Intrapartum Care UHL Obstetric Guideline

University Hospitals of Leicester NHS
NHS Trust

C60/2019

CONTENTS

INTRODUCTION AND WHO THE GUIDELINE APPLIES TO:

- This guideline is for all Maternity Service staff caring for healthy women in normal labour. This includes antenatal assessment for place of birth.

BACKGROUND:

- This document is based on the NICE Clinical Guideline 190 **Intrapartum Care: Care of healthy women and their babies during childbirth**. This guideline has been extensively reviewed within the Maternity Unit prior to implementation to ensure local requirements are reflected within this amended document. Please contact the Clinical Risk and Quality Manager for details.

RELATED UHL DOCUMENTS:

- Referral Handover of Care and Transfer UHL Obstetric Guideline
- Management of Newborn Infants born through Meconium-stained liquor
- Antenatal Cardiotocography UHL Obstetric Guideline
- Fetal Monitoring in Labour UHL Guideline
- Intelligent Intermittent Auscultation in Labour UHL Obstetric Guideline
- Supporting Birth Outside of Trust Guidance in Low Risk Midwifery Birth Settings UHL Obstetrics Guideline
- Bladder Care During and After Labour and Delivery UHL Obstetric Guideline
- Perineal or Genital Trauma Following Childbirth UHL Obstetric Guideline

PLACE OF BIRTH

- Low risk women may be offered the choice to deliver at home, at St Mary's Birth Centre or in either of the alongside birth centres at Leicester Royal Infirmary and Leicester General Hospital. They should receive information about these settings from the community midwife in the form of the Trust "Maternity Care" leaflet.
- High risk women may also choose to birth away from the obstetric units at Leicester Royal Infirmary or Leicester General Hospital. In these circumstances, they should have an individualised care plan made after referral to, and discussion with an Obstetrician or the Consultant Midwife. This should occur as early in the pregnancy as possible (but after 24 weeks). Where a woman declines to see an Obstetrician, involvement of a senior midwife should be offered in a setting agreed with the woman.
- The following tables give guidance to assist in helping women to plan their preferred place of birth.

MEDICAL CONDITIONS SUGGESTING INCREASED RISK AND **PLANNED BIRTH AT OBSTETRIC UNIT**	
Disease area	Medical condition
Cardiovascular	Confirmed cardiac disease Hypertensive disorders
Respiratory	Asthma requiring an increase in treatment or hospital treatment Cystic fibrosis
Haematological	Haemoglobinopathies (sickle cell disease, beta-thalassaemia major) History of thrombolic disorders Immune thrombocytopenia purpura or other platelet disorder or platelet count below $100x10^9$/litre Von Willebrands disease Bleeding disorder in the woman or unborn baby Atypical antibodies which carry a risk of haemolytic disease of the newborn
Endocrine	Hyperthyroidism Diabetes
Infective	Risk factors associated with GBS whereby antibiotics in labour are recommended Hepatitis B / C with abnormal LFT's Carriers of / infected with HIV Toxoplasmosis – women receiving treatment Current active infection of chickenpox / rubella / genital herpes in the woman or baby TB – undergoing treatment
Immune	SLE Scleroderma
Renal	Abnormal renal function Renal disease requiring supervision by a renal specialist
Neurological	Epilepsy Myasthenia gravis Previous CVA
Gastrointestinal	Liver disease associated with current abnormal LFT's
Psychiatric	Psychiatric disorder requiring current inpatient care

OTHER FACTORS SUGGESTING INCREASED RISK AND **PLANNED BIRTH AT 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 pre term birth Placental abruption with adverse outcome Eclampsia Uterine rupture Primary PPH >1000ml or requiring treatment or blood transfusion Score of 6 or more on the PPH risk assessment tool Retained placenta requiring manual removal in theatre Caesarean Section Shoulder Dystocia
Current pregnancy	Multiple pregnancy Placenta praevia Pre-eclampsia or pregnancy induced hypertension Preterm labour or preterm pre-labour rupture of membranes Placental abruption Anaemia – Hb less than 100g/l at onset of labour Confirmed IUD Induction of labour Substance misuse Alcohol dependency requiring assessment or treatment Onset of gestational diabetes Malpresentation - breech or transverse lie BMI at booking of >35kg/m2 for primgravid women or >40 for multiparous women with previous vaginal delivery Recurrent ante partum haemorrhage Small for gestational age in this pregnancy (less than 10th centile or reduced growth velocity on ultrasound) Abnormal FHR / Doppler studies Ultrasound diagnosis of oligo / polyhydramnios
Previous gynaecological history	Myomectomy Hysterotomy

MEDICAL CONDITIONS REQUIRING **INDIVIDUAL ASSESSMENT**	
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 Thalassemia trait
Infective	Hepatitis B / C with normal LFT's
Immune	Non-specific connective tissue disorders
Endocrine	Unstable hypothyroidism that requires a change in treatment
Skeletal / neurological	Spinal abnormalities Previous fractured pelvis Neurological deficits
Gastrointestinal	Liver disease without current abnormal liver function Crohn's disease / Ulcerative colitis
OTHER FACTORS REQUIRING **INDIVIDUAL ASSESSMENT** WHEN PLANNING PLACE OF BIRTH	
Factor	Additional information
Previous pregnancy complications	Stillbirth or neonatal death with a known non-recurrent cause Pre-eclampsia developing at term Placental abruption with good outcome History of previous baby more than 4.5kg Extensive vaginal, cervical or third or fourth degree perineal trauma Previous term baby with jaundice requiring exchange transfusion
Current pregnancy	Antepartum bleeding of unknown origin (single episode after 24wks gestation) Blood pressure of 140 mmHg Systolic or 90 mmHg diastolic on 2 occasions Clinical or ultrasound suspicion of macrosomia Para 4 or more Recreational drug use Safeguarding concerns present at 36 week risk assessment Under current outpatient psychiatric care 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 (LLETZ) Fibroids

CARE THROUGHOUT LABOUR

COMMUNICATION

Women's experience

- All healthcare professionals should ensure that in all birth settings there is a culture of respect for each woman as an individual undergoing a significant and emotionally intense life experience, so that the woman is in control, is listened to and is cared for with compassion, and that appropriate informed consent is sought.

MOBILISATION

- Encourage and help the woman to move and adopt whatever positions she finds most comfortable throughout labour.

SUPPORT

- Encourage the woman to have support from birth companion(s) of her choice.

HYGIENE MEASURES

- Routine hygiene measures should be taken by staff caring for women in labour, including standard hand hygiene and single-use non-sterile gloves are appropriate to reduce cross-contamination between women, babies and healthcare professionals.
- Trust procedure regarding infection control assessment and management should be followed at all times.
- Tap water may be used if cleansing is required before vaginal examination. Prior to catheterisation, sterile water should be used to clean the vulva and external urethral orifice. Prior to instrumental delivery or suturing, either in the delivery room or the obstetric theatre, non-alcoholic antiseptic solution should be used to clean the lower vagina and vulva.

INITIAL ASSESSMENT OF POTENTIAL LABOUR

INITIAL ASSESSMENT OF THE WOMAN

- When performing an initial assessment of a woman in labour, listen to her story and take into account her preferences and her emotional and psychological needs.
- Carry out an initial assessment to determine if midwifery-led care in any setting is suitable for the woman, irrespective of any previous plan. The assessment should comprise the following:
    - Review the antenatal notes (including all antenatal screening results) and discuss these with the woman.
    - Ask her about the length, strength and frequency of her contractions.

- Ask her about any pain she is experiencing and discuss her options for pain relief.
- Record her pulse, blood pressure and temperature, and carry out urinalysis.
- Record if she has had any vaginal loss.

Vaginal examination:

- When conducting a vaginal examination:
    - be sure that the examination is necessary and will add important information to the decision-making process
    - recognise that a vaginal examination can be very distressing for a woman, especially if she is already in pain, highly anxious and in an unfamiliar environment
    - explain the reason for the examination and what will be involved
    - ensure the woman's informed consent, privacy, dignity and comfort
    - explain sensitively the findings of the examination and any impact on the birth plan to the woman and her birth companion(s)
    - If the woman appears to be in established labour, offer a vaginal examination. If there is uncertainty about whether the woman is in established labour, a vaginal examination may be helpful after a period of assessment, but is not always necessary.

Note about the presence of meconium:

- As part of any assessment, document the presence or absence of significant meconium. This is defined as dark green or black amniotic fluid that is thick or tenacious, or any meconium-stained amniotic fluid containing lumps of meconium.

- If significant meconium is present, ensure that:
    - healthcare professionals trained in fetal blood sampling are available during labour AND
    - healthcare professionals trained in advanced neonatal life support are readily available for the birth.

- If meconium is present, transfer the woman to obstetric-led care provided that it is safe to do so and the birth is unlikely to occur before transfer is completed. Follow the general principles for transfer of care described in the “Maternity Responsible Clinician, Referral, handover of care and transfer” guideline.

ASSESSMENT OF THE UNBORN BABY

- Ask the woman about the baby's movements in the last 24 hours.
- Palpate the woman's abdomen to determine the fundal height, the baby's lie, presentation, position, engagement of the presenting part, and frequency and duration of contractions.

Measuring fetal heart rate as part of initial assessment:

- Offer auscultation of the fetal heart rate at first contact with a woman in suspected or established labour, and at each further assessment:
    - Use either a Pinard stethoscope or Doppler ultrasound.
    - Carry out auscultation immediately after a contraction for at least 1 minute and record it as a single rate.
    - Record accelerations and decelerations if heard.
    - Palpate the maternal pulse to differentiate between the maternal and fetal heartbeats.

- Be aware that for women at low risk of complications there is insufficient evidence about whether cardiotocography as part of the initial assessment either improves outcomes or results in harm for women and their babies, compared with intermittent auscultation alone. Therefore, if a woman at low risk of complications requests cardiotocography as part of the initial assessment:
    - discuss the risks, benefits and limitations of cardiotocography with her, and support her in her choice
    - Explain that, if she is in a setting where cardiotocography is not available, she will need to be transferred to obstetric-led care.

- Offer continuous cardiotocography if any of the risk factors listed in the Fetal Heart Rate Monitoring section below are identified on initial or subsequent assessment, and explain to the woman why this is being offered.

- Offer cardiotocography if intermittent auscultation indicates possible fetal heart rate abnormalities, and explain to the woman why this is being offered. If the trace is normal as per the Fetal Heart Rate Monitoring in Labour guideline after 20 minutes, return to intermittent auscultation unless the woman asks to stay on continuous cardiotocography.

- If fetal death is suspected or maternal pulse and fetal heart are not distinct, offer real-time ultrasound assessment to check fetal viability.

WHEN TO TRANSFER FROM MIDWIFERY LED TO OBSTETRIC LED CARE

- Transfer the woman to obstetric-led care, following the general principles for transfer of care described in the “Maternity Responsible Clinician, Referral, handover of care and transfer” guideline if any of the following are observed on initial assessment:

Maternal reasons for transfer:

- Pulse over 120 beats/minute on 2 occasions 30 minutes apart
- a single reading of either raised diastolic blood pressure of 110 mmHg or more or raised systolic blood pressure of 160 mmHg or more
- either raised diastolic blood pressure of 90 mmHg or more or raised systolic blood pressure of 140 mmHg or more on 2 consecutive readings taken 30 minutes apart

- a reading of 2+ of protein on urinalysis and a single reading of either raised diastolic blood pressure (90 mmHg or more) or raised systolic blood pressure (140 mmHg or more)
- temperature of 38°C or above on a single reading, or 37.8°C or above on 2 consecutive readings 1 hour apart
- any vaginal blood loss other than a show
- rupture of membranes more than 24 hours before the onset of established
- labour
- the presence of meconium
- pain reported by the woman that differs from the pain normally associated with contractions
- any risk factors recorded in the woman's notes that indicate the need for obstetric led care.

- **Fetal reasons for transfer:**

- any abnormal presentation, including cord presentation
- transverse or oblique lie
- high (4/5–5/5 palpable) or free-floating head in a nulliparous woman
- suspected fetal growth restriction or macrosomia
- suspected anhydramnios or polyhydramnios
- fetal heart rate below 110 or above 160 beats/minute
- a deceleration in fetal heart rate heard on intermittent auscultation
- reduced fetal movements in the last 24 hours reported by the woman

If none of these are observed, continue with midwifery-led care unless the woman requests transfer.

- If any of the factors are observed but birth is imminent, assess whether birth in the current location is preferable to transferring the woman to an obstetric unit and discuss this with the coordinating midwife. Follow the general principles for transfer of care described in the "Referral, handover of care and transfer" guideline.

LATENT PHASE

- NICE 2021 recommend that the latent phase of labour be defined as:
    - a period of time, not necessarily continuous, when there are painful contractions: AND
    - There is some cervical change, including cervical effacement and dilatation up to 4cm.

- However it is difficult to objectively tell when the change from the latent to the active phase of labour occurs, leading to some dilemmas in the management of women. One especially difficult issue is how to define a prolonged latent phase. Studies have used figures from 12 to 24hrs and beyond at the point where a prolonged latent phase is diagnosed.

- There is evidence that prolongation of the latent phase is associated with:
    - Subsequent labour abnormalities and need for caesarean section.

- significantly prolonged labour
- high levels of pain / anxiety in latent phase which were linked to an increase level of medical intervention in the active phase
- There have also been adverse outcomes for mothers and babies when the prolonged latent phase has not been adequately managed.

- A leaflet is available for the woman which contains coping strategies for the latent phase of labour and this should be given.

- Women planning to deliver in a birth centre should be invited in for assessment if they have telephoned 3 times to discuss whether they are in labour – even if their contractions are not yet regular and established

- At every hospital attendance a full set of observations and fetal monitoring should be carried out prior to sending the woman home. A vaginal assessment should be made if the woman is complaining of regular contractions.

- The assessment form in Appendix 1 should be completed at each attendance.

WHEN TO REFER FOR MEDICAL REVIEW DURING THE LATENT PHASE

- Women should have a medical review on their 3rd admission with regular painful contractions and not yet in established labour. Some women may need medical review on their 1st and / or 2nd admission if there are any concerns about the clinical history and / or examination

- Women should have a medical review if they have had 3 vaginal examinations and are not yet established in labour. (this may be during a single admission).

- Women choosing to birth at home should be referred in to hospital for medical review on their 3rd visit by the community midwife

- A CTG and full maternal assessment should be carried out prior to medical review and referral should be made using the SBAR tool.

- As per the induction of labour guideline, women who have three admissions in the latent of labour, or where the latent phase has lasted over 20 hours, should be discussed with the Obstetric ST3 or above. It is reasonable to offer augmentation of labour under these circumstances after discussion with the woman about her preferences.

- Following the review a plan must be made with consideration to the woman's wishes. These may include:
    - Returning to midwifery led care
    - Augmentation with appropriate analgesia as above.
    - Transfer to antenatal ward

CARE THROUGHOUT LABOUR

SUPPORT IN LABOUR

- Provide a woman in established labour with supportive one-to-one care.
- Do not leave a woman in established labour on her own except for short periods or at the woman's request.

CONTROLLING GASTRIC ACIDITY

- Do not offer either H_2-receptor antagonists or antacids routinely to low-risk women.
- Proton Pump Inhibitators (Omeprazole) should be given on admission and then every 24 hours until delivery to all women who have, or develop, risk factors that make a general anaesthetic more likely.
- All women in labour who have, or develop risk factors that make a general anaesthetic more likely (or progressing to Caesarean section) should be given 40mg Omeprazole orally on admission and then 20mg Omeprazole every 24 hours until delivery.
- Women undergoing induction of labour should have 40mg Omeprazole at the time of initial admission for induction (prior to foley catheter or prostaglandin use) and then 20mg Omeprazole every 24 hours until delivery.
- Where women are undergoing category 1, 2 or 3 Caesarean section and they have only had one dose of 40mg Omeprazole, a further dose of 20mg omeprazole can be given IF the last dose given was more than 12 hours previously. Alternatively, the Anaesthetist may choose to administer an IV infusion of omeprazole/ ranitidine for women who are at particularly high risk of aspiration.

EATING AND DRINKING IN LABOUR

- All women may drink during established labour. This may include water, clear fluids such as squash, and isotonic sports drinks e.g. Lucozade Sport, Powerade.
- Women may be informed that isotonic sports drinks (containing no more than 30kcal/100mls) may be more beneficial than water.
- Low risk women (those without any risk factors) may drink clear fluids (as above) and eat a light diet throughout their labour. Women at risk of requiring operative intervention (see below) should not eat solid food.
- Once a decision has been made to transfer to theatre for LSCS, assisted vaginal delivery, or another operative procedure, women should be kept NBM (Nil by Mouth – including fluids)
- • Women at risk include:
    - Body Mass Index >40 at booking
    - Multiple pregnancy

- Breech
- Intra-uterine growth restriction
- Previous postpartum haemorrhage or retained placenta
- Previous Caesarean section/ Uterine surgery
- Oxytocin augmentation
- Significant antepartum haemorrhage
- Abnormal CTG, especially if fetal scalp pH measurements required
- Any meconium staining of liquor
- Women with epidural
- Women receiving opioids including IM Pethidine
- Slow progress during labour
- Previous difficult Intubation
- Contraindication for Regional Anaesthesia

PAIN RELIEF IN LABOUR: NON-REGIONAL

Non-pharmacological analgesia:

- If a woman chooses to use breathing and relaxation techniques in labour, support her in this choice.
- If a woman chooses to use massage techniques in labour that have been taught to birth companions, support her in this choice.
- Offer low risk women the opportunity to labour in water for pain relief. For women labouring in water, follow the UHL Water Birth guideline.
- Do not use injected water papules.
- Do not offer acupuncture, acupressure or hypnosis, but do not prevent women who wish to use these techniques from doing so.
- Women may be offered aromatherapy in keeping with the "Aromatherapy for Women in Pregnancy Labour and Postnatally UHL Obstetric Guideline. Support the playing of music of the woman's choice in labour.
- Support women who bring choose to use transcutaneous electrical nerve stimulation (TENS) in early or established labour. The Home Birth team may provide TENS machines (which they maintain), but women planning hospital birth will need to provide their own equipment.

Inhalational analgesia:

- Ensure that Entonox (a 50:50 mixture of oxygen and nitrous oxide) is available in all birth settings as it may reduce pain in labour, Inform the woman that it may make her feel nauseous and light-headed. See also Entonox Administration UHL Policy

Intravenous and intramuscular opioids:

- Ensure that pethidine, diamorphine or other opioids are available in all birth settings. Inform the woman that these will provide limited pain relief during

labour and may have significant side effects for both her (drowsiness, nausea and vomiting) and her baby (short-term respiratory depression and drowsiness which may last several days).

- Inform the woman that pethidine, diamorphine or other opioids may interfere with breastfeeding.
- If an intravenous or intramuscular opioid is used, also administer an antiemetic.
- Women should not enter water (a birthing pool or bath) within 2 hours of opioid administration or if they feel drowsy

FIRST STAGE OF LABOUR

- Do not offer or advise clinical intervention if labour is progressing normally and the woman and baby are well.
- In all stages of labour, women who have left the normal care pathway because of the development of complications can return to it if/when the complication is resolved.
- Individualised care should be given. Some women do not follow the usual pattern of labour and can progress rapidly but on vaginal assessment do not appear to be in established labour. As a result they may progress to delivery without adequate monitoring or analgesia. Avoid reliance on VE findings and discuss with a senior midwife if unsure, or the findings do not align with the clinical picture. Attention to previous labour history can act as an aid in identifying precipitate labour in multiparous women.

DURATION OF THE FIRST STAGE

- Inform women that, while the length of established first stage of labour varies between women:
    - first labours last on average 8 hours and are unlikely to last over 18 hours
    - Second and subsequent labours last on average 5 hours and are unlikely to last over 12 hours.

OBSERVATIONS DURING THE ESTABLISHED FIRST STAGE

- Do not routinely use verbal assessment using a numerical pain score.
- Use a pictorial record of labour (partogram) once labour is established.
- Where the partogram includes an action line, use the World Health Organization recommendation of a 4-hour action line.
- Record the following observations during the first stage of labour:
    - half-hourly documentation of frequency of contractions
    - hourly pulse
    - 4-hourly temperature and blood pressure

    - frequency of passing urine
    - Offer a vaginal examination 4-hourly or if there is concern about progress or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss).

- If any of the indications for transfer are met, transfer the woman to obstetric-led care. Follow the general principles for transfer of care described in the “Maternity Responsible Clinician, Referral, handover of care and transfer” guideline.

- Give ongoing consideration to the woman's emotional and psychological needs, including her desire for pain relief.

- Encourage the woman to communicate her need for analgesia at any point during labour.

POSSIBLE ROUTINE INTERVENTIONS IN THE FIRST STAGE

- Do not routinely offer the package known as active management of labour (one-to-one continuous support; strict definition of established labour; early routine amniotomy; routine 2-hourly vaginal examination; oxytocin if labour becomes slow).

- In normally progressing labour, do not perform amniotomy routinely.

- Do not use combined early amniotomy with use of oxytocin routinely.

- If a controlled amniotomy is necessary, Oxytocin should be commenced immediately. This is not required if the presenting part is, and always has been fixed in the maternal pelvis.

DELAY IN THE FIRST STAGE

Suspected delay in the first stage:

- If delay in the established first stage is suspected, take the following into account:
    - parity
    - cervical dilatation and rate of change
    - uterine contractions
    - station and position of presenting part
    - the woman's emotional state

- Offer the woman support, hydration, and appropriate and effective pain relief.

- If delay in the established first stage is suspected, assess all aspects of progress in labour when diagnosing delay, including:
    - cervical dilatation of less than 2 cm in 4 hours for first labours
    - cervical dilatation of less than 2 cm in 4 hours or a slowing in the progress of labour for second or subsequent labours
    - descent and rotation of the baby's head

    - changes in the strength, duration and frequency of uterine contractions.

- If delay in the established first stage of labour is suspected, amniotomy should be considered for all women with intact membranes, after explanation of the procedure and advice that it will shorten her labour by about an hour and may increase the strength and pain of her contractions.

- Whether or not a woman has agreed to an amniotomy, advise all women with suspected delay in the established first stage of labour to have a vaginal examination 2 hours later, and diagnose delay if progress is less than 1 cm.

Confirmed delay in the first stage of labour:

- For all women with confirmed delay in the established first stage of labour:

- Transfer the woman to obstetric-led care for an obstetric review and a decision about management options, including the use of oxytocin (follow the general principles for transfer of care described in the "Referral, Handover of Care and Transfer" guideline. **For a multiparous woman with confirmed delay in the established first stage of labour, an obstetrician should perform a full assessment, including abdominal palpation and vaginal examination, before a decision is made about using oxytocin.**

- Offer all women with delay in the established first stage of labour support and effective pain relief. Explain to the woman that using oxytocin after spontaneous or artificial rupture of the membranes will bring forward the time of birth but will not influence the mode of birth or other outcomes.

- Inform the woman that oxytocin will increase the frequency and strength of her contractions and that its use will mean that her baby should be monitored continuously. Offer the woman an epidural before oxytocin is started. If oxytocin is used, ensure that the time between increments of the dose is no more frequent than every 30 minutes. Increase oxytocin until there are 4–5 contractions in 10 minutes. See also Trust "Induction of Labour" guideline.

- Advise the woman to have a vaginal examination 4 hours after starting oxytocin in established labour:
    - If cervical dilatation has increased by less than 2 cm after 4 hours of oxytocin, further obstetric review is required to assess the need for caesarean section.
    - If cervical dilatation has increased by 2 cm or more, advise 4-hourly vaginal examinations.

SECOND STAGE OF LABOUR

DEFINITION OF THE SECOND STAGE

- For the purposes of this guideline, use the following definitions of labour:

- Passive second stage of labour:

- The finding of full dilatation of the cervix before or in the absence of involuntary expulsive contractions.

- Onset of the active second stage of labour:
    - the baby is visible
    - expulsive contractions with a finding of full dilatation of the cervix or other signs of full dilatation of the cervix
    - Active maternal effort following confirmation of full dilatation of the cervix in the absence of expulsive contractions.

OBSERVATIONS DURING THE SECOND STAGE

- Carry out the following observations in the second stage of labour, record all observations on the partogram and assess whether transfer of care may be required
    - half-hourly documentation of the frequency of contractions
    - hourly blood pressure
    - continued 4-hourly temperature
    - frequency of passing urine
    - Offer a vaginal examination hourly in the active second stage, or in response to the woman's wishes (after abdominal palpation and assessment of vaginal loss).

In addition:

- Continue to take the woman's emotional and psychological needs into account.
- Assess progress, which should include the woman's behaviour, the effectiveness of pushing and the baby's wellbeing, taking into account the baby's position and station at the onset of the second stage. These factors will assist in deciding the timing of further vaginal examination and any need for transfer to obstetric led care.
- Perform intermittent auscultation of the fetal heart rate immediately after a contraction for at least 1 minute, at least every 5 minutes. Palpate the woman's pulse every 15 minutes to differentiate between the two heartbeats. Where CEFM is being used but pulse oximetry is not available the maternal pulse should be palpated every 15 minutes as above.
- Ongoing consideration should be given to the woman's position, hydration, coping strategies and pain relief throughout the second stage.

DURATION OF THE SECOND STAGE AND DEFINITION OF DELAY

- For a nulliparous woman:
    - birth would be expected to take place within 3 hours of the start of the active second stage in most women
    - diagnose delay in the active second stage when it has lasted 2 hours and refer the woman to a healthcare professional trained to undertake an operative vaginal birth if birth is not imminent.

- For a multiparous woman:
    - birth would be expected to take place within 2 hours of the start of the active second stage in most women
    - diagnose delay in the active second stage when it has lasted 1 hour and refer the woman to a healthcare professional trained to undertake an operative vaginal birth if birth is not imminent.

- For a nulliparous woman, suspect delay if progress (in terms of rotation and/or descent of the presenting part) is inadequate after 1 hour of active second stage. Offer vaginal examination and then offer amniotomy if the membranes are intact.

- For a multiparous woman, suspect delay if progress (in terms of rotation and/or descent of the presenting part) is inadequate after 30 minutes of active second stage. Offer vaginal examination and then offer amniotomy if the membranes are intact.

- If full dilatation of the cervix has been confirmed in a woman without regional analgesia, but she does not get an urge to push, carry out further assessment after 1 hour.

OXYTOCIN IN THE SECOND STAGE

- Consideration should be given to the use of oxytocin, with the offer of regional analgesia, for nulliparous women if contractions are inadequate at the onset of the second stage.

- Oxytocin should only be started for multiparous women with secondary arrest of labour after full and careful assessment by a Specialty Registrar or above, the findings of which must be documented in the notes.

THE WOMAN'S POSITION AND PUSHING IN THE SECOND STAGE

- Discourage the woman from lying supine or semi-supine in the second stage of labour and encourage her to adopt any other position that she finds most comfortable. Avoid lithotomy where possible when pushing as this increases the risk of more serious perineal trauma.

- Inform the woman that in the second stage she should be guided by her own urge to push.

- If pushing is ineffective or if requested by the woman, offer strategies to assist birth, such as support, change of position, emptying of the bladder and encouragement.

INTRAPARTUM INTERVENTIONS TO REDUCE PERINEAL TRAUMA

- The OASI bundle should be offered to all women having a vaginal delivery.

Prevention of third and fourth degree tears:

- Evidence for routine protective effect of episiotomy is conflicting. However, Mediolateral episiotomy should be considered in instrumental deliveries and for all women with risk factors for third and fourth degree tears.
- Where episiotomy is indicated, the mediolateral technique is recommended, with careful attention to ensure that the angle is 60 degrees away from the midline when the perineum is distended at crowning. Provide tested effective analgesia before carrying out an episiotomy, either using existing epidural analgesia or 1% lidocaine locally.
- Manual perineal protection (MPP) at crowning can result in better outcomes. Recent interventional studies have demonstrated successful reduction in obstetric anal sphincter injury rates, all of which have described manual perineal protection/'hands on' techniques, see RCOG guidance). For spontaneous births MPP should be used unless the woman objects or her chosen birth position does not allow it. For assisted births, MPP should always be used.
- Perineal protection includes:
- 1. Left hand slowing down the delivery of the head
- 2. Right hand protecting the perineum (Finnish Grip)
- 3. Mother NOT pushing when head is crowning (communicate)
- 4. Think about episiotomy (risk groups and correct angle)
- Warm compression during the second stage of labour reduces the risk of anal sphincter injuries. A swab dampened with warm tap water may be used. It must be warm to the touch but not hot. They must not be heated using a microwave. Heat packs MUST NOT be used.

DELAY IN THE SECOND STAGE

- Delay in the second stage is where birth is not imminent after 2 hours in the active second stage of labour for nulliparous women or one hour in multiparous women. If there is delay in the second stage of labour, or if the woman is excessively distressed, support and sensitive encouragement and the woman's need for analgesia/anaesthesia are particularly important.
- An obstetrician should assess a woman with confirmed delay in the second stage (after transfer to obstetric-led care, following the general principles for transfer of care described in the "Referral, Handover of Care and Transfer "guideline before contemplating the use of oxytocin.
- After initial obstetric assessment of a woman with delay in the second stage, maintain ongoing obstetric review every 15–30 minutes.

EXPEDITING BIRTH

- If the birth needs to be expedited for maternal or fetal reasons, assess both the risk to the baby and the safety of the woman. Assessments should include:
    - the degree of urgency
    - clinical findings on abdominal and vaginal examination
    - choice of mode of birth (and whether to use forceps or ventouse if an instrumental birth is indicated)
    - anticipated degree of difficulty, including the likelihood of success if instrumental birth is attempted
    - location
    - any time that may be needed for transfer to obstetric-led care
    - the need for additional analgesia or anaesthesia
    - the woman's preferences.
- Talk with the woman and her birth companion(s) about why the birth needs to be expedited and what the options are.
- Inform the team about the degree of urgency.
- Record the time at which the decision to expedite the birth is made.

THIRD STAGE OF LABOUR

- Recognise that the time immediately after the birth is when the woman and her birth companion(s) are meeting and getting to know the baby. Ensure that any care or interventions are sensitive to this and minimise separation or disruption of the mother and baby.

DEFINITION OF THE THIRD STAGE

- The third stage of labour is the time from the birth of the baby to the expulsion of the placenta and membranes.
- Active management of the third stage involves a package of care comprising the following components:
    - routine use of uterotonic drugs
    - deferred clamping and cutting of the cord
    - Controlled cord traction after signs of separation of the placenta.
- Physiological management of the third stage involves a package of care that includes the following components:
    - no routine use of uterotonic drugs
    - no clamping of the cord until pulsation has stopped
    - delivery of the placenta by maternal effort.

PROLONGED THIRD STAGE

- Diagnose a prolonged third stage of labour if it is not completed within 30 minutes of the birth with active management or within 60 minutes of the birth with physiological management. Follow the UHL guideline "Retained Placenta – Guidelines for Management" on managing a retained placenta.

OBSERVATIONS IN THE THIRD STAGE

- Record the following observations for a woman in the third stage of labour:
    - Her general physical condition, as shown by her colour, respiration and her own report of how she feels.
    - Vaginal blood loss.
- If there is postpartum haemorrhage, a retained placenta or maternal collapse, or any other concerns about the woman's wellbeing:
    - Transfer her to obstetric-led care (following the general principles for transfer of care described in the "Maternity Responsible Clinician, Referral, Handover of Care and Transfer" guideline.
    - Carry out frequent observations to assess whether resuscitation is needed.

ACTIVE AND PHYSIOLOGICAL MANAGEMENT OF THE THIRD STAGE

- Explain to the woman antenatally about what to expect with each package of care for managing the third stage of labour and the benefits and risks associated with each.
- Explain to the woman that active management:
    - shortens the third stage compared with physiological management
    - is associated with nausea and vomiting in about 100 in 1,000 women
    - is associated with an approximate risk of 13 in 1,000 of a haemorrhage of more than 1 litre
    - is associated with an approximate risk of 14 in 1,000 of a blood transfusion.
- Explain to the woman that physiological management:
    - is associated with nausea and vomiting in about 50 in 1,000 women
    - is associated with an approximate risk of 29 in 1,000 of a haemorrhage of more than 1 litre
    - is associated with an approximate risk of 40 in 1,000 of a blood transfusion.
- If a woman at low risk of postpartum haemorrhage requests physiological management of the third stage, support her in her choice.
- Discuss with the woman at the initial assessment in labour about the different options for managing the third stage and ways of supporting her during delivery of the placenta, and ask if she has any preferences. Calculate the woman's risk of PPH using the PPH risk assessment tool (see appendix 2)

and use this to decide how to manage the third stage. Recalculate the risk of PPH score at the beginning of the second stage and immediately postpartum and use this to categorise the risk of a PPH (green, amber or red). Use the score to offer the woman treatment that will reduce (approximately halve) her risk of having a massive obstetric haemorrhage (blood loss >2000ml).

- Advise the woman to have active management of the third stage, because it is associated with a lower risk of a postpartum haemorrhage and/or blood transfusion.
- Document in the records the decision that is agreed with the woman about management of the third stage.
- For active management, administer 1ml of syntometrine by intramuscular injection immediately after the birth of the baby and before the cord is clamped and cut. Use oxytocin alone only when ergometrine is contra-indicated for example if the woman has hypertension or pre eclampsia, or if the woman specifically requests this.
- After administering syntometrine or oxytocin, clamp and cut the cord.
    - Do not clamp the cord earlier than 1 minute from the birth of the baby unless there is concern about the integrity of the cord or the baby has a heart rate below 60 beats/minute that is not getting faster.
    - Clamp the cord at 60seconds post-delivery for women who wish to donate cord blood to Antony Nolan or any other Commercial Cord Blood Collection.
    - Consider delaying cord clamping for two to four minutes (until the cord is white) to maximise blood transfer from the placenta to the baby.
    - If the woman requests that the cord is clamped and cut later than 5 minutes, support her in her choice.
- After syntometrine or oxytocin and cutting the cord, wait for signs of separation of the placenta. Then use either controlled cord traction or modified Brandt Andrews maneouver to deliver the placenta.
- Record the timing of cord clamping in both active and physiological management.
- Advise a change from physiological management to active management if either of the following occur:
    - haemorrhage
    - The placenta is not delivered within 1 hour of the birth of the baby.
- Offer a change from physiological management to active management if the woman wants to shorten the third stage.
- Do not use either umbilical oxytocin infusion or prostaglandin routinely in the third stage of labour.

- Contact an obstetric doctor (ST3 or above if the third stage is longer than 30mins with active management or 60mins with physiological management, sooner if there are any signs of haemorrhage.

Routinely weigh all blood loss after the birth. A senior midwife and obstetric doctor (ST3 or above) should be informed when blood loss is >1000ml. The obstetric doctor (ST3 or above) and anaesthetist should be informed and attend the bedside when blood loss is >1500ml.

CARE OF THE NEWBORN BABY

INITIAL ASSESSMENT OF THE NEWBORN BABY AND MOTHER–BABY BONDING

- Record the Apgar score routinely at 1 and 5 minutes for all births.
- Record the time from birth to the onset of regular respirations.
- If the baby is born in poor condition (on the basis of abnormal breathing, heart rate or tone):
    - follow the UHL guideline on neonatal resuscitation **and**
    - take paired cord-blood samples for blood gas analysis, after clamping the cord using 2 clamps.
- Continue to evaluate and record the baby's condition until it is improved and stable.
- Do not take paired cord blood samples (for blood gas analysis) routinely.
- Ensure that a second clamp to allow double-clamping of the cord is available in all birth settings.
- Encourage women to have skin-to-skin contact with their babies as soon as possible after the birth. If the woman decines or is undergoing further interventions the father of the baby may do this.
- In order to keep the baby warm, dry and cover him or her with a warm, dry blanket or towel while maintaining skin-to-skin contact with the woman.
- Avoid separation of a woman and her baby within the first hour of the birth for routine postnatal procedures, for example, weighing, measuring and bathing, unless these measures are requested by the woman, or are necessary for the immediate care of the baby.
- Encourage initiation of breastfeeding as soon as possible after the birth, ideally within 1 hour.
- Record body temperature and birth weight soon after the first hour following birth.
- Undertake an initial examination to detect any major physical abnormality and to identify any problems that require referral.

- Ensure that any examination or treatment of the baby is undertaken with the consent of the parents and either in their presence or, if this is not possible, with their knowledge.

NEONATAL RESUSCITATION

- In the first minutes after birth, evaluate the condition of the baby – specifically respiration, heart rate and tone – in order to determine whether resuscitation is needed according to nationally accredited guidelines on neonatal resuscitation.
- All relevant healthcare professionals caring for women during birth should attend annually a course in neonatal resuscitation that is consistent with nationally accredited guidelines on neonatal resuscitation.
- In all birth settings:
    - bear in mind that it will be necessary to call for help if the baby needs resuscitation, and plan accordingly
    - ensure that there are facilities for resuscitation, and for transferring the baby to another location if necessary
    - develop emergency referral pathways for both the woman and the baby, and implement these if necessary.
- If a newborn baby needs basic resuscitation, start with air.
- Minimise separation of the baby and mother, taking into account the clinical circumstances.
- Throughout an emergency situation in which the baby needs resuscitation, allocate a member of the healthcare team to talk with, and offer support to, the woman and any birth companion(s).

CARE OF BABIES IN THE PRESENCE OF MECONIUM

- In the presence of any degree of meconium:
    - do not suction the baby's upper airways (nasopharynx and oropharynx) before birth of the shoulders and trunk
    - do not suction the baby's upper airways (nasopharynx and oropharynx) if the baby has normal respiration, heart rate and tone
    - do not intubate if the baby has normal respiration, heart rate and tone.
- If there has been significant meconium and the baby does not have normal respiration, heart rate and tone, follow nationally accredited guidelines on neonatal resuscitation, including early laryngoscopy and suction under direct vision.
- If there has been significant meconium and the baby is healthy, closely observe the baby within a unit with immediate access to a neonatologist.
- Meconium of any grade is **NOT** considered to be **significant** if:
    - The baby is vigorous at birth

- The baby is clinically well within the first hour of life

Initial management

- All babies born through meconium-stained liquor should have observations taken and documented by the midwife at 1 and 2 hours of age. All babies born with meconium should have paired cord gases at delivery.

- While there are differences between the NICE guidance and this guideline in how to define significant meconium, the recommended UHL management algorithm has been subject to audit to ensure safe practice.

- If any of the following are observed after any degree of meconium, ask a neonatologist to assess the baby (transfer both the woman and baby if they are at home or in a freestanding midwifery unit, following the general principles for transfer of care.
    - respiratory rate above 60 per minute
    - the presence of grunting
    - heart rate below 100 or above 160 beats/minute
    - capillary refill time above 3 seconds
    - body temperature of 38°C or above, or 37.5°C on 2 occasions 30 minutes apart
    - oxygen saturation below 95% (measuring oxygen saturation is optional after non-significant meconium)
    - Presence of central cyanosis, confirmed by pulse oximetry if available.

- Explain the findings to the woman, and inform her about what to look out for and who to talk to if she has any concerns.

BABIES BORN TO WOMEN WITH PRELABOUR RUPTURE OF THE MEMBRANES AT TERM

- Ensure that any any baby born to a woman with prelabour rupture of the membranes (more than 24 hours before the onset of established labour) has been reviewed by a neonatal doctor or advanced nurse practictioner. Use their assessment to guide whether NEWS observations are necessary. Where there are any concerns about a baby, refer promptly to a neonatologist for review, emphasising that the baby has a significant risk factor for sepsis (prolonged rupture of membranes).

- If there are no signs of infection in the woman, do not give antibiotics to either the woman or the baby, even if the membranes have been ruptured for over 24 hours.

- If there is evidence of infection in the woman, follow the pyrexia in labour guideline.

- Advise women with prelabour rupture of the membranes to inform their healthcare professionals immediately of any concerns they have about their baby's wellbeing in the first 5 days after birth, particularly in the first 12 hours when the risk of infection is greatest.

- Do not perform blood, cerebrospinal fluid and/or surface culture tests in an asymptomatic baby.
- Refer a baby with any symptom of possible sepsis, or born to a woman who has evidence of chorioamnionitis, to a neonatal care specialist immediately.

CARE OF THE WOMAN AFTER BIRTH

INITIAL ASSESSMENT

- Carry out the following observations of the woman after birth:
    - Record her temperature, pulse and blood pressure. Transfer the woman (with her baby) to obstetric-led care if any of the relevant indications listed in the section “when to transfer from midwife led care of obstetric led care” on page 9 are met.
    - Uterine contraction and lochia.
    - Examine the placenta and membranes: assess their condition, structure, cord vessels and completeness. Transfer the woman (with her baby) to obstetric-led care if the placenta is incomplete.
    - Early assessment of the woman's emotional and psychological condition in response to labour and birth.
    - Successful voiding of the bladder. Assess whether to transfer the woman (with her baby) to obstetric-led care after 6 hours if her bladder is palpable and she is unable to pass urine.
- If transferring the woman to obstetric-led care, follow the general principles for transfer of care.

PERINEAL CARE

DEFINITION AND ASSESSMENT OF TRAUMA

- Define perineal or genital trauma caused by either tearing or episiotomy as follows:
    - first degree – injury to skin only
    - second degree – injury to the perineal muscles but not the anal sphincter
    - third degree – injury to the perineum involving the anal sphincter complex:
        - 3a – less than 50% of external anal sphincter thickness torn
        - 3b – more than 50% of external anal sphincter thickness torn
        - 3c – internal anal sphincter torn.
    - Fourth degree – injury to the perineum involving the anal sphincter complex (external and internal anal sphincter) and anal epithelium.
- Before assessing for genital trauma:
    - explain to the woman what is planned and why
    - offer inhalational analgesia

    - ensure good lighting
    - position the woman so that she is comfortable and so that the genital structures can be seen clearly

- Perform the initial examination gently and with sensitivity. It may be done in the immediate period after birth.

- If genital trauma is identified after birth, offer further systematic assessment, including a rectal examination.

- Include the following in a systematic assessment of genital trauma:
    - further explanation of what is planned and why
    - confirmation by the woman that tested effective local or regional analgesia is in place
    - visual assessment of the extent of perineal trauma to include the structures involved, the apex of the injury and assessment of bleeding
    - a rectal examination to assess whether there has been any damage to the external or internal anal sphincter if there is any suspicion that the perineal muscles are damaged.

- Ensure that the timing of this systematic assessment does not interfere with mother–baby bonding unless the woman has bleeding that requires urgent attention.

- Assist the woman to adopt a position that allows adequate visual assessment of the degree of trauma and for repair. Only maintain this position for as long as necessary for systematic assessment and repair. If it is not possible to adequately assess the trauma, transfer the woman (with her baby) to obstetric-led care, following the general principles for transfer of care.

- Seek advice from a more experienced midwife or obstetrician if there is uncertainty about the nature or extent of the trauma. Transfer the woman (with her baby) to obstetric-led care (following the general principles for transfer of care if the repair needs further surgical or anaesthetic expertise.

- Document the systematic assessment and its results fully, possibly pictorially.

- All relevant healthcare professionals should attend training in perineal/genital assessment and repair, and ensure that they maintain these skills.

- Undertake repair of the perineum as soon as possible to minimise the risk of infection and blood loss.

WHEN CARRYING OUT PERINEAL REPAIR:

    - ensure that tested effective analgesia is in place, using infiltration with up to 20 ml of 1% lidocaine or equivalent
    - top up the epidural or insert a spinal anaesthetic if necessary.

- If the woman reports inadequate pain relief at any point, address this immediately.

- Advise the woman that in the case of first-degree trauma, the wound should be sutured in order to improve healing, unless the skin edges are well opposed.
- Advise the woman that in the case of second-degree trauma, the muscle should be sutured in order to improve healing.
- If the skin is opposed after suturing of the muscle in second-degree trauma, there is no need to suture it.
- If the skin does require suturing, use a continuous subcuticular technique.
- Undertake perineal repair using a continuous non-locked suturing technique for the vaginal wall and muscle layer.
- Use an absorbable synthetic suture material to suture the perineum.
- Offer rectal non-steroidal anti-inflammatory drugs routinely after perineal repair of first- and second-degree trauma provided these drugs are not contraindicated.
- Observe the following basic principles when performing perineal repairs:
    - Repair perineal trauma using aseptic techniques.
    - Clean the perineum and vagina with antiseptic solution (pink or yellow sachets) and then apply sterile drapes
    - Check equipment and count swabs and needles before and after the procedure.
    - Good lighting is essential to see and identify the structures involved.
    - Ensure that difficult trauma is repaired by an experienced practitioner in theatre under regional or general anaesthesia.
  - For women who have had an epidural, **in the presence of other risk factors** like instrumental delivery, and simple perineal trauma (simple first/second degree tear/episiotomy not associated with multiple perineal laceration/other vaginal tears), the catheter **should not be removed for at least 6hours**.
  - For women who had an **epidural and other risk factors** like: pre-existing **urinary dysfunction, midcavity/rotational instrumental deliveries, anterior/complex perineal trauma/oedema/haematoma**, the catheter should **not be removed for at least 12hours** after delivery.

    - Ensure that good anatomical alignment of the wound is achieved and that consideration is given to the cosmetic results.
    - Carry out rectal examination after completing the repair to ensure that suture material has not been accidentally inserted through the rectal mucosa.
    - After completion of the repair, document an accurate detailed account covering the extent of the trauma, the method of repair and the materials used.

- Give the woman information about the extent of the trauma, pain relief, diet, hygiene and the importance of pelvic-floor exercises.

EDUCATION AND TRAINING

None

MONITORING

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
	Audit	Labour Ward Leads and matrons	Yearly	Report to Maternity Governance

SUPPORTING REFERENCES

Intrapartum Care cg190. NICE (2017). London.
Management of Third and Fourth Degree Tears Green Top Guideline No 29. RCOG.(2015)

KEYWORDS

Labour, Intrapartum care, vaginal examination, pre labour rupture of membranes, eating and drinking in labour, pain relief, meconium, assessment of the newborn

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title): N Ling	**Executive Lead:** Chief Nurse
Details of Changes made during review: December 2019 - V3 Format changed**.** Insertion of OASI care bundle and perineal repair guidance	

Details of updates

Date	Individual	Changes made

	responsible for changes	
17/7/20	Eamonn Breslin and Kerry Williams	Commerical cord blood collection added in (page 24)If a controlled amniotomy is necessary, Oxytocin should be commenced immediately (not required if the presenting part is fixed in the pelvis) (Page 18)
3/5/21	Hayley Archer	Fetal heart rate monitoring Guideline removed in view of new guidelines being brought in. Hyperlinks added in. Any meconium for paired cord gases.
November 2021 V3.2	H Fakoya L Taylor	Added reference to Consultant midwife referral when birth outside of criteria is requested Factors suggesting increased risk and **planned birth at obstetric unit:-** History of PPH volume reduced from 1500ml to 1000ml or requiring treatment or blood transfusion Current Hb level increased from 90g/l to 100g/l Update Bladder care post perineal trauma in line with new bladder care guidance

Appendix 1

Addressograph label here

Managing prolonged latent phase of labour for women with low risk pregnancies
A vaginal examination should be offered in the presence of ***regular*** painful contractions to confirm the active phase of labour. A full explanation and rationale for the procedure should be provided as part of verbal consent.

Primigravida: active labour should be confirmed where there is cervical dilatation and full effacement with ***regular*** painful contractions, increasing in length, strength and frequency.
Multigravida: Date and time of 1st assessment: active labour should be confirmed where there is cervical dilatation with ***regular*** painful contractions, increasing in length, strength and frequency.
Dilation should only be used as a guide. The assessment should always take in the whole clinical picture.

		Date	Date	Date
		Time	Time	Time
		1st Assessment This should include a medical review if there are any concerns about the clinical picture	2nd Assessment This should include a medical review if there are any concerns about the clinical picture	3rd Assessment This should include a medical review
Contractions	Regular/Irreg	:10	:10	:10
Cervix	Position			
	Effacement			
	Application			
	Dilatation			
Presenting part:	Cephalic			
	Station			
	Caput			
	Moulding			
Position				
Membranes	Intact/Absent			
	Liquor colour			
Fetal heart	Normal			
Fetal movements	Normal			
Urinalysis				
MEOWS Score				
Signature				

Woman not in active labour refer to algorithm.
If following a third vaginal examination the woman is not in active labour, a full assessment including continuous electronic fetal monitoring should be carried out and referral for medical review using **SBAR**.

Discussed with:
Plan:

Appendix 2 – PPH risk assessment

PPH RISK ASSESSMENT (version 2: Nov 2019)

Complete on admission in labour, prior to 2nd stage and following delivery

ANTENATAL RISK FACTORS	Points
Placenta Praevia / Accreta	10
Placental Abruption	10
Multiple Pregnancy	6
Current Hb ≤90	6
Parity ≥6	6
Massive Polyhydramnios (AFI>30)	6
Previous Massive Obstetric Haemorrhage (1.5 litres)	6
Pre-eclampsia / gestational hypertension	4
Maternal clotting Disorder	3
Previous PPH (>1litre or required transfusion) or previous Retained Placenta	3
Parity ≥4	3
Intrauterine death	2
BMI ≥40 at booking	2
Uterine Fibroids (>3cm or multiple)	2
Recurrent APH (minor)	2
Polyhydramnios (AFI >20)	2
Fetal estimated weight >4kg or over 95th centile on GROW	2
Elective Caesarean Section / Recurrent Caesarean Section	2
Antenatal Score	

PERINATAL RISK FACTORS	Points
Induction of labour / Augmentation of labour	2
Sepsis / Pyrexia in Labour >38 degrees	2
Prolonged 1st stage of labour > 12 hours (active stage of labour)	2
>12 hours of Syntocinon	2
Prolonged 2nd stage of labour > 4hours	2
Perinatal Score prior to second stage	
Perinatal Score after delivery	

POSTNATAL RISK FACTORS	Points
Retained Placenta	6
Emergency Caesarean Section	2
Baby actual weight > 4kg (see note on next page)	2
Operative Vaginal Delivery	2
Postnatal Score	

Total Score (Antenatal + Perinatal score after delivery +Postnatal score)

Management for 3rd stage and following delivery – alternative plans should be documented in the notes		
Score less than 6	**Score6–9**	**Score 10 or more**
Syntometrine IM at delivery or if contraindicated give Syntocinon 10unitsIM/5unitsIV	Follow green action PLUS	Green and Amber actions PLUS
	IV access – Grey cannula	2nd Grey cannula and set up Cell Salvage collection for Caesarean
Measure all blood loss: >1000ml: Inform Obs Reg >1500ml: Obs Reg and Anaes to attend, Inform Obs Cons	Send Group & Save and FBC	Cross match 2 units of blood if not suitable for electronic release
	Syntocinon infusion 40 units with 36ml 0.9% Saline @ 10ml / hour	Even if not bleeding, give one of: • *Ergometrine 250mcg IM (or 125mcg IV at CS)* • *Carboprost 250mcg IM* • *Misoprostol 800mcg PR*
Routine Postnatal observations	Commence MEOWS and record observations at least every 30 minutes for 2 hours	
	Consider Carboprost - EARLY	
BE AWARE OF THE CONTRA-INDICATIONS WHEN USING ERGOMETRINE		

STRUCTURED CHECKLIST

- **Complete on admission for IOL or in spontaneous labour**
- **Four hourly throughout the first stage of labour**
- **Hourly in the second stage of labour**
- **Following the third stage of labour**

Most recent Hb ____ Date tested ____ / ____ / ____

If <100, should be retested on admission in labour

Group and Save Required: YES ☐ NO ☐

Group and Save Sent: YES ☐ NO ☐

Date and Time sent: ____ / ____ / ____ - ____ : ____

Is woman suitable for electronic release if blood required?: YES ☐ NO ☐

If NO, refer to care plan and cross match blood early

PPH scoring tool record: ____

Time of PPH Assessment	Time	Total Score	3rd Stage Plan	Signature
Admission for elective C/S			Green / Amber / Red	
Admission assessment in Labour			Green / Amber / Red	
Four Hourly in Labour (1)			Green / Amber / Red	
Four Hourly in Labour (2)			Green / Amber / Red	
Four Hourly in Labour (3)			Green / Amber / Red	
Four Hourly in Labour (4)			Green / Amber / Red	
Four Hourly in Labour (5)			Green / Amber / Red	
Start of Second Stage			Green / Amber / Red	
After 1st hour in Second Stage			Green / Amber / Red	
After 2nd hour in Second Stage			Green / Amber / Red	
After 3rd hour in Second Stage			Green / Amber / Red	
Following the Third Stage			Green / Amber / Red	

Notes on change in management plan or reason for diverting from the score recommended plan:

Note: We recognise that the baby may not be weighed immediately. If >1 hour postnatal but baby weight>4kg and this pushes woman into the next scoring category (ie amber or red), do not perform additional interventions if the woman has not had any bleeding.

Adapted from the Fife PPH management tool. Version 2 Nov 2019