 3-5 days and inform GP.
- Email patient name, NHS number and date of birth to the below email and state **unbooked patient**.

4. References Related Documents and Other Guidance

- Maternity Care Working Party. (2006). *Modernising Maternity Care - A Commissioning Toolkit for England (2nd Edition)*. London: The National Childbirth Trust, The Royal College of Midwives, The Royal College of Obstetricians and Gynaecologists. Available at: www.rcog.org.uk
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- World Health Organisation (2017) *WHO recommendations on antenatal care for a positive birth experience.* Geneva, Switzerland

Appendix 1

Cardiology pathways for West Midlands Maternal Medicine Network

Category A	**Category B**	**Category C**
LOCAL EXPERTISE (Not routinely seen at BWC but MDT support and discussion available)	**SHARED CARE** (Seen in BWC for clinical review, advice and guidance)	**MATERNAL MEDICINE CENTRE** (Booking and all care at BWC)
Mild pulmonary stenosis	Mild reduced left ventricular ejection fraction (>45%)	Left ventricular ejection fraction <45%
Small/repaired patent ductus arteriosus	Hypertrophic cardiomyopathy with no high risk features	Severe mitral stenosis
Mitral valve prolapse	Repaired aortic coarctation	Severe aortic stenosis
Repaired atrial septal defect	Mild mitral stenosis	
Repaired ventricular septal defect	Other valve lesions not listed in A or C	Systematic right ventricle
Isolated atrial or ventricular ectopic beats	Atrioventricular septal defect	Fontan
Treated cardiac electrophysiology conditions	Repaired tetralogy of Fallot	Previous peripartum cardiomyopathy
	Marfan (MMC if not aortic centre)	Ventricular arrhythmia
	Bicuspid aortic valve (if aorta <45mm)	Moderate aortic stenosis
	Unrepaired simple shunt lesions	Moderate mitral stenosis
	Treated ischaemic heart disease	Mechanical valve
	Myocarditis	Turner syndrome without aortic dilatation
	Ongoing supraventricular arrhythmia	Turner syndrome with aortic dilatation
		Aortic dilatation
		Unrepaired cyanotic disease
		Vascular Ehlers Danlos
		Re-coarctation
		Heart transplant
		New ischaemic heart disease
		Pulmonary hypertension (refer to national centre)

Local Care	A&G from Maternal Medicine Centre	Care Led by maternal Medicine Centre
Gestational diabetes mellitus	**Type I and II diabetes mellitus with:** **Nephropathy (see kidney pathway)** **Cardiovascular disease (see heart pathway)**	**Primary and secondary hyperaldosteronism**
Type I and II diabetes mellitus including diabetic retinopathy	Monogenic diabetes	Phaeochromocytoma or paraganglioma
Hypothyroidism	Thyroid hormone resistance	Cushing's syndrome
Hyperthyroidism and gestational hyperthyroidism	Thyroid cancer	Acromegaly
Thyroid nodules	Macroprolactinoma	Metabolic disorders such as Glycogen storage disorder
Microprolactinoma	Pituitary disease on hormone replacement therapy	Hyperparathyroidism
PCOS	Congenital adrenal hyperplasia	Hypoparathyroidism
Vitamin D deficiency	Dumping syndrome post bariatric surgery	Type 1 and 2 Diabetes and retinopathy requiring treatment during pregnancy and/or kidney impairment (CKD 2 with significant proteinuria (PCR >30; or CKD 3 or more)
	Addison's disease	

Kidney Disease Pathways for West Midlands Maternal Medicine Network

Local Centre	A&G Mat Med Centre	Led by Mat Med
Single kidney	Lupus nephritis in remission or on treatment	Active lupus nephritis
Non-lupus glomerulonephritis/ tubulointerstitial nephritis: • No immunosuppression AND • Stable pre-pregnancy CKD stage 1-2 AND • uPCR <100 or uACR <30 AND • BP <140/90	Non-lupus glomerulonephritis/ tubulointerstitial nephritis: • On immunosuppression OR • Pre-pregnancy CKD stage 3 OR • uPCR ≥100 or uACR ≥ 30 OR • BP >140/90	Pre-pregnancy CKD stages 4 and 5
Kidney stones	Kidney transplant	Combined kidney-pancreas transplant
Recurrent UTI (no immunosuppression)	Recurrent UTI on immunosuppression	Dialysis
Reflux nephropathy with normal kidney function	Reflux nephropathy with abnormal kidney function	New renal vasculitis in pregnancy and vasculitis on immunosuppression
Autosomal dominant polycystic kidney disease with normal kidney function.	Autosomal dominant polycystic kidney disease with abnormal kidney function	Scleroderma renal crisis
AKI responding to treatment	AKI not responding to treatment or not resolving post-partum	
AKI due to pre-eclampsia resolved post-partum	Previous renal vasculitis in remission, no longer on treatment	
	Previous urinary tract reconstructive surgery	
	Kidney disease requiring biologic treatment	
	Progressive kidney disease in pregnancy	
	Kidney disease on biologic treatment	

Appendix 2

Women should be offered the choice of planning birth at home, in a midwife led unit or in an obstetric unit.

The following medical conditions indicate increased risk of complication, suggesting planned birth in an obstetric unit (NICE 2017). Locally, this means that the woman should be booked under the care of an obstetrician and seen before 16 weeks' gestation.

Medical conditions indicating individual assessment when planning place of birth:

Disease area	Medical condition
Cardiovascular	Confirmed cardiac disease, Hypertensive disorder
Respiratory	Asthma requiring an increase in treatment or hospital treatment in last 12 months Cystic fibrosis
Haematological	Haemoglobinopathies – sickle-cell disease, beta-thalassaemia major History of thromboembolic disorders Immune thrombocytopenia purpura or other platelet disorder or platelet count below 100×10^9/litre Von Willebrand's disease Bleeding disorder in the woman or unborn baby Atypical antibodies which carry a risk of haemolytic disease of the newborn
Endocrine	Hyperthyroidism Hypothyroidism- after initial obstetric/endocrine evaluation, further plan for pregnancy can be made. Diabetes
Infective	Hepatitis B/C with abnormal liver function tests Carrier of/infected with HIV Toxoplasmosis – women receiving treatment Current active infection of chicken pox/rubella/genital herpes in the woman or baby Tuberculosis under treatment
Immune	Systemic lupus erythematosus Scleroderma
Renal	Abnormal renal function Renal disease requiring supervision by a renal specialist
Neurological	Epilepsy Myasthenia gravis Previous cerebrovascular accident
Anaesthetic	Any previous problems with general/local anaesthetic
Genetic	Medium-chain acyl-CoA dehydrogenase deficiency (MCADD)
Gastrointestinal	Liver disease associated with current abnormal liver function tests Inflammatory bowel disease (e.g. Chrones) if previous surgery or on steroids/ASA
Psychiatric	Psychiatric disorder requiring current inpatient care
Other factors indicating increased risk suggesting planned birth at an obstetric unit:	
Factor	**Additional Information**
Previous complications	Unexplained stillbirth Neonatal death or previous death related to intrapartum difficulty Previous baby with neonatal encephalopathy Pre-eclampsia requiring preterm birth Placental abruption with adverse outcome Eclampsia Uterine rupture Primary postpartum haemorrhage requiring additional treatment or blood transfusion Retained placenta requiring manual removal in theatre Caesarean section Shoulder dystocia Previous baby less than 10th centile

Current pregnancy	Multiple birth Placenta praevia Pre-eclampsia or pregnancy-induced hypertension Preterm labour or preterm pre-labour rupture of membranes Placental abruption Anaemia – haemoglobin less than 85 g/litre at onset of labour Confirmed intrauterine death Induction of labour Substance misuse Alcohol dependency requiring assessment or treatment Onset of gestational diabetes Malpresentation – breech or transverse lie BMI at booking of greater than 35 kg/m2 Recurrent antepartum haemorrhage Small for gestational age in this pregnancy (less than fifth centile or reduced growth velocity on USS) Abnormal fetal heart rate/Doppler studies Ultrasound diagnosis of oligo-/polyhydramnios
Previous gynaecological history	Myomectomy Hysterotomy

Disease area	**Medical condition**
Cardiovascular	Cardiac disease without intrapartum implications
Haematological	Atypical antibodies not putting the baby at risk of haemolytic disease Sickle-cell trait Thalassaemia trait Anaemia – haemoglobin 85–105 g/litre at onset of labour Thrombo-embolism
Infective	Hepatitis B/C with normal liver function tests
Immune	Non-specific connective tissue disorders Auto-immune/antiphospholipid disease
Endocrine	Unstable hypothyroidism such that a change in treatment is required
Skeletal/ neurological	Spinal abnormalities Previous fractured pelvis Neurological deficits
Gastrointestinal	Liver disease without current abnormal liver function Crohn's disease Ulcerative colitis
Other factors indicating individual assessment when planning place of birth:	
Factor	**Additional information**
Previous complications	Stillbirth/neonatal death with a known non-recurrent cause Pre-eclampsia developing at term Placental abruption with good outcome History of previous baby more than 4.5 kg Extensive vaginal, cervical, or third- or fourth-degree perineal Trauma Fetal anomaly Recurrent miscarriage (3 or more) Preterm birth Rhesus disease Obstetric cholestasis Previous term baby with jaundice requiring exchange transfusion
Current pregnancy	Antepartum bleeding of unknown origin (single episode after 24 weeks of gestation) Blood pressure of 140 mmHg systolic or 90 mmHg diastolic or more on 2 occasions Clinical or ultrasound suspicion of macrosomia Para 6 or more Recreational drug use Age over 40 at booking
Fetal indications	Fetal abnormality
Previous gynaecological history	Major gynaecological surgery Cone biopsy or large loop excision of the transformation zone Fibroids –multiple fibroids or a single fibroid above 4cm in size
Mental health	Under current outpatient psychiatric care
FGM	Sensitive enquiry and antenatal examination to confirm

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the Policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: *(Responsible for also ensuring actions are developed to address any areas of non-compliance)*	Frequency of reporting:
	WHAT?	**HOW?**	**WHEN?**	**WHO?**	**WHERE?**	**WHEN?**
	Responsibilities of relevant staff groups Process to ensure that: • Women have first full booking visit and BadgerNet history completed by 12+^{6} weeks' gestation • Women who are more than 12 weeks pregnant on referral to the maternity service are offered an appointment and seen within 2 weeks of the referral • Women are provided with information leaflet regarding fetal movements by 24 weeks' gestation • Maternal risk assessed throughout pregnancy at appropriate times • Risk assessed for appropriate place of birth • Individualised management plans are initiated for high risk women, including referral to maternal and fetal medicine tertiary centres when indicated • Referral back to midwifery led care where appropriate	Maternity Information System Monthly Dashboard	Monthly	Maternity Informatics Team	Maternity Governance/ Trust Board / LMNS	Monthly

References

- Maternity Care Working Party. (2006). *Modernising Maternity Care - A Commissioning Toolkit for England (2nd Edition)*. London: The National Childbirth Trust, The Royal College of Midwives, The Royal College of Obstetricians and Gynaecologists. Available at: www.rcog.org.uk
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- World Health Organisation (2017) *WHO recommendations on antenatal care for a positive birth experience.* Geneva, Switzerland

Contribution List

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Maternity Governance Meeting