Royal Hospital for Women (RHW)
BUSINESS RULE
COVER SHEET

Ref: T23/70496

NAME OF DOCUMENT	Antepartum Haemorrhage (APH)
TYPE OF DOCUMENT	Clinical Business Rule
DOCUMENT NUMBER	RHW CLIN009
DATE OF PUBLICATION	October 2023
NATIONAL STANDARDS	• Standard 2 – Partnering with Consumers • Standard 5 – Comprehensive Care • Standard 8 – Recognising and Responding to Acute deterioration
RISK RATING	Medium
REVIEW DATE	October 2026
FORMER REFERENCE(S)	Antepartum Haemorrhage (APH) – Local Operating Procedure - Clinical
EXECUTIVE SPONSOR	Medical co-director of Maternity Services
AUTHOR	Dr S Geber – Junior Medical Officer M Anderson – Midwifery Educator
SUMMARY	Antepartum Haemorrhage (APH) affects approximately 2-5% of pregnancies and is defined as any bleeding from the genital tract in pregnancy after 20 weeks gestation, prior to the onset of labour.

Royal Hospital for Women (RHW)
CLINICAL BUSINESS RULE

Antepartum Haemorrhage (APH) RHW CLIN009

This Clinical Business Rule (CBR) is developed to guide safe clinical practice at the Royal Hospital for Women. Individual patient circumstances may mean that practice diverges from this Clinical Business Rule. Using this document outside the Royal Hospital for Women or its reproduction in whole or part, is subject to acknowledgement that it is the property of the Royal Hospital for Women and is valid and applicable for use at the time of publication. The Royal Hospital for Women is not responsible for consequences that may develop from the use of this document outside The Royal Hospital for Women.

1. BACKGROUND

Antepartum haemorrhage (APH) is any bleeding from the genital tract in a pregnant woman after 20 weeks gestation and prior to the onset of labour. It affects 2 - 5% of pregnancies and after 26 weeks gestation it is associated with increased maternal and infant morbidity and perinatal mortality [1, 4, 6]

The aim of this CBR is to minimise fetal and maternal morbidity and mortality associated with APH

2. RESPONSIBILITIES

2.1 Medical staff – assess, and manage maternal and fetal condition
2.2 Midwifery staff – assess, monitor, provide care and escalate any changes in maternal or fetal condition

3. PROCEDURE

3.1 Clinical Practice

- Assess maternal condition including baseline observations and volume of bleeding classify as:
  - Minor haemorrhage ≤50mls blood loss that has settled
  - Major haemorrhage ≥50mls blood loss with no sign of clinical shock
  - Massive haemorrhage ≥1000mls blood loss and/or signs of clinical shock
- Call for help and resuscitate woman immediately if clinically indicated:
  - Lie the woman in a supine position with left lateral tilt/uterine displacement
  - Assess haemodynamic stability by performing A to G:
    - **A**irway
    - **B**reathing
    - **C**irculation
    - **D**isability (e.g. neurological status)
    - **E**xposure
    - **F**luids
    - **G**lucose
  - Activate appropriate Clinical Emergency Response System (CERS) if needed
  - For major/massive APH manage as per appendix 1
  - Notify the consultant obstetrician, neonatologist and operating theatre, initiate the Critical Bleeding Protocol if required
  - Insert two 16 gauge intravenous (IV) cannullae and collect Full Blood Count (FBC), Electrolytes Urea and Creatinine (EUC), Liver Function Test (LFT), Group + Hold (G+H), crossmatch, ROTEM (if appropriate), coagulation studies and Kleihauer
  - Start rapid IV fluid resuscitation with crystalloid
  - Insert indwelling catheter if major/massive blood loss and monitor urine output
- Obtain medical and obstetric history
- Perform an abdominal examination. Assess for uterine tenderness or rigidity and uterine tightening's/contractions
- Assess fetal condition/wellbeing as outlined in Fetal Heart Rate Monitoring – Maternity guideline by:

  - auscultating fetal heart rate (FHR) at < 25 weeks gestation or Cardiotocograph (CTG) following consultation with multidisciplinary team and the woman
  - applying CTG at ≥ 25 weeks gestation
  - continuous electronic fetal heart rate monitoring (CEFM) if in active labour
- Check previous ultrasound reports for placental position. If unknown and woman is stable, request ultrasound to determine placental position, and fetal growth and wellbeing
- Perform speculum examination to determine source of bleeding and cervical dilatation. Do not perform a digital vaginal examination until placenta praevia is excluded
- Perform maternal observations and measurement of blood loss every 15 minutes until stable
- Correct/ prevent iron deficiency anaemia by prescribing appropriate iron replacement
- Consider administration of corticosteroids ≤ 34+6 weeks gestation and preterm birth is expected in the next 7 days (as per Preterm Labour – Diagnosis and Management GL2022-006)
- Consider immediate birth if a persistent abnormal red CTG or maternal circulatory compromise
- Prepare for active management of third stage if birth is likely
- Notify neonatal team if birth is likely
- Administer Anti D to Rh negative woman – 625 IU (or more depending on Kleihauer result) and not already had a dose in the previous six weeks
- Recommend admission for woman if blood loss is heavier than spotting or bleeding is ongoing
- Recommend discharge home for a woman:
  - who has presented with spotting after reassuring clinical and fetal assessment
  - who is no longer bleeding and placenta praevia has been excluded
- Advise to book follow up care with usual care provider within a week of discharge
- Advise to contact Birth Unit immediately if vaginal bleeding reoccurs
- Debrief the woman and her family after the acute situation is managed. Offer counseling and social work referral as appropriate

3.2 **Documentation**

- Medical record
- Antenatal card

3.3 **Educational Notes**

- APH may present either in a concealed or revealed manner and the management approach should consistently involve evaluating signs and symptoms of shock, as well as assessing the presence of fetal compromise, irrespective of the amount of visible blood [3, 6]
- Even in the absence of outward indications of blood loss, a woman's condition can deteriorate rapidly[3]
- The kleihauer is not a sensitive test to diagnose abruption, it is well known for false positives, and a cascade of over diagnosis and treatment[6]
- APH of unknown origin after 20 weeks gestation complicates up to 10% of all pregnancies and increases the incidence of postpartum haemorrhage (PPH), induction of labour (IOL), and preterm birth [1, 2, 6]
- APH has a heterogeneous pathophysiology and cannot be predicted [6]
- Causes of APH include[1,4,6,7]:
  - placenta praevia
  - placental abruption
  - vasa praevia
  - abnormal placentation or placenta accrete spectrum
  - uterine rupture
  - vulval or vaginal causes such as infection
  - cervical abnormalities
- There is a three to five-fold increase in preterm birth in women with at least one episode of APH prior to 34 weeks gestation [6]
- The most predictive risk for placental abruption is abruption in a previous pregnancy [6]

3.4 **Implementation, communication and education plan**

The revised CBR will be distributed to all medical, nursing and midwifery staff via @health email. The CBR will be discussed at ward meetings, education and patient quality and safety meetings. Education will occur through in-services, open forum and local ward implementation strategies to address changes to practice. The staff are asked to respond to an email or sign an audit sheet in their clinical area to acknowledge they have read and understood the revised CBR. The CBR will be uploaded to the CBR tab on the intranet and staff are informed how to access

3.5 **Related Policies/procedures**

- Fetal Heart Rate Monitoring – Maternity – MoH GL2018/025
- Preterm Labour – Diagnosis and Management – MoHGL2022-006
- Placenta Previa/Low-lying Placenta
- RhD Immunoglobulin (Anti D) – Maternity MoHGL2015_011
- Postpartum Haemorrhage – Prevention and Management
- Clinical Emergency Response System (CERS) - Management of the Deteriorating patient
- Anaemia and Haemoglobinopathies in Pregnancy
- Iron Deficiency – Management in maternity and gynaecology/oncology patients
- Critical Bleeding Protocol (CBP)

3.6 **References**

1. Young JS and White LM (2019). Vaginal Bleeding in late pregnancy. Emergency Medicine Clinics of North America 37, 2 251-264.
2. Bhandari S, Raja EA, Shetty A, Bhattacharya S (2013). Maternal and perinatal consequences of antepartum haemorrhage of unknown origin. British Journal of Obstetrics and Gynaecology 44-52.
3. Antepartum Haemorrhage (including Uterine Rupture) - SA Perinatal Practice Guidelines, Department for Health and Wellbeing, Government of South Australia, Version 7, June 2004 (reviewed 2021)
4. Fan D, Wu S, Liu L Xia Q, Wang, W Guo, X & Lui Z (2017). Prevalence of antepartum haemorrhage in women with placenta praevia: a systematic review and meta-analysis. Scientific Reports, 7, 40320
5. Bever AM, Pugh S, Kim S, Newman RB, Grobman WA, Chien EK, Wing DA, Li H, Albert PS & Grantz KL(2018). Fetal growth patterns in pregnancies with first-trimester bleeding. Obstetrics & Gynecology. 131(6), 1021 – 1030
6. Antepartum Haemorrhage, RCOG, Green-top Guideline No.63, 1st Edition, Nov. 2011 (reviewed 2014)
7. Placenta Previa and Placenta Accreta: Diagnosis and Management, RCOG, Green-top Guideline No. 27a, 1st Edition, 2001 (reviewed 2018)

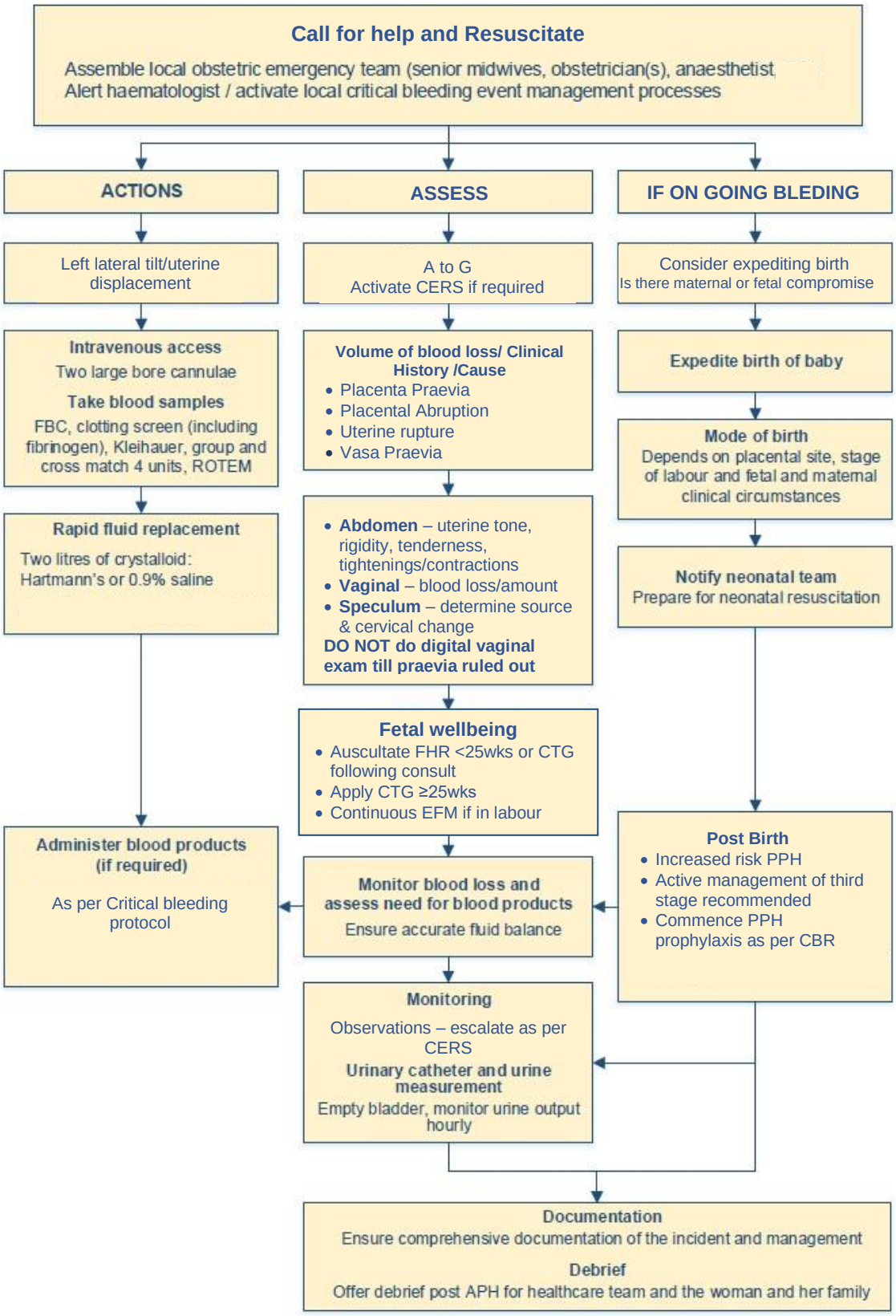
4. CULTURAL SUPPORT

- When clinical risks are identified for an Aboriginal woman, she may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services.
- For a Culturally and Linguistically Diverse CALD woman, notify the nominated cross-cultural health worker during Monday to Friday business hours
- If the woman is from a non-English speaking background, call the interpreter service: NSW Ministry of Health Policy Directive PD2017_044-Interpreters Standard Procedures for Working with Health Care Interpreters.

5. REVISION AND APPROVAL HISTORY

Date	Revision No.	Author and Approval
Endorsed 18 October 2023 RHW SQC Reviewed and endorsed Maternity Services CBRs 19/09/2023 Reviewed and endorsed Maternity Services LOPs 12/5/20 Approved Quality & Patient Safety Committee 16/4/15 Amended August 2019 – change to PACE Reviewed and endorsed Maternity Services LOPs 31/3/15 Approved Patient Care Committee 8/5/08 Obstetrics Clinical Guidelines Group March 2008		

Appendix 1: Management of Major/Massive APH



Flowchart adapted from SA Perinatal Practice Guideline for APH [3]