Trust guideline for the management of major obstetric haemorrhage (MOH)

Document Control:

For Use In:	Norfolk and Norwich University Hospital Foundation Trust		
	Maternity Services		
Search Keywords	Obstetric haemorrhage, APH, PPH, Oxytocic's, placental abruption, uterine atony		
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Document Owner:	Women and Children's Services		
Approved By:	Maternity Guidelines Committee Clinical Guidelines Assessment Panel		
Ratified By:	Clinical Safety and Effectiveness Sub-Board		
Approval Date:	29th April 2024	**Date to be reviewed by:** This document remains current after this date but will be under review	29th April 2027
Implementation Date:	N/A		
Reference Number:	852		

Version History:

Version	Date	Author	Reason/Change
V9.2	September 2019	Daisy Nirmal Rosie Goodsell Jon Francis	Change from Oxytocin to Syntometrine for routine active management 3rd stage after Cochrane review
V10	March 2021	Daisy Nirmal Rosie Goodsell Jon Francis	Added rate of post-partum oxytocin post infusion - 166mL now, not 160mL as previously stated.
V10.1	August 2021	Daisy Nirmal Rosie Goodsell Jon Francis	Change of proforma to include on-going assessment of blood loss

V10.2	October 2021	Daisy Nirmal Rosie Goodsell Jon Francis	Amendment of incorrect figure on flowchart
V11.0	June 2022	Daisy Nirmal Rosie Goodsell Jon Francis	In case of secondary postpartum haemorrhage, retained products or anything of concern should be discussed with the consultant
V11.1	April 2024	Victoria Maxey, Consultant Obstetrician	New standard template. Follow up after caesarean hysterectomy, including advice re cervical screening.

Previous Titles for this Document:

Previous Title/Amalgamated Titles	Date Revised
None	Not applicable

Distribution Control

Printed copies of this document should be considered out of date. The most up to date version is available from the Trust Intranet.

Consultation

This guideline has been ratified by the O&G Clinical Guideline Committee and has been disseminated via the hospital intranet to all members of obstetric staff.

Consultant Gynaecologist
Consultant Histopathologists
Consultant Obstetrician

Monitoring and Review of Procedural Document

The document owner is responsible for monitoring and reviewing the effectiveness of this Procedural Document. This review is continuous however as a minimum will be achieved at the point this procedural document requires a review e.g., changes in legislation, findings from incidents or document expiry.

Relationship of this document to other procedural documents

This document is a clinical guideline to Norfolk and Norwich University Hospital Foundation Trust; please refer to local Trust's procedural documents for further guidance, as noted in Section 5.

Trust guideline for the management of major obstetric Haemorrhage. (MOH)

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Quick reference: Major Obstetric Haemorrhage on Delivery Suite

MLBU patients with EBL > 500ml should be discussed with Delivery Suite as they may need urgent transfer for ongoing management (see section 2 below).

Obstetric Haemorrhage Transfusion Flowchart

1. Introduction

1.1. Rationale

Obstetric haemorrhage remains one of the major causes of maternal death in both developed and developing countries. The 2011–13 Confidential Enquiries into Maternal Deaths and Morbidity report (1) identified 13 direct deaths due to obstetric haemorrhage in the UK and Ireland: the report places obstetric haemorrhage as the second leading cause of direct maternal deaths. The recommendations from the report focus on basic clinical skills, with prompt recognition of the severity of a haemorrhage and emphasise communication and teamwork in the management of these cases**.**

1.2. Objective

The objective of the clinical guideline is to:

- inform practice in the event of Obstetric Haemorrhage.
- Ensure prompt recognition of the severity of a haemorrhage.
- Emphasise communication and teamwork in the management of these cases.

This does not cover Management of Placenta Previa or suspected Accreta.

Antenatal anaemia should be investigated and treated appropriately as this may reduce the morbidity associated with postpartum haemorrhage (2).

The management of women who refuse blood products presents a continuing challenge in obstetric practice. These women should have an individual management plan documented in the notes (refer to the existing departmental guideline on Obstetric haemorrhage in women who refuse blood transfusion Trust Docs ID 851.

1.3. Scope

This clinical guideline is intended for use for all maternity and obstetric staff within NNUHFT Maternity Services.

1.4. Glossary

The following terms and abbreviations have been used within this document:

Term	Definition
NNUHFT	Norfolk and Norwich University Hospital Foundation Trust
MOH	Major Obstetric Haemorrhage
APH	Antepartum Haemorrhage
PPH	Post Partum Haemorrhage
DIC	Disseminated Intravascular coagulation
ARDS	Acute Respiratory Distress Syndrome
MLBU	Midwifery led birthing unity
RhD	Rhesus negative blood group
IU	International Units

Mcg	Microgram
IV	Intravenous
IM	Intramuscular
RBC	Red Blood cells
RCOG	Royal College of Obstetricians and Gynaecologists

2. Responsibilities

Medical staff in obstetrics including junior doctors, speciality doctors, consultants and midwifery staff who care for pregnant women have a responsibility to keep updated with the latest national and trust guidance on management of obstetric haemorrhage to provide optimal care and minimise adverse outcomes.

3. Processes to be followed.

The following principles describe the processes to meet the objective of this clinical guideline for antepartum and postpartum haemorrhage.

3.1. Antepartum Haemorrhage

The two most serious causes of APH are placenta praevia and placental abruption. It is outside the remit of this guideline to discuss the predisposing factors and clinical features of these conditions.

Placenta praevia leads to bleeding from a low-lying situated placenta. It is more common pre-term, and the blood loss is typically 'revealed' and painless.

Placental abruption arises from premature detachment of a normally situated placenta and complicates 0.5% - 1.8% of pregnancies, with serious maternal and fetal consequences. It remains a significant cause of maternal mortality and morbidity. There may be up to 60% perinatal mortality.

3.1.1 Complications of APH

- Hypovolaemia.
- DIC (Disseminated intravascular coagulation).
- Acute renal failure.
- ARDS (acute respiratory distress syndrome).
- Fetal death.
- Postpartum haemorrhage.
- Maternal death.

3.2. Postpartum Haemorrhage

3.2.1 Definition of Postpartum Haemorrhage (PPH)

Primary Postpartum Haemorrhage is the most common cause of Major Obstetric haemorrhage. The traditional definition of primary PPH is the loss of 500 mL or more

of blood from the genital tract within 24 hours of the birth of a baby. PPH can be minor (500–1000 mL) or major (more than 1000 mL). Major can be further subdivided into moderate (1001–2000 mL) and severe (more than 2000 mL) (2).

Secondary Postpartum Haemorrhage is abnormal or excessive bleeding from the birth canal between 24 hours and 12 weeks postnatally.

3.2.2 Principles of management of Primary PPH.

The midwife in charge and the first-line obstetric and anaesthetic staff should be alerted when women present with minor PPH (blood loss 500–1000 mL) without clinical shock**.**

The aim being to recognise and arrest the bleeding before it becomes life-threatening. For patients in the Midwifery-Led Birthing Unit (MLBU), if the Estimated Blood Loss (EBL) is under 1000mLs, the bleeding has settled and the woman is stable and asymptomatic, it may be appropriate to remain on MLBU, following discussion with the delivery suite Co-ordinator. (See Trust Docs ID 7181 - MLBU Operational Guideline). Where the EBL exceeds 1000mL, all women should be transferred to the delivery suite.

3.2.3 Measures for minor PPH (blood loss 500–1000 mL).

Measures for minor PPH without clinical shock.

- Intravenous access (one 16-gauge cannula).
- Urgent venepuncture (20 mL) for:
    a. Group and screen.
    b. Full blood count.
    c. Coagulation screen.
- Pulse, respiratory rate, temperature, and blood pressure plus MEOWS score recording every 15 minutes.
- Commence warmed crystalloid infusion**.**

Failure to recognise and adequately treat a primary PPH can quickly lead to Major obstetric Haemorrhage.

Pregnant women can initially compensate well, and signs of hypovolaemia may occur late. Whilst significant haemorrhage may be apparent from observed physiological disturbances, young fit pregnant women compensate remarkably well. Whilst a tachycardia commonly develops there can be a paradoxical bradycardia and hypotension is always a very late sign. Therefore, ongoing bleeding should be acted on without delay. Fluid resuscitation and blood transfusion should not be delayed because of false reassurance from a single haemoglobin result; consider the whole clinical picture. (1)

The circulating blood volume increases in pregnancy to approximately 100mL/kg and so responses to the estimated blood loss should take the woman's stature into account.

For example, a woman of 70kg who loses 1500mLs of blood has lost about 20% of her circulating volume, whilst in a woman who weighs 55kg this would comprise almost 30%.

Estimated blood volumes and proportionate losses according to body weight (1)

Weight	Total blood volume*	15% blood volume loss	30% blood volume loss	40% blood volume loss
50kg	5000mLs	750mLs	1500mLs	2000mLs
55kg	5500mLs	825mLs	1650mLs	2200mLs
60kg	6000mLs	900mLs	1800mLs	2400mLs
65kg	6500mLs	975mLs	1950mLs	2600mLs
70kg	7000mLs	1050mLs	2100mLs	2800mLs

3.2.4 Aetiology of PPH (The four Ts-Tone, trauma, tissue, thrombin)

1. Atonic uterus (accounts for 75 - 90% of cases)
2. Genital tract trauma (20%of cases)
3. Retained products (10% of cases)
4. Clotting defect (1% of cases)

3.2.5 Risk Factors for PPH

1. Multiple pregnancy/polyhydramnios (i.e. uterine over distension) (Tone).
2. Previous PPH (Tone).
3. Placental abruption (Thrombin).
4. Prolonged labour/precipitate labour (Tone).
5. Failure to progress in second stage (Tone).
6. Prolonged third stage of labour (Tissue).
7. Retained placenta (Tissue).
8. Placenta accreta (Tissue).
9. Chorioamnionitis (Tone, Thrombin).
10. Perineal laceration (Trauma).
11. High parity (P4 and above) (Tone).
12. General anaesthesia (Tone).
13. Second stage Caesarean section (Tissue).

3.3. Initial management of major APH and PPH

If managed inadequately or in an untimely manner, major APH and PPH will quickly lead to sudden maternal collapse.

3.3.1 Immediate Management

The initial management of obstetric haemorrhage involves assessment and maternal resuscitation followed by treating the cause of haemorrhage – and this is common to both APH and PPH.
Actions should occur simultaneously:

- Communication.
- Resuscitation.
- Monitoring and investigation.
- Arrest bleeding.

Speed is of the essence, so clear lines of communication between the midwifery, obstetric, anaesthetic and the blood transfusion staffs is essential. Where feasible it is important to keep the patient and her birthing partner informed of what is happening and proposed management.

1. Call for HELP, pull the emergency buzzer. On the Midwifery Led Birthing Unit (MLBU) the emergency buzzer will sound on Blakeney Ward and staff from there will attend.
2. Request 2222 **call** and ask for the emergency obstetric team. State clearly the location of the emergency, its nature, i.e. APH/PPH, and the room number.
3. If situation occurs on the MLBU, the Delivery Suite co-ordinator should be contacted immediately and provision for transfer should be made. Immediate emergency measures as indicated below should be initiated whilst arrangements are being made for transfer.
4. The massive blood transfusion protocol should be followed, and laboratory staff alerted by ringing extension 2905 and use of the trigger phrase **"I want to trigger the Massive Blood Transfusion Protocol"**. This is linked to the trust guideline for **Massive blood loss in adults**. This will obtain: 5 units of PRC and 4 of FFP.
5. Ensure sufficient personnel are available to carry urgent blood samples **to** the transfusion department and blood and blood products **from** there. This is a role for which Midwifery Care Assistants (MCAs) have had specific training.
6. Inform the on-call consultant obstetrician and consultant anaesthetist where appropriate for instance 40 % blood volume loss or ongoing bleeding.
7. Where possible, allocate a scribe. Use the Obstetric Emergency Record chart to record events.

Remember – ABC

1. **Airway** maintenance, if pregnant left lateral tilt. Chin lift.
2. **Breathing** - Administer oxygen 10 -15 L/min via a face mask
3. **Circulation** - Ensure IV access -16-gauge intravenous cannulae x 2.
4. Take bloods for FBC, U&E clotting and X-match (4 units) and Kleihauer if Rh

negative. All patients should be given blood of their own blood group as soon as possible. If the blood bank is informed of the urgency, ABO and Rh D compatible blood can usually be made available on an emergency basis soon after receipt of the crossmatch sample. Additional colloid will be necessary if more than 3 units have been given. Only use un-crossmatched O Rh D negative blood if transfusion must be given immediately.

5. **Initial fluid management**. Rapid infusion of 2000 mL of warmed Hartmann's solution.
6. The anaesthetist will normally supervise the management of fluid replacement.
7. An indwelling bladder catheter should be inserted with hourly measurement output.
8. Strict fluid balance is essential, and a fluid balance chart should be initiated and carefully maintained.
9. Postnatal women can be laid flat possibly with a head down tilt if there are signs of hypovolaemia,
10. Regular haemoglobin and haematocrit assessment is helpful but restoration of normovolaemia is first priority.
11. Fluid resuscitation and blood transfusion should not be delayed because of false reassurance from a single haemoglobin result; consider the whole clinical picture (1)
12. Platelet counts and coagulation studies should be performed as a guide to the need for replacement therapy with fresh frozen plasma, cryoprecipitate or platelet concentrates.
13. A plasma fibrinogen level of greater than 2 g/L should be maintained during ongoing PPH.
14. Give 4g Fibrinogen Concentrate after first 4 units of blood transfused BEFORE considering FFP and/or cryoprecipitate. (see full Fibrinogen concentrate guideline here - Trustdocs ID: 17727)
15. Clinicians should consider the use of intravenous tranexamic acid 1.0 g IV, in addition to Oxytocin at caesarean section to reduce blood loss in women at increased risk of PPH. (2)
16. In a woman who is bleeding and is likely to develop a coagulopathy or has evidence of a coagulopathy, it is prudent to give blood components before coagulation indices deteriorate and worsen the bleeding. (1)
17. Keep the patient warm.
18. If bleeding is ongoing after the first 4 units of blood have been transfused and fibrinogen concentrate given, then the primary pack from the major obstetric haemorrhage protocol should be used (5 units RBC as indicated, 4 units FFP).
19. Ensure appropriate blood product replacement. Up to 1000 mL of fresh frozen plasma (FFP) and 10 units of cryoprecipitate (two packs) maybe given in the face of relentless bleeding, while awaiting results of coagulation studies.
20. Correct acidosis, hypothermia (clotting is prolonged with hypothermia – active warming measures should be considered) & hypocalcaemia.
21. Involve consultant haematologist if coagulation defect before surgical intervention.

22. Monitor BP, pulse, urine output, O_2 saturation, respiratory rate continuously and temperature every 15 minutes – Record on Mega chart. In cases of severe APH commence CTG. MEOWs Scores must be attributed to each set of observations.
23. Invasive intravascular monitoring may be initiated by the anaesthetist.
24. Record keeping. Ensure records are up to date and complete following the event and that all drugs are prescribed.

3.3.2 Continuing management of APH

Having resuscitated the mother, the subsequent obstetric management depends on the severity of the bleeding and the condition and gestation of the fetus.

Placenta praevia (fetus dead or alive):

If delivery is deemed necessary, then caesarean section is the only safe option. Senior obstetric and anaesthetic staff should be involved, with a consultant obstetrician scrubbed in theatre and two anaesthetists (at least one a consultant), as a minimum. A consultant gynaecologist should be aware the case is going on in theatre (although do not need to be present). 4 units of blood should be available in the fridge on delivery suite.

Placental abruption:

Intrauterine death: Aim to deliver vaginally unless obstetric contraindication. Labour often follows quickly. Perform amniotomy and augment with Oxytocin if indicated. Anticipate PPH. Where an abruption results in fetal loss, a blood transfusion will usually be required. **Do not** wait until the haemorrhage has been seen.

Live fetus: If signs of fetal compromise and viable gestation: perform a category "1" Caesarean section under general anaesthetic.

If there is no fetal compromise, vaginal delivery may be appropriate. Discuss with consultant on-call. Continuous electronic fetal heart rate monitoring is essential.

3.3.3 Continuing management of PPH

Management of Uterine Atony

1. Anticipate the problem - those women with risk factors should already be on Delivery Suite and have venous access and be receiving an Oxytocin infusion post-partum of 30 units of Oxytocxin in 500 mL 0.9% normal saline at 166 mL/hour as per Trust Guideline for the Management of the Third Stage of Labour including Retained Placenta Trustdocs ID: 818.
2. "Rub-up" the uterine fundus to stimulate uterine contraction, and consider removal of vaginal/uterine clots. Consider Bi-manual compression.
3. Confirm that Syntometrine 5/500 IM was given in third stage - if not, do so. **NB. In pre-eclampsia or patients with a history of cardiac disease give 5 IU Oxytocin by slow I.V. injection or 10 IU I.M.**
4. Give 1g Tranexamic acid by slow I.V injection (~1mL/min). This is not a

uterotonic, so will not help uterine tone. However, it is an antifibrinolytic and has been shown to reduce blood loss in this situation, especially if given early.

5. Repeat Syntometrine 5/500 (or Oxytocin if hypertensive or cardiac disease).
6. Commence infusion of 30 units of Oxytocin in 500 mL 0.9% normal saline at 166 mL/hour if not already in progress.
7. If ongoing bleeding at 30min or re-bleeding within 24 hours give a further 1g IV Tranexamic Acid.
8. If the placenta is retained and uterus contracted, try controlled cord traction. If this fails, arrange manual removal of placenta – see guideline for management of third stage of labour.
9. If atony persists, Carboprost (*Hemabate*), 250 mcg (1.0mL) may be given by deep I.M. injection at the discretion of the Obstetric Registrar. If successful, further doses (maximum of eight) may be required at 15-minute intervals, after discussion with the on-call Consultant.
10. Misoprostol 800 mcg can be administered sub lingual.
11. Arrange urgent examination under anaesthesia if:
    - a.i. Significant haemorrhage continues despite a well contracted uterus.
    - a.ii. Above measures fail to produce a tonic uterine contraction.
    - a.iii. Bleeding is secondary to obvious genital tract trauma.
12. Consider Bakri Tamponade Balloon in selected cases.
13. Consider B-Lynch brace suture in selected cases.
14. Interventional radiology is available out of hours. If the bleeding persists, the obstetric consultant can contact the Interventional Radiology Consultant on-call. (Trust Guideline for the Anaesthetic Management of women with known or suspected abnormal placentation requiring interventional radiology. Trustdocs ID: 7504.)
15. A caesarean hysterectomy may be required where other measures are unsuccessful. A Consultant Gynaecologist should be called in this instance.
16. If bleeding is not responsive to the standard medical, surgical, radiological treatment, rFVIIa may be considered. Discuss with consultant haematologist.
17. Cell salvage should be considered in selected cases after discussion with the anaesthetist and the theatre staff (See also Trust guideline Joint Trust Guideline for the Management of Intraoperative Cell Salvage in Obstetrics Trustdocs ID: 829).

18. Record keeping – procedures should be documented contemporaneously throughout the event using the emergency PPH record chart by a scribe. Documentation should include the persons present, tasks undertaken, drugs given, and observations recorded including fluids given and urine output. Strict fluid balance charts should be continued following the event with regular review by the obstetrician.
19. If the emergency has occurred on the MLBU, the woman will be transferred to the Delivery Suite following discussion with the co-ordinator and a transfer form completed by the midwifery staff.
20. Communication: Document clear lines of communication between the consultant obstetrician, consultant anaesthetist, haematologist, blood transfusion personnel, Delivery Suite co-ordinator and senior midwife on MLBU.
21. Ensure the woman and her family are reassured throughout and are debriefed after the event.

**** Notes:**

- Oxytocin infusion is the recommended first line treatment for primary PPH. When used following prophylactic uterotonics, misoprostol and oxytocin infusion work similarly. Vaginal, sublingual or rectal misoprostol took 1.0–2.5 hours to increase uterine tone. Clinicians should be aware of this delay in the clinical effect of misoprostol. Guidelines from WHO and the International Federation of Gynaecology and Obstetrics recommend that in the management of PPH, misoprostol is administered sublingually. (2,5,6)

- The WOMAN trial published April 2017 recommends the early use of tranexamic acid in PPH (7). This trial Randomised 20,060 women with PPH (>500mL Normal Vaginal Delivery or >1000mL Caesarean Section) from multiple centres (193 hospitals worldwide) to either placebo or 1g I.V. tranexamic acid alongside usual care. A significant reduction in mortality from bleeding was found especially if given early (Relative risk 0.69 p=0.008) with no increase in adverse events including thromboembolic events. This confirms previous smaller, underpowered studies with similar results (8).

Secondary PPH:

Following initial resuscitation, appropriate use of antimicrobial therapy should be initiated when endometritis is suspected.
A pelvic USS may be helpful to exclude the presence of retained products of conception. Surgical evacuation of retained products should be undertaken by an experienced clinician (2).
All cases of secondary PPH should be discussed/reviewed by a consultant and a plan for management should be written in the notes.

3.4. Debriefing and follow up.

3.4.1 Follow up and investigation

An opportunity to discuss the events surrounding the obstetric haemorrhage should be offered to the woman (and her birthing partner) at a mutually convenient time. All cases of unanticipated peripartum hysterectomy should be subsequently discussed on monthly Clinical Governance Meetings.

Incident/Datix to be completed for all cases of Obstetric haemorrhage where blood loss is more than 1.5 litres).

3.4.2 Follow-up after Caesarean Hysterectomy

Where a Caesarean Hysterectomy has been undertaken (planned or unplanned) a joint appointment between obstetrics and gynaecology should be offered (usually 6 weeks postnatally), to allow a comprehensive discussion of the surgery and histology results and to advise on future care, e.g. additional input from physiotherapy, cervical screening etc.

When a hysterectomy is performed in the perinatal period it can be more challenging to differentiate uterine/cervical/vaginal transitional landmarks and therefore when clinically it is felt that a total hysterectomy has been performed this may not always be the case. In addition, it is not possible to confirm from the pathology specimen alone complete removal of the entirety of the cervix.

Therefore, local agreement is that, unless it is clear that only a subtotal hysterectomy has been performed (indicating an ongoing need for cervical screening), a clinical examination (speculum +/- digital vaginal examination) should take place to confirm the clinical presence or absence of all or part of the cervix. This examination should be offered at the joint debrief appointment.

With knowledge of the clinical examination findings the Consultant Gynaecologist, having reviewed the smear history, will advise on whether cervical screening can be ceased and communicate this to both the patient and General Practitioner.

4 Training & Competencies

The expectations for staff training are those detailed in the Maternity Training Needs Analysis. Trustdocs8649

5 Related Documents

RCOG. Green-top guideline no.52 (2016)	RCOG Greentop guideline 52
The Management of Antenatal and postnatal anaemia: trust docs 16043	TrustDocs16043
National Institute for Health and Care Excellence: Intrapartum care	NICE NG35
Trust guideline for the management of obstetric haemorrhage in women who refuse blood and blood products: trust docs 851	TrustDocs851

RCOG. Blood transfusion in obstetrics Green top guideline no. 47	RCOG greentop guideline 47
Maternity Training Needs Analysis	Trustdocs8649
Trust guideline for Using Fibrinogen Concentrate as part of MOH protocol in theatre	TrustDocs17727
Trust guideline Joint Trust Guideline for the Management of Intraoperative Cell Salvage in Obstetrics	TrustDoc 829
Royal College of Obstetricians and Gynaecologists. Antepartum Haemorrhage. Green-top Guideline No. 63. London: RCOG; 2011.	RCOG Greentop guideline 63
RCOG: Placenta Praevia and Placenta Accreta Diagnosis and Management. Green-top Guideline No. 27a	RCOG Greentop guideline 27a
Trust guideline for the Management of Third Stage of Labour	Trustdoc818
Trust guideline for Massive Blood Loss in Adults	TrustDocs1175
Clinical guideline for women with abnormally invasive placenta (East of England Regional network guideline)	TrustDocs19331

6 References

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7 Monitoring Compliance

Key elements	Process for Monitoring	By Whom (Individual / group /committee)	Responsible Governance Committee /dept	Frequency of monitoring
PPH >1500mls	Datix Trigger – case investigation Rates monitored on Maternity Dashboard	Maternity Risk Team	Women's and Childrens Risk and Governance	Case by Case

The cases are to be discussed at the Maternity Incident Review and Escalation Meeting (MIRE) to make recommendations for further action and ensure that the actions and recommendations are suitable and sufficient.

8. Appendices

Postpartum Haemorrhage (PPH) / Massive Obstetric Haemorrhage Proforma				*Patient Identifier Label*
Date *dd/mm/yyyy*		**Time** *24 hours clock*		
Consultant				

Person completing form (scribe)	*Print name*	*Signature*	*Designation*	*Date dd/mm/yyyy*

Personnel present	*Print name*	*Designation*

Lead: Helicopter view		

Date *dd/mm/yyyy*		If transferring to theatre 2nd name band	
		Completed ☐	
Call for help		*Tick when actioned*	*Time actioned as appropriate 24 hour clock*
Emergency bell activated		☐	
2222 call -ask for Obstetric Emergency team		☐	
Airway			
Check airway		☐	
Breathing			
Check breathing		☐	
Oxygen 10 litres/minute		☐	
Circulation			
Lie flat		☐	
1st 16G cannula		☐	
Rapid infusion of 2L warmed Crystalloid (Hartmanns)		☐	
Take bloods urgently for	FBC	☐	
	G&S	☐	
	Clotting	☐	
	Crossmatch 6 units	☐	
Nominate		*Tick and complete as appropriate*	
Designated person to liaise with Transfusion		☐	*Print name of designated person*
Crossmatch 6 units		☐	
Consider 2nd 16g cannula when EBL >1000mLs		☐	

Postpartum Haemorrhage (PPH) / Massive Obstetric Haemorrhage Proforma				
Date *dd/mm/yyyy*		**Time** *24 hours clock*		*Patient Identifier Label*
Consultant				

Person completing form (scribe)	*Print name*	*Signature*	*Designation*	*Date dd/mm/yyyy*

Consider
If Massive Obstetric Haemorrhage (blood loss >1000mLs / continuing haemorrhage or clinical concerns): Activate the Massive Blood Transfusion Protocol Trustdocs ID 852. Contact x2905. State 'I wish to activate the Massive Obstetric Haemorrhage Protocol'

Inspect (Think Tone Tissue Trauma Thrombin)	*Tick as applicable*
Uterus is well contracted	Yes ☐ No ☐ if no, consider uterotonics
Placenta and membranes complete	Yes ☐ No ☐ if no, consider EUA
Genital tract any trauma?	Yes ☐ No ☐ if yes, consider repair

Clotting defect suspected	Yes ☐ No ☐ if yes, consider discussion with haematologist	
Monitor	*Tick as appropriate*	*Time actioned as appropriate 24 hour clock*
Maternal observations on MEOWs chart	☐	
EBL (Ongoing assessment – be aware of persistent insidious loss (trickling))	Time Weighed? Y/N ☐ mLs ☐ mLs ☐ mLs ☐ mLs ☐ mLs	
Treatment - ARREST THE BLEEDING	*Tick as applicable*	*Time actioned as appropriate 24 hour clock*
Massage the uterus, expel clots, 'rub-up' contraction	☐	
Urinary catheter	☐	
Bimanual compression	☐	
Drugs	*Tick as applicable*	*Time actioned as appropriate 24 hour clock*
Syntometrine 5/500 IM (NB if hypertensive or cardiac disease use Oxytocin 10 units IM)	☐	
Tranexamic acid 1g IV	☐	
Oxytocin infusion (30 iu Oxytocin in 500mL 0.9% sodium chloride at 166mL/hr	☐	
Carboprost (Hemabate) 250mcg IM every 15 minutes up to 8 doses.	☐	
Repeat dose of Syntometrine	☐	
Consider Theatre		
Inform consultant	☐	
Consider Blood Transfusion		
Red cells	☐	
O Neg (available in Delivery Suite blood fridge – consider in case of life threatening haemorrhage)		
Incident form	*Tick as appropriate*	*Time actioned as appropriate 24 hour clock*
Incident form completed	Yes ☐ No ☐ *If yes - Datix reference*	

9. Equality Impact Assessment (EIA)

Type of function or policy	Existing

Division	Women and Childrens	**Department**	Maternity/Obstetrics
Name of person completing form	N Hill	**Date**	24/4/24

Equality Area	**Potential Negative Impact**	**Impact Positive Impact**	**Which groups are affected**	**Full Impact Assessment Required YES/NO**
Race	Nil	Nil	n/a	No
Pregnancy & Maternity	Nil	Nil	n/a	No
Disability	Nil	Nil	n/a	No
Religion and beliefs	Blood or blood products not accepted due to faith	Nil	Jehovah Witness	No – separate guideline for this cohort of patients
Sex	Nil	Nil	n/a	No
Gender reassignment	Nil	Nil	n/a	No
Sexual Orientation	Nil	Nil	n/a	No
Age	Nil	Nil	n/a	no
Marriage & Civil Partnership	Nil	Nil	n/a	no
EDS2 – How does this change impact the Equality and Diversity Strategic plan (contact HR or see EDS2 plan)?	No impact			

- **A full assessment will only be required if: The impact is potentially discriminatory under the general equality duty**
- **Any groups of patients/staff/visitors or communities could be potentially disadvantaged by the policy or function/service**
- **The policy or function/service is assessed to be of high significance**

IF IN DOUBT A FULL IMPACT ASSESSMENT FORM IS REQUIRED

The review of the existing policy re-affirms the rights of all groups and clarifies the individual, managerial and organisational responsibilities in line with statutory and best practice guidance.