# Royal Hospital for Women (RHW)
# BUSINESS RULE
# COVER SHEET

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| **EXECUTIVE SPONSOR** | Midwifery and Medical Clinical Co-directors of Maternity Services |
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| **SUMMARY** | Clear pathway and guidance for the arrangement of caesarean births and consistent practice across the multidisciplinary team |

# Royal Hospital for Women (RHW)
# CLINICAL BUSINESS RULE

## Caesarean Birth – Maternal Preparation and Receiving of the Neonate(s)

**RHW CLIN066**

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*Within this document we will use the term woman, this is not to exclude those who give birth and do not identify as female. It is crucial to use the preferred language and terminology as described and guided by each individual person when providing care.*

## 1. BACKGROUND

Caesarean birth is a surgical procedure in which a neonate/s is/are born via an incision made in the woman's abdominal wall and uterus[1]

The aim of this CBR is to provide a clear pathway for the arrangement of caesarean births and consistent practice of the multidisciplinary team

## 2. RESPONSIBILITIES

**2.1 Medical staff:**

- **Obstetric medical staff –** counselling, consenting, and performing caesarean birth
- **Neonatal medical staff** - resuscitation of the neonate if required

**2.2 Midwifery and nursing staff –** preparation, support and clinical care of a woman having a caesarean birth. Receiving and assessment of the neonate, providing and supporting neonatal medical team if resuscitation is required

## 3. PROCEDURE

**Clinical Practice**

### 3.1 Elective caesarean birth

3.1.1 Consent and booking - obstetric team

- Ensure woman is counselled appropriately regarding caesarean birth with consultation documented in medical record[10,14] including:
  - Procedure
    - surgical details
    - anaesthetic details
  - Reason/indication for procedure
  - Expectation e.g. safe outcome for woman and neonate
  - Alternatives
  - Risks and Benefits
    - short term
    - longer term
    - Impact on future pregnancies
  - Decision and consent, opportunity to ask questions

- Complete Recommendation for Admission (RFA) form, including signed consent and client registration section, then forward to the booking office
- Commence outpatient pre-admission check list and place in front of woman's paper medical record
- Explain to woman that:
  - elective caesarean dates are booked with consideration to medical indication, priorities and intended for ≥ 39 weeks gestation
  - booking will not proceed without completion of the RFA form
  - the booking office will contact the woman with the date of her caesarean
  - the booking office will arrange and inform woman of anaesthetic and pre-admission clinic appointment/telehealth
- Provide woman with pathology request forms (Full Blood Count, Group and Hold) and chlorhexidine wash (with instructions for use on morning of planned caesarean) from 36 weeks gestation
- Advise woman to attend pathology at Prince of Wales Hospital (POWH) < 72hrs before planned caesarean. If caesarean is arranged for Monday, attend pathology before 11am on the Saturday prior as POWH pathology collection centre is closed Saturday afternoon, Sunday, and public holidays.
- Advise woman will be contacted the business day prior to her caesarean to confirm time of admission

3.1.2 On admission

- Ensure admission paperwork and documentation is available and complete. Including:
  - RFA
  - Consent form signed
  - Pathology attended (FBC, G&H)
  - Medical records
- Secure identification bands x 2 on woman (red bands if known allergy) – one on ankle and one on wrist
- Explain process to woman and partner/support person
- Perform, complete and document admission, including:
  - abdominal palpation
  - confirm presentation with ultrasound if indication for caesarean is for non-cephalic presentation (ultrasound can be performed by medical officer or an accredited midwife). Escalate for prompt medical review if presentation now cephalic
  - auscultate fetal heart rate (FHR)
  - maternal observations
  - pre-operative checklist including written consent for neonatal Vitamin K and Hepatitis B vaccination
- Provide woman with oral sodium citrate (pre-filled bottle)
- Ensure woman has showered with chlorhexidine wash the morning of birth
- Clip/shave pubic hair prior to the woman's transfer to operating theatre (OT) (if required)
- Clean abdomen with aqueous chlorhexidine wipe or appropriate alternative[8] as per Surgical bundle for abdominal surgery CBR
- Provide woman with hospital gowns to change into and instruct need for removal of underwear
- Transfer woman and partner/support person to theatre
- Direct partner/support person to change into theatre attire, own clothes to be placed in a bag and tied to end of woman's bed
- Ensure partner reads and signs 'Consent for the presence of a support person' (Caesarean section SEI020.122) and is aware smart phones are ONLY allowed for still photography, NOT for videos and NOT for telephone/video calls, or live streaming on social media

3.1.3 Birth

- Accompany woman to anaesthetic bay
- Ensure woman is covered with sheet/gown/bedding until commencement of procedure
- Assist woman into appropriate position for neuraxial anaesthesia
  - Remove woman's arm/s from hospital gown prior to connection of intravenous drip
  - Have partner/support person remain in anaesthetic bay whilst neuraxial anaesthesia is sited
  - Reposition woman into supine position once neuraxial anaesthesia is sited

  - Ensure privacy during insertion of indwelling catheter (IDC) including minimising number of staff present/observing IDC insertion
- Attend safety huddle and 'time out', ensuring woman's details, allergies and risk factors are identified and checked
- Confer and agree with teams regarding risk factors and facilitation of skin to skin (see educational notes)
- Repeat abdominal wipe with aqueous chlorhexidine[8] (as per Surgical bundle for abdominal surgery)
- Direct partner/support person to sit beside woman (at head of operating table)
- Ensure woman is supported and is the central focus of the multidisciplinary team
- Ensure ambient noise is kept to a minimum. Conversation between staff to be woman focused

**3.2 Emergency Caesarean birth**

- Determine time frame of caesarean as outlined in table below and document decision to birth interval[9]

| Category | Reason | Action |
|---|---|---|
| **Within 30 minutes** | • cord prolapse<br>• sustained fetal bradycardia<br>• major antepartum haemorrhage<br>• maternal collapse | • Place 2222 call to switch stating Rapid Response 30 minute CS (as below) |
| **Within 60 minutes** | • scalp pH < 7.2<br>• scalp lactate > 4.8<br>• failed instrumental birth<br>• abnormal 'red' Fetal Heart Rate (FHR) pattern<br>• fully dilated | • Place 2222 call to switch stating Rapid Response 60 minute CS (as below)<br>• In anaesthetic bay in 15 minutes, on operating table within 40 minutes, CS commenced by 45 minutes |
| **Within 120 minutes** | • lack of adequate cervical dilatation with normal or abnormal 'yellow' FHR pattern<br>• bleeding placenta praevia with stable maternal and fetal observations<br>• booked CS with uterine activity/contractions | • Communicate with theatre, anaesthetic, ward, NCC staff, and Access Demand Manager (ADM)/After-hours Nurse manager (AHNM) and postnatal<br>• Complete Randwick Campus Operating Suite (RCOS) booking form ('blue sheet') |
| **Within 4 hours** | • booked CS with ruptured membranes and no uterine activity/contractions<br>• severe pre-eclampsia without fetal compromise | |
| **Add to elective list** | • non-progressing induction<br>• fetal growth restriction requiring CS not in labour | |

- Place 2222 call to switch, state Rapid Response, the emergency category and location. A Rapid Response will then be activated as a CS 30/60 minutes going to:
  - Theatres
  - Anaesthetics Registrar
  - Obstetric Registrar and Resident Medical Officer (RMO)
  - Newborn Care Centre (NCC)
  - Access and Demand Manager (ADM)/After-Hours Nurse Manager (AHNM)
  - Porter
- Site intravenous (IV) cannula where possible and collect pre-operative bloods, if not already taken
- Obtain consent and if time permits complete pre-operative checklist[10]
  - 30 or 60 minute caesarean; verbal consent is recommended

- > 60min caesarean; written consent is recommended
- Ask woman to put on gown if time allows
- Give oral sodium citrate
- Clip/shave pubic hair prior to the woman's transfer to OT (if required)
- Transfer woman to allocated operating theatre (for 30 minute CS don't stop at "red line"). Primary midwife to remain with woman, ensuring most accurate handover of information and continuity of care
- Revisit indication "re-group" in anaesthetic bay for 30 or 60 minute CS with the multidisciplinary team depending on any change in clinical picture. This involves the woman and her partner/support person, obstetric, midwifery, anaesthetics, neonatal and theatre teams. Communicate any change clearly to the woman, her partner/support person and all staff involved in the birth[14]
- Perform theatre checklist and anaesthetic review. Anaesthetic team will determine the type of anaesthesia following collaboration with obstetric team and the woman
- Ensure
  - urinary catheter is inserted on operating table, if needed
  - obstetric team perform vaginal examination once woman on operating table to confirm appropriate mode of birth (if woman is in labour)
- Continue to monitor FHR until skin preparation is commenced. If insitu, remove fetal skin electrode (FSE) immediately prior to commencement of surgery

**If additional theatre needs to be made available after hours (1800-0700)**

- Confer with Obstetric consultant and teams regarding clinical priority
- Contact theatres, anaesthetics and AHNM, notifying of additional theatre need, including allocation of additional staff

### 3.3 Midwifery practice

#### 3.3.1 Receiving of the neonate

- Ensure resuscitaire is equipped and in working order, including heater on warm
- Review maternal history to assess risk factors for the neonate
  - contact appropriate paediatric team for attendance
  - resuscitaire to be prepared as per expected risks for neonate
- Prepare personal protective equipment (once woman is draped, midwife to ready self)
  - ensure sterile impervious drape on theatre trolley (scrub nurse to prepare and set up)
  - attend social hand wash and don pre opened sterile gloves using Aseptic Non-Touch Technique (ANTT)
  - position self in theatres for scrub nurse to cover with sterile impervious drape, ensuring sterility is maintained
  - receive neonate from obstetric medical officer and note time of birth
  - assess neonate's condition[6,7]
- Initiate and maintain skin to skin between the stable woman and stable neonate, if woman's preference and safe to do so [3, 15]
- Place neonate directly on woman's chest and cover both with dry, warm blanket[16]
- Continue to assess neonate's condition throughout remaining time in theatre (midwife is to remain with the neonate). If the neonate's condition deteriorates, explain to parents and transfer neonate to resuscitaire for further assessment and support
- Support with breastfeeding as per woman's wishes[3, 4]
- Attend neonate's observations and Apgar score whilst skin to skin. Secure 2 x identification bands to neonate's ankles
- Attend measurements and neonate assessment including vitamin K and or immunisation as per parent's wishes:
  - during last stage of suturing and/or maternal transfer to recovery bed, OR
  - in Recovery unit
- Remove neonate for transfer of woman to recovery bed

- Return neonate skin to skin with woman prior to transfer to Recovery

**3.4 Recovery**

- Transfer woman and neonate on bed to Recovery unit
- Allow partner/support person to continue with woman and neonate, if medically safe to do so
- Assist and support breastfeeding ideally within the first hour of birth
- Attend neonatal measurements and assessments, including vitamin K and/or immunisations if not previously completed

**3.5 Following birth**

- Check placenta:
  - Swab and send to histopathology if required. Please ensure request form has comprehensive clinical details to assist pathologist e.g. gestation at delivery, indication for CS, a reason placental histopathology requested, antenatal or intrapartum risk factors or medical issues, as outlined in Placental Examination and Indications for Referral to Pathology CBR
  - Retain or dispose of placenta as per parent's wishes
- Collect cord blood as outlined in Umbilical cord blood gas sampling CBR for:
  - arterial and venous pH, lactate, and base excess (required for any emergency caesarean or baby in poor condition)
  - Group and Direct Antiglobulin Test (DAT) if woman rhesus negative
- Return any surgical clamps to scout nurse
- Restock resuscitaire

**3.7 Documentation**

- Medical record, woman, and neonate
- Neonatal blue book
- Birth registration papers

**3.8 Educational Notes**

- Chlorhexidine wash and wipes have been shown to reduce surgical site infections
- Caesarean section is one of the most common interventions in pregnancy and is safer now than in the past, however, a small risk of serious morbidity and mortality for both the mother and the baby remains and the benefits need to be weighed against the risks[13]
- Increased risks to the mother include postoperative infection, haemorrhage, and complications during future pregnancies[11]
- Long term complications arising for women having caesarean births include uterine rupture, placenta accreta, surgery for adhesions and/or surgery for anterior abdominal wall hernia[1]
- Risks to the baby for planned caesarean section at less than 39 weeks' gestation can include increased rates of neonatal respiratory issues, asthma, obesity and developmental issues[12]
- Immediate and continued skin to skin contact is associated with reduced maternal pain perception, greater uterine contraction with reduced blood loss, increased maternal/baby bond, decrease in newborn crying, thermoregulation of the newborn, early breastfeeding initiation, and duration of overall breastfeeding[16]

**3.9 Implementation, communication, and education plan**

This 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

## 4. Related Policies/procedures

- Recognition and management of Neonate who is clinically deteriorating outside of Newborn Care centre
- Umbilical Cord Blood Gas Sampling
- Placenta examination and indications for referral to pathology
- Placenta removal from Hospital by Parents
- Breastfeeding protection promotion and support
- Breastfeeding – First Breast Expression
- Fetal Heart Rate Monitoring – Maternity – MoH GL2018/025
- Fetal Electrode Application
- Identification and Security of Neonate
- Surgical Bundle for Abdominal Surgery
- Escalation policy – Birthing Services
- Prevention of Venous Thromboembolism – MoH PD2019_057

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## 6. ABORIGINAL HEALTH IMPACT STATEMENT DOCUMENTATION

- Considerations for culturally safe and appropriate care provision have been made in the development of this Business Rule and will be accounted for in its implementation.
- When clinical risks are identified for a Aboriginal or Torres Strait Islander woman or family, they may require additional supports. This may include Aboriginal health professionals such as Aboriginal liaison officers, health workers or other culturally specific services

## 7. CULTURAL SUPPORT

- 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.

## 8. REVISION AND APPROVAL HISTORY

| Date | Revision No. | Author and Approval |
|---|---|---|
| Amended August 2019 – change PACE to CERS<br>Change 777 to 2222 February 2019<br>Amendments by LOPs Chair October 2018<br>Reviewed and endorsed Obstetrics LOPs group 10/4/18<br>Replaced: Caesarean Birth – Maternal Preparation and receiving the Newborn by Midwives and Nurses Guideline<br>Approved Quality & Patient Safety Committee 15/10/09 Reviewed September 2009<br>Approved Quality Council 16/6/2003<br>Replaced: Emergency Caesarean Section for the Operating Theatres<br>Approved Quality & Patient Safety Committee 17/3/11 Reviewed<br>November 2010 Approved Quality Council 20/2/06 | | |
| 2/03/2024<br>17.6.24 | 7 | Maternity CBR Committee<br>Endorsed BRGC |