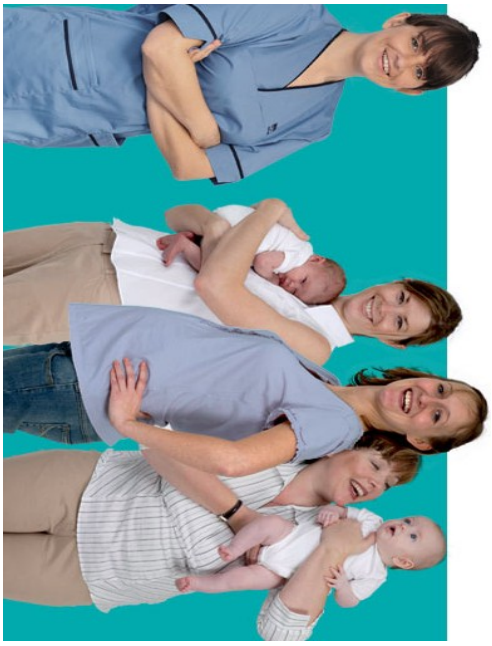
Community monitoring: thresholds for further action (PRECOG) 2004.

Description	Definition	Action by midwife/GP
New hypertension without proteinuria after 20 weeks	Diastolic BP ≥ 90 and < 100mmHg	Refer for hospital assessment within 48 hours
	Diastolic BP ≥ 90 and < 100mmHg with significant symptoms*	Refer for same day hospital assessment
	Systolic BP ≥ 160 mmHg	Refer for same day hospital assessment
	Diastolic BP ≥ 100mmHg	Refer for same day hospital assessment
New hypertension and proteinuria after 20 weeks	Diastolic BP ≥ 90mmHg and new proteinuria ≥ 1+ on dipstick	Refer for same day hospital assessment
	Diastolic BP ≥ 110mmHg and new proteinuria ≥ 1+ on dipstick	**Arrange immediate admission**
	Systolic BP ≥ 170mmHg and new proteinuria ≥ 1+ on dipstick	**Arrange immediate admission**
	Diastolic BP ≥ 90mmHg and new proteinuria ≥ 1+ on dipstick and significant symptoms	**Arrange immediate admission**
New proteinuria without hypertension after 20 weeks	1+ on dipstick	Repeat pre-eclampsia assessment in community within 1 week.
	2+ or more on dipstick	Refer for hospital step-up assessment within 48 hours
	≥ 1+ on dipstick with significant symptoms	Refer for same day hospital step-up assessment
	* Symptoms include: epigastric pain, vomiting, headache, visual disturbances, reduced fetal movements & small for gestational age fetus	



Maternity Services

A local guide to routine antenatal care for healthy pregnant women and referral guidance for assessed risk in pregnancy.

Borders Midwifery

NHS Borders

Introduction

This 'aide memoir' is produced as an additional resource to the 'Pathways for Maternity Care' national guidance document produced by NHS Quality Improvement Scotland (March 2009). It is designed to enhance the referral process when risk assessment indicates a deviation from accepted normal parameters.

Continuous risk assessment, clear communication and documentation, promoting normality and supporting women's choice are key to ensuring best midwifery practice. When a woman's choice differs from the recommended care pathway, her choice should be supported in conjunction with a Supervisor of Midwives and clearly documented in her pregnancy records. The on call Supervisor of Midwives is available 24 hours via Labour Ward: 01896 826897

The content is not exhaustive and accountability for appropriate referral rests with the midwife whose knowledge and competence govern her clinical judgement. (NMC Midwives Rules & Standards 2013, NMC Standards for Competence for Registered Midwives, NMC The Code 31/03/2015).

Updated by Ann Fernie, SCM Community, Lorraine Wilson, Snr Midwife/Sonographer &
Dr Brian Magowan, Lead Obstetrician
August 2016

SPECIFIC INFECTIONS

The risk of chicken pox infection causing harm to the baby in early pregnancy is very small. Give ZIG (Zoster Immunoglobulin) if < 10 days from contact or < 4 days from onset of rash if the mother was VZ negative on booking bloods.

Severe and even fatal cases of chickenpox can occur in neonates whose mothers develop chickenpox from 7 days before to 1 month after delivery (usually 2 days before to 2 days after). The baby should be given varicella zoster immunoglobulin (VZIG) as soon as possible if maternal symptoms develop. VZIG may be given to babies in contact with chickenpox whose mothers have no history of chickenpox (or no antibodies on testing).

Group B β-haemolytic streptococci (GBS)

Antenatal screening is not indicated in the UK (initial screen positives may become negative, and vice versa). There is no evidence to support antenatal treatment of asymptomatic carriers, as carriage is rapidly re-established following treatment.

Intrapartum prophylaxis is probably appropriate for:

- Those found with GBS on vaginal culture during this pregnancy
- Those who have had a previous baby affected by GBS
- Those found to have GBS bacteriuria during pregnancy

Prophylaxis is probably not appropriate for:

- Those found incidentally to have had GBS in a previous pregnancy, or when not pregnant.

Parvovirus B19

This causes slapped cheek syndrome in children and adults. If a mother develops slapped cheek syndrome before 20 weeks gestation, the baby can become profoundly anaemic and hydropic. This anaemia can be treated with intra-uterine transfusions. There is probably minimal fetal risk beyond 20 weeks.

If contact significant (with someone who had or has since developed a rash within 48 hrs and was in face to face contact for > 5 minutes or indoors for >15 minutes) refer to clinic, registrar or PAU for advice.

GENERAL INFECTION ADVICE

Farm workers

Toxoplasma (which causes miscarriage in cows and sheep), a chlamydia (which causes miscarriage in sheep), and listeria can all cause miscarriage in humans. Pregnant women should therefore avoid animal work, particularly in the lambing and calving seasons. Overalls and boots worn for work should be removed at the house door, and the boots cleaned and left outside. Soiled overalls should be placed directly into the washing machine by the wearer, who should then wash and dry their hands thoroughly. At the end of the season the lambing/calving shed should be thoroughly washed and swept out, and left open to the air for the summer. Handwashing by all who enter the house from the farm at any time is the key to controlling such infection.

Nurses

Nurses may be concerned about CMV, particularly if they are in contact with small children. Serology is of little benefit, as the presence of antibodies does not necessarily denote immunity. Hands should be washed well and often. The risk of CMV is very small.

Travel and vaccinations

Consider aspirin ± graduated compression stockings for long-haul flights. If the woman is visiting a malarial region, give advice on mosquito nets, wearing long sleeves and trousers (tucked into socks), insect-repellent spray, cream, wipes, etc. Antimalarials should be taken (Larium should be avoided if possible, although it may be safe >12 weeks). Refer to GP. The risk of vaccinations is likely to be extremely small.

Pets

There is a small risk of toxoplasmosis from *cats*. Women should wear household rubber gloves to clean litter trays and wash their hands afterwards. Better still, they could get someone else to do it! They should also avoid children's sandpits and wear gloves for gardening. Adult *dogs* with no diarrhoea do not pose a significant risk.

Antenatal Referral Guidance

MIDWIFERY LED CARE

Suitable for all women whose pregnancy is considered within the accepted evidence-based parameters of "normality". The requirement is for the woman to be physiologically well during her pregnancy and for an absence of any known medical disorder that may adversely affect the pregnancy or birth.

These women should be offered a midwife as their lead professional from the first point of contact, through pregnancy, birth and the postnatal period, until completion of their package of care at the point of handover to the Health Visitor.

Continuous risk assessment throughout the entire episode of care may lead to transfer of care to the Obstetric Team, or return to Midwife Led Care following investigation. This must be clearly documented by all participants in the woman's care.

Status at booking uncertain?

Discuss with PAU, or ANC, or directly with Consultant depending on the circumstances.

CONSULTANT LED CARE

Although still booked by a midwife, the pattern of care will be decided or led by the Obstetrician. Early pregnancy referral to the appropriate Consultant may be necessary to facilitate early intervention such as medicine review / investigation / ultrasound scanning etc.

SCHEDULE OF MIDWIFERY LED CARE FOR LOW RISK ANTENATAL WOMEN *www.nhshealthquality.org*

Visit	Week	Care	Particular Attention to:
1	First point of contact	Information on screening tests and plan 'booking-in' appointment for 8-10 weeks with named midwife. This contact may be by telephone or in clinic, and should include issue of screening information	Folic Acid (400µg/ until 12 weeks) Higher dose 5mg in the following: BMI > 30 Twins HO Epilepsy if on anti-convulsants HO NTD Smoking status
2	8 – 12	Perform initial risk assessment through Maternal History Taking using SWHMR. Ideally this should be prior to 12 weeks to allow for early referral if risks identified. History taking, information giving and blood screening tests may be divided over the first two early pregnancy contacts.	Emotional and mental health wellbeing. ICP SAFER chart - & discuss Smoking / Alcohol Ensure height, weight & BMI documented. Ensure 'private time' is offered **Refer for routine dating scan / Consent for CUB screen** **Healthy start form / vitamins** Ready Steady Baby Off to a good Start Recommend Flu vaccine Oct-Mar
3	15 – 17	Blood pressure & urinalysis + ensure results from all screening tests requested, discussed and documented	Offer 2nd trimester serum screening if required. Ensure 20 week fetal detailed scan arranged Recommend Pertussis vaccine
4	22	SWHMR as note A below + ensure results from all screening tests requested discussed and documented	Offer MAT B1 form for employer Update Safer Discuss blood tests & anti D if Req. Forms given if required Discuss Parenthood Education Classes. Affirm information
5	28	SWHMR as notes A and B below	Check haemoglobin & antibodies. Offer Anti D prophylaxis if Rh Neg If high risk for Diabetes—GTT. Routine ICP Commence GAP chart.

Past Obstetric History

The following are suitable for consultant led care with whichever consultant is responsible for that geographical area:

- Colposcopy with treatment. (If no treatment—MLC)
- > 1 LLETZ (1 or less MLC)
- Female Genital Mutilation (FGM)
- Uterine anomaly, including bicornuate, septate, myomectomy
- 3 or more consecutive miscarriages.
- Assisted conception IVF / ICSI / Egg donation
- Previous mid-trimester loss / previous cervical suture
- Maternal age < 16 yrs or > 40 yrs
- Late booker > 20 wks
- BMI > 40
- Hypothyroidism
- Current or past severe mental health history
- Previous stillbirth / neonatal death
- Previous haemolytic disease / Rhesus disease
- Previous congenital abnormality
- Significant morbidity of baby
- Previous severe PIH / Eclampsia / HELLP
- Previous preterm labour
- Previous baby AFFECTED by Group B strep
- Previous severe / early onset IUGR
- Previous Major Obstetric Haemorrhage (inc abruption)
- Previous C/S or traumatic delivery, including 3rd degree tear and shoulder dystocia.

Where the following risks are identified during ongoing assessment in pregnancy, referral directly to the Consultant is appropriate:

- Placenta praevia
- Preterm rupture of membranes <37 wks
- Post term labour >42 weeks
- Significant or recurrent APH
- Obstetric Cholestasis
- Oligo or Polyhydramnios
- Haemoglobin < 90g/l
- Platelets <150x10^9/l, repeat in 4 weeks. If falls to <100x10^9/l refer to ANC. If very low (e.g. <80x10^9/l) refer to on call Reg.
- Current active genital herpes
- Syphilis, Hepatitis B or HIV positive
- Abnormal Diabetes screening—Diabetic Clinic

Consultant Led Care

Medical disorders in pregnancy

Those with the following medical disorders are suitable to book at the High Risk Clinic or Combined Diabetic Clinic:

- Unusual or complex drug therapy
- Epilepsy
- Hyperthyroidism
- Inflammatory Bowel Disease
- Coeliac disease
- Diabetes
- Previous or active thromboembolic disease
- Severe Asthma (needing oral steroids or recent hospital admission)
- HIV / HEP B / HEP C
- Alcohol / Drug Misuse
- Heart disease
- Major Psychiatric Illness
- Renal disease / Liver disease
- Severe anaemia / Haematological disease
- Connective Tissue / Autoimmune disease / Anti-phospholipids synd

Multiple pregnancy

Those with Twins (or other multiple pregnancy) should be referred to the fetal medicine clinic in PAU between 11 – 14 weeks.

For women where the identified risk is through family history, an appointment with the consultant should be made soon after initial booking.

- Significant Hereditary Condition in the family
- Known haemoglobinopathy, or known haemoglobinopathy trait and a partner who screens positive

6 **Prims**	31	SWHMR as notes A and B below	
7	34	SWHMR as notes A and B below + offer advice about benefits of perineal massage to re-duce perineal trauma at birth.	Check haemoglobin. Ensure 'private time' has been offered during antenatal period .
8	36	SWHMR as notes A and B below + give information on mem-brane sweep	Care plan for labour, discuss and sign by patient and staff Weigh and record.
9 **Prims**	38	SWHMR as notes A and B below	
10	40	SWHMR as notes A and B below Membrane sweep at 40 wks. + agree a plan for Induction of Labour at T+10-12. (phone Ward 17 to book IOL)	Document membrane sweep in SWHMR

NB: If wishes to go beyond 42 weeks transfer to consultant care

NOTES:

A - SFH from 26/28 wks, blood pressure, urinalysis, oedema, fetal heart-beat and movement, and emotional wellbeing.

B - Presenting part, fetal lie / position, fifths palpable.

Early or additional intervention

Prolonged sub-fertility IVF/ ICSI / Egg donation	Refer to PAU for Early ultrasound scan 8 weeks. If Infertility only then MLC.
Previous ectopic	Early scan at 6 weeks
Bicornuate uterus or septum	Early scan 8 weeks
Maternal Age	<16 yrs: offer early years referral >40 yrs: offer early USS
Current or past **severe** mental illness	Offer early years referral
Late Booker > 20 weeks	Dating / Detailed USS
Unusual or complex drug therapy, unlicensed medicines or herbal medicine	Discuss with obstetrician
Concerns re social or domestic situation	Early years referral Consider Child protection pathways
BMI < 18	Lifestyle assessment Serial growth scans 4 wkly from 28 wks
BMI > 40	Folic Acid 5mg/day Start care pathway (separate sheet)
Previous stillbirth or late loss	Routine booking scan, earlier if anxious. Consultant at 15 wks.
IUCD in-situ	Refer to on-call obs/gyn registrar
Previous molar pregnancy	Early USS at 6 wks

3 or more consecutive miscarriages	Early ultrasound scan 8 wks
Previous small baby,< 10th centile on GROW	Serial growth scans from 28 wks in PAU if MLC
Previous cholestasis	If becomes symptomatic, check LFTs and Bile acids. If ALT or bile acids raised, refer to Consultant.
Those on thyroxine for hypothyroidism.	Check freeT4 and TSH, increase dose of thyroxine by 50ug & recheck freeT4 & TSH after 4 weeks.

Anaesthetic History / related anaesthetic issues

Referral to anaesthetist should be via the obstetrician.
Appropriate indications include:

- Previous or anticipated anaesthetic problems (e.g. failed intubation or regional analgesia, dural tap, pain during caesarean section)
- Severe back or neck problems
- BMI > 40
- Women who decline blood products
- Severe drug reactions

Ongoing risk assessment throughout pregnancy

Where the following risks are identified in pregnancy, discussion with the on call Obstetric Registrar or Consultant is appropriate, or an appointment at a Consultant clinic. In more urgent cases, it may be appropriate to refer directly to Labour Ward or the Pregnancy Assessment Unit.

- Raised blood pressure or symptoms of pre-eclampsia - see back page
- Refer for a growth scan if
  - 1st SFH plots below the 10th centile on GROW
  - Consecutive measurements suggest No growth (static or flat curve)
  - Slow growth (curve not following slope of any curve on the chart)
  - Excessive growth (curve steeper than any curve on the chart). A 1st measurement above the 90th centile is not an indication for a growth scan, however if you suspect polyhydramnios or there is excessive growth on subsequent measurements, please refer.

  MLC to PAU. CLC to Cons ANC.

- Confirmed exposure to active viral infection when previously non-immune - refer to New guidelines on screening for communicable diseases, Rebecca Devine, Specialist Registrar Public Health or discuss with the Registrar on call if required.
- Malpresentation after 36 weeks – see at ante-natal clinic
- Abnormal CUB screen result or USS – see at PAU
- Chlamydia positive - phone registrar on call