Vaginal birth after caesarean section (VBAC)
Queensland Clinical Guidelines: Vaginal birth after caesarean (VBAC)

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Contact: Email: Guidelines@health.qld.gov.au
URL: www.health.qld.gov.au/qcg

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This guideline does not address all elements of standard practice and accepts that individual clinicians are responsible for:

- Providing care within the context of locally available resources, expertise, and scope of practice
- Supporting consumer rights and informed decision making in partnership with healthcare practitioners including the right to decline intervention or ongoing management
- Advising consumers of their choices in an environment that is culturally appropriate and which enables comfortable and confidential discussion. This includes the use of interpreter services where necessary
- Ensuring informed consent is obtained prior to delivering care
- Meeting all legislative requirements and professional standards
- Applying standard precautions, and additional precautions as necessary, when delivering care
- Documenting all care in accordance with mandatory and local requirements

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Flowchart: Next birth after caesarean section

**Antenatal**
- Shared decision making
  - Discussion ≤ 20-24 weeks:
    - Support maternal preferences
    - Capabilities of the facility
    - Previous birth information
    - Individual risks & benefits
    - Obtain informed consent
    - Document
  - Consider anaesthetic review
  - Preferably one obstetrician visit by 36 weeks or by 32 weeks if antenatal transfer of care required
  - Document plan of care

**Induction of labour**
- Document obstetric and maternal shared decision making
- Requires caution due to increased risk of uterine rupture
- Prostaglandin and Oxytocin: Obtain informed consent as contraindicated by manufacturer

**Intrapartum admission**
- Review medical chart (including prior CS report) and labour care plan
- Notify obstetric team
- Notify anaesthetic and theatre staff
- Insert ≥ 16 gauge intravenous cannula
- Group & hold, full blood count
- One-to-one midwifery care
- Continuous fetal monitoring
- For intrapartum care:
  - Refer to QCG: Normal birth

**Is planned vaginal birth appropriate?**
- Yes
- No

**Induction of labour?**
- Yes
- No

**Is augmentation appropriate?**
- Yes
- No

**Augmentation**
- Discuss with obstetric team
- Refer to QCG: Normal birth
- Consider:
  - Supportive measures
  - Artificial rupture of membranes
  - Oxytocin infusion:
    - Refer to IOL box

**Elective repeat CS**
- (At 39-40 week if clinically appropriate)

**Is the progress of labour satisfactory?**
- Yes
- No

**Emergency CS**

**Uterine rupture – signs and symptoms**
- Prolonged, persistent and profound bradycardia
- Abnormal FHR pattern suggesting fetal compromise
- Abdominal pain, acute onset of scar tenderness
- Abnormal progress in labour, prolonged first or second stage of labour
- Vaginal bleeding
- Cessation of previously efficient uterine activity
- Loss of station of the presenting part
- Chest pain or shoulder tip pain
- Maternal tachycardia, hypotension or shock

**Vaginal birth**

Definitions: CSCF: Clinical services capability framework; CS: Caesarean section; FHR: Fetal heart rate; IOL: Induction of labour; ≤: less than or equal to; ≥: greater than or equal to

Queensland Clinical Guideline (QCG): MN15.12-V4-R20 Vaginal Birth after caesarean section (VBAC)
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARM</td>
<td>Artificial rupture of membranes, amniotomy</td>
</tr>
<tr>
<td>BMI</td>
<td>Body mass index</td>
</tr>
<tr>
<td>Cat 1</td>
<td>Category 1 emergency caesarean section</td>
</tr>
<tr>
<td>CEFM</td>
<td>Continuous electronic fetal monitoring</td>
</tr>
<tr>
<td>CS</td>
<td>Caesarean section</td>
</tr>
<tr>
<td>ERCS</td>
<td>Elective repeat caesarean section</td>
</tr>
<tr>
<td>IOL</td>
<td>Induction of labour</td>
</tr>
<tr>
<td>VBAC</td>
<td>Vaginal birth after caesarean section</td>
</tr>
<tr>
<td>VBAC-2</td>
<td>Planned vaginal birth after caesarean section with two prior caesarean sections</td>
</tr>
</tbody>
</table>

### Definitions

<table>
<thead>
<tr>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuity of carer</td>
<td>Where the same health professional or professionals provide care throughout a woman’s contact with maternity services, including pregnancy, birth and the postbirth period.¹</td>
</tr>
<tr>
<td>Elective repeat caesarean section (ERCS)</td>
<td>Planned caesarean birth by a woman who has had one or more prior caesarean births, whether or not the previous caesarean births were electively scheduled or not.²</td>
</tr>
<tr>
<td>Neonatal respiratory morbidity</td>
<td>Combined rate of transient tachypnoea of the newborn and respiratory distress syndrome.</td>
</tr>
<tr>
<td>Next birth after caesarean section</td>
<td>Refers to a woman’s next birth after a previous caesarean section (CS).</td>
</tr>
<tr>
<td>Obstetrician</td>
<td>Local facilities may as required, differentiate the roles and responsibilities assigned in this document to an “Obstetrician” according to their specific practitioner group requirements; for example to General Practitioner Obstetricians, Specialist Obstetricians, Consultants, Senior Registrars and Obstetric Fellows.</td>
</tr>
<tr>
<td>Planned VBAC</td>
<td>Planned VBAC (vaginal birth after caesarean) refers to the plan to birth vaginally, rather than by ERCS by the woman who has experienced a prior caesarean birth.³</td>
</tr>
<tr>
<td>Primary caesarean section</td>
<td>The first CS a woman has.</td>
</tr>
<tr>
<td>Shared decision making⁴</td>
<td>Shared decision making involves the integration of a woman’s values, goals and concerns with the best available evidence about benefits, risks and uncertainties of treatment, in order to achieve appropriate health care decisions. It involves clinicians and patients making decisions about the woman’s management together. In partnership with their clinician, patients are encouraged to consider available screening, treatment, or management options and the likely benefits and harms of each, to communicate their preferences, and help select the course of action that best fits these.⁴</td>
</tr>
<tr>
<td>Uterine dehiscence</td>
<td>Disruption of the uterine muscle with intact uterine serosa.⁵</td>
</tr>
<tr>
<td>Uterine rupture</td>
<td>Disruption of the uterine muscle extending to and involving the uterine serosa or disruption of the uterine muscle with extension to the bladder or broad ligament.⁷</td>
</tr>
<tr>
<td>VBAC</td>
<td>Vaginal birth following one or more previous CSs; also known as successful VBAC; refer to definition of ‘Planned VBAC.’</td>
</tr>
</tbody>
</table>
1 Introduction
The increasing rate of primary caesarean section (CS) has led to an increased proportion of women with a history of previous caesarean birth. The options for the next birth include:
- A planned vaginal birth after caesarean (VBAC) which will result in either a vaginal birth or an emergency CS; or
- An elective repeat CS (ERCS)

There are infrequent, significant clinical harms with both planned VBAC and ERCS. Clinical outcomes are determined mainly from epidemiological studies and one randomised control trial (n=22). Findings from a large systematic review concluded planned VBAC is a reasonable and safe choice for most women, however, there are individual specific considerations which may increase the potential harms associated with planned VBAC. Facilitating shared decision making will enable women to make informed decisions about their birth options.

1.1 Purpose
This guideline provides assistance for clinicians to care for and support women:
- In their decision making about their next birth after CS
- Planning a VBAC

1.2 Queensland context
In 2013 in Queensland, 118 per 1000 women, at term gestation, experienced their next birth after primary CS where:
- 719 per 1000 women had a repeat CS with no labour
- 632 per 1000 women who spontaneously laboured had a VBAC (women who subsequently had a CS for reason of a uterine scar from previous surgery were excluded, as a proportion of these women would have had an ERCS if there was no spontaneous labour)
- 678 per 1000 women who were induced had a VBAC
- The recorded uterine rupture rate for the women who spontaneously laboured or were induced was 5 per 1000 women

1.3 Woman-centred care and shared decision making
Woman centred care and shared decision making enables women to feel empowered in making decisions, based on the woman’s individual needs and preferences and the best available evidence of potential benefits and harms, in partnership with care providers.

Supporting women with their decision making for their next birth after CS includes the principles of:
- Shared decision making, incorporating
  - Clinicians having counselling skills and access to consistent evidence-based information in order to support women to make an informed choice
  - Providing women with consistent evidence-based information about their next birth after CS
- Access to planned VBAC services

1.4 Service capability
Offer planned VBAC in maternity services in accordance with the current Clinical Services Capability Framework. Whilst site specific guidelines may be required to reflect resources and the ability of the birthing facility to respond to emerging situations, ensure the service is capable of providing:
- Access to an emergency CS including clearly defined Category 1 CS (Cat 1) policy/workplace instruction and processes
- Continuous intrapartum monitoring
- One-to-one midwifery care during labour
- Advanced neonatal resuscitation
- Onsite blood transfusion
- 24 hour anaesthetic services
1.5 Recommendations and implementation

Guideline recommendations and information on implementation, including audit, are provided in the accompanying Supplement: Vaginal birth after caesarean (VBAC) accessed via http://www.health.qld.gov.au/qcg/.

2 Care following the primary/prior CS

Following a primary/prior CS, and before going home, offer all women the opportunity to talk and discuss their birth experience17:

- Preferably with the medical officer who performed the CS and the primary midwife involved in the woman’s care
- The woman may prefer to discuss at a later date17
- More than one discussion may be required

Include in the discussion:

- Any labour and birth concerns (including unplanned events)
- Identification of emotional needs20
- Reason for the CS17
- Unexpected events during the CS/preceding labour
- Planning future pregnancies and births3, including:
  - Contraception
  - A recommended minimum 18 month interval from CS to VBAC7
  - Information regarding the next mode of birth
  - Intra-pregnancy weight management improves the probability of VBAC21

Provide the woman17, her midwife (if appropriate) and General Practitioner with written information regarding the above discussion with a copy in the woman’s clinical record.

3 Antenatal care

Ensure all women have access to individualised next birth after CS advice and care planning throughout pregnancy, including:

- An antenatal discussion prior to 20–24 weeks [refer to Section 3.1]
- At least one antenatal visit, preferably with an obstetrician3 for discussion and planning before or at:
  - 34-363 weeks
  - 32 weeks for rural services if antenatal transfer to another service is anticipated
- With a multidisciplinary team, and continuity of carer (e.g. Midwifery Group Practice) where available
  - Discuss, consult and refer according to professional guidelines

If individualised care planning is not available at the local facility, refer according to local and professional consultation and referral guidelines22
3.1 Discussion and planning

Shared decision making about the next birth after a previous CS should take into consideration:

- Maternal preferences and priorities\(^{17}\), including:
  - The number of intended future pregnancies\(^{16}\) as longer term risks (e.g. placenta praevia, placenta accreta) increase after each subsequent CS
  - The capabilities of the maternity service\(^{14}\) [refer to Section 1.4]:
    - If the local hospital cannot provide VBAC services, offer the women the opportunity to transfer to a hospital that offers planned VBAC
      - Refer to local and professional consultation and referral guidelines\(^{22}\)
    - If a woman makes choices outside of those recommended in this clinical guideline or beyond the service capability of the chosen place of birth\(^{15}\):
      - Consider within the ethical frameworks of autonomy and beneficence\(^{23}\)
      - Ensure the woman is informed of the potential increase of harm due to the diminished availability of resources and staff, including obstetric, paediatric, anaesthetic, pathology, and operating theatre
      - Develop management plans as required (e.g. for uterine rupture)
      - Refer to local frameworks and processes
  - Previous birth information including the indication for the previous CS, and the operation report to verify the type of uterine incision, previous uterine closure technique, and any perioperative complications
    - Ideally obtain the operation report prior to the initial discussion with the woman
      - As it can be difficult to access operative notes performed at other facilities, request early in pregnancy
  - Potential maternal and perinatal benefits and harms of VBAC and ERCS in the context of a woman’s individual circumstances\(^{24,17}\) [refer to Sections 3.2 and 3.3]
  - Explanation of the reason(s) if VBAC not advised
  - The birth plan, including:
    - Intrapartum care [refer to Section 4 Intrapartum care]
    - The possibility circumstances may change and ERCS/emergency CS may be required to be offered with consideration of vaginal birth and CS in the birth plan
  - Written information (e.g. decision aids) and/or reputable internet sites accessible by the woman
  - Interpreters where required
  - Access to culturally competent care including Indigenous maternity health care models and Indigenous workers for Aboriginal and Torres Strait Islander women and families
  - Document:
    - The discussions (including above) in the woman’s clinical record
    - The woman’s acknowledgement of the discussion (may be included on a VBAC or ERCS consent form – refer to local facility)
    - The decision regarding mode of birth and the agreed plan of care, including if labour commences before the expected ERCS date\(^{25}\)
    - If required, the interpreter’s name and/or identification number who facilitated the discussion

3.2 Planned VBAC

3.2.1 Contraindications

Ascertain and document if contraindications for VBAC are present. Contraindications include:

- Maternal or fetal reasons to avoid vaginal birth in current pregnancy\(^{14,24}\)
- Previous uterine incision other than lower transverse segment\(^{3,16,24}\)
- Previous uterine rupture\(^{3,24}\)
- Previous hysterotomy or myomectomy entering the uterine cavity\(^{14}\)
3.2.2 Considerations

- Previous CS:
  - Classical incision associated with increased risk of uterine dehiscence/rupture\(^7\)
  - The uterine rupture and dehiscence risks are not significantly different between single and double layer closure techniques\(^{26,27}\), however:
    - Locked single layer uterine closures have been associated with higher risks of uterine rupture and dehiscence when compared to unlocked single layer and double layer closures\(^{26,28}\)
- Where the pregnancy interval (birth to due date/actual birth date) is less than 18 months, discuss the increased risk of uterine rupture\(^7,29\)
- VBAC after two previous CS (VBAC-2) – refer to Table 2
- Multiple pregnancy or suspected fetal macrosomia requires consultation with an obstetrician
- Exclude low-lying placenta praevia and accreta – referral to a tertiary facility may be required for assessment
- The role of ultrasound in predicting risk of rupture is uncertain and not routinely recommended, however:
  - There is a strong negative correlation between lower uterine segment thickness and risk of uterine defect (thinning, dehiscence or rupture)\(^3,10\), and
    - Although an ideal thickness has not been determined, a myometrial lower uterine segment thickness of greater than 2.0 mm provides a strong negative predictive value for a uterine defect\(^3,30\)

3.2.3 Likelihood of VBAC

Planned VBAC success is generally in the range of 60–80\%.\(^7\) Factors which increase vaginal birth occurring include:

- Previous vaginal birth, whether before or following the CS, is a strong predictor\(^7,29\) with a VBAC rate approaching 90\%\(^25\)
- Younger maternal age\(^3,29\)
- Caucasian/white ethnicity\(^7\)
- Body Mass Index (BMI) less than 30 kg/(m\(^2\))\(^7\)
  - Weight loss increases VBAC success in women who were overweight or obese before their first CS birth\(^21\)
- Prior CS indication not related to arrest of labour\(^25\)
- Spontaneous onset of labour at less than 41 weeks gestation\(^7\)
- Cervical dilatation greater than 4cm on admission\(^3,29\)
- Birth weight less than 4 kg\(^7\)

3.3 Potential benefits and harms of VBAC and ERCS

VBAC and ERCS have differing risks and benefits for women and their babies. There is insufficient high level evidence in regards to the benefits and harms of planned VBAC and ERCS.

3.3.1 Potential benefits of VBAC

Compared to CS, women having a VBAC have:

- Shorter stays in hospital\(^7,17,29\)
- Lower rates of deep vein thrombosis\(^29\)
- Enhanced mother-infant bonding, including the long term wellbeing of the infant\(^29\)
- Lower maternal morbidity\(^7\)
- Infants with a gut microbiota that is causally linked with greater protection from allergic disease\(^31\)
3.3.2 Potential harms of planned VBAC

- Planned VBAC which results in vaginal birth is associated with fewer complications than an ERCS\textsuperscript{15}
- Planned VBAC which results in an emergency CS is associated with more complications than an ERCS\textsuperscript{15}
- Absolute risk of birth related perinatal loss with planned VBAC is comparable to the risk for women having their first baby\textsuperscript{7}
- Refer to Table 1 for VBAC and ERCS considerations
- Refer to Table 2 for planned VBAC considerations after two CSs
- Refer to Table 4 and Table 5 for induction and augmentation of labour considerations

Table 1. VBAC and ERCS considerations including uterine rupture

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Number per 1000 women (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uterine rupture</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4.7 (2.8–6.8)\textsuperscript{7}</td>
</tr>
<tr>
<td>Spontaneous labour without Oxytocin augmentation</td>
<td>1.9 (1.1–3.2)\textsuperscript{32}</td>
</tr>
<tr>
<td>Second pregnancy – first birth an emergency CS</td>
<td>2\textsuperscript{33}</td>
</tr>
<tr>
<td>Second pregnancy – first birth a planned CS</td>
<td>3\textsuperscript{33}</td>
</tr>
<tr>
<td>Subsequent to uterine rupture</td>
<td>Number per 1000 uterine ruptures\textsuperscript{7}</td>
</tr>
<tr>
<td>Maternal mortality</td>
<td>Nil</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>140–330</td>
</tr>
<tr>
<td>Perinatal mortality</td>
<td>60</td>
</tr>
<tr>
<td>Neonatal morbidity (hypoxic ischaemic encephalopathy)</td>
<td>62</td>
</tr>
<tr>
<td>Subsequent neonatal mortality</td>
<td>18</td>
</tr>
<tr>
<td>Neonatal morbidity at term gestation</td>
<td>0–28</td>
</tr>
<tr>
<td>Other</td>
<td>Number per 1000 women (95% CI)</td>
</tr>
<tr>
<td>Maternal infection</td>
<td>63 (34–101)</td>
</tr>
<tr>
<td>Perinatal mortality</td>
<td>1.3 (0.6–3)</td>
</tr>
</tbody>
</table>

Table 2. Two prior caesarean sections (VBAC-2): Planned VBAC and ERCS

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Number per 1000 women (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VBAC-2\textsuperscript{**}</td>
<td>VBAC</td>
</tr>
<tr>
<td>VBAC</td>
<td>711</td>
</tr>
<tr>
<td>Uterine rupture</td>
<td>13.6 (0–54)\textsuperscript{15}</td>
</tr>
<tr>
<td>(9–18)\textsuperscript{15}</td>
<td></td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>5.5</td>
</tr>
<tr>
<td>Transfusion</td>
<td>20</td>
</tr>
<tr>
<td>Febrile morbidity</td>
<td>6</td>
</tr>
<tr>
<td>Perinatal morbidity</td>
<td>0.9</td>
</tr>
<tr>
<td>Neonatal unit admission</td>
<td>84.9</td>
</tr>
</tbody>
</table>

3.3.3 Potential harms of ERCS

- Maternal mortality is significantly higher with planned ERCS\textsuperscript{7} and may increase with each subsequent CS
- Future pregnancy complications of CS include placenta praevia and placenta accreta
  - Placenta accreta morbidity includes:
    - Excessive blood loss
    - Potential need for hysterectomy
    - Complications associated with surgery
    - Maternal mortality\textsuperscript{17}
- Refer to Table 3. Potential harms of ERCS
Table 3. Potential harms of ERCS

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Per 1000 women (95% CI)</th>
<th>VBAC'</th>
<th>ERCS'</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Maternal mortality</td>
<td>0.04 (0.01–0.2)</td>
<td>0.13 (0.04–0.4)</td>
<td></td>
</tr>
<tr>
<td>o Maternal mortality at term gestation</td>
<td>0.02 (0.004–0.1)</td>
<td>0.10 (0.02–0.4)</td>
<td></td>
</tr>
<tr>
<td>• Hysterectomy</td>
<td>1.7 (0.1–2.4)</td>
<td>3.1 (0.2–4.9)</td>
<td></td>
</tr>
<tr>
<td>• Transfusion</td>
<td>8.8 (4.2–15.1)</td>
<td>11.6 (6.4–18.3)</td>
<td></td>
</tr>
<tr>
<td>• Fever</td>
<td>66 (44–93)</td>
<td>102 (49–170)</td>
<td></td>
</tr>
</tbody>
</table>

Other Per 1000 women (95% CI)

<table>
<thead>
<tr>
<th>Consideration</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• After 2 CS – placenta praevia</td>
<td>11–23</td>
</tr>
<tr>
<td>• After 2 CS – placenta accreta</td>
<td>2–9</td>
</tr>
<tr>
<td>• After 3 CS – placenta praevia</td>
<td>18–37</td>
</tr>
<tr>
<td>• After 3 CS – placenta accreta</td>
<td>8–17</td>
</tr>
</tbody>
</table>

3.3.4 Timing of ERCS

For babies born by CS, the risk of respiratory morbidity decreases after 39 weeks, therefore, schedule ERCS after 39 weeks.17

3.3.5 Induction of labour

• Induction of labour (IOL) requires caution16 and documented obstetric and maternal shared decision making and is required
• Risk of uterine rupture is increased [Refer to Section 3.3.2 and/or Table 4]
• Transcervical catheter is the clinically preferred method for IOL
• To note, although widely used in clinical practice, previous uterine surgery is a manufacturer contraindication for the use of Oxytocin and Dinoprostone30,36 therefore informed consent is required

Table 4. Planned VBAC and IOL considerations

<table>
<thead>
<tr>
<th>IOL consideration</th>
<th>Per 1000 women (95% CI)</th>
<th>VBAC achieved</th>
<th>Uterine rupture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any induction method</td>
<td>630 (590–670)</td>
<td>12 (9–16)</td>
<td></td>
</tr>
<tr>
<td>Any gestational age</td>
<td>-</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Term VBACs and IOL</td>
<td>-</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Post term and IOL</td>
<td>-</td>
<td>32</td>
<td></td>
</tr>
<tr>
<td>Mechanical – transcervical catheter and/or artificial rupture of membranes (ARM)</td>
<td>(i) 612</td>
<td>(ii) 6.3 (0.8–22.4)</td>
<td></td>
</tr>
<tr>
<td>(ii) 540 (490–590)</td>
<td>(i) 6.8 (1.9–17.4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prostaglandin (PGE₂)</td>
<td>(i) 514</td>
<td>(ii) 20 (11–35)</td>
<td></td>
</tr>
<tr>
<td>(ii) 630 (580–690)</td>
<td>(i) 17.7 (4.8–44.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prostaglandin and Oxytocin</td>
<td>(i) 602</td>
<td>(ii) 8.2 (3–17.7)</td>
<td></td>
</tr>
<tr>
<td>Oxytocin</td>
<td>(i) 645</td>
<td>(ii) 11 (9–15)</td>
<td></td>
</tr>
<tr>
<td>(ii) 620 (530–700)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxytocin and indication for prior CS: FTP and CPD</td>
<td>540 (480–600)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Fetal distress</td>
<td>600 (490–690)</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Malpresentation/breech</td>
<td>750 (600–860)</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

(i) Australian review32; (ii) International systematic review

Abbreviations: CI: Confidence interval; FTP: Failure to progress; CPD: Cephalo-pelvic disproportion

4 Intrapartum care

Provide intrapartum care as per the Queensland Clinical Guideline Normal Birth.37 Refer to the following sections for planned VBAC specific care.
4.1 On admission

It is important to remember that the way in which care is given, and the environment in which it is provided, has a significant impact on the woman and her partner's experience of childbirth and her subsequent emotional wellbeing.\(^{11}\) The woman may change her choice of birth mode to CS or planned VBAC at any stage, either antenatally or in labour, and support their choice by informed discussion.\(^{38}\)

- Notify and consult the medical obstetric team/medical officer when a woman presents for planned VBAC\(^{14}\)
- Review the plan of care prepared antenatally in consultation with the woman and revise if necessary
- Provide one-to-one midwifery care\(^{19,37}\), as:
  - Associated with improved birth outcomes
  - To enable prompt identification and management of uterine scar dehiscence or rupture\(^{3,14}\)
- An intravenous cannula\(^{16}\) of sufficient size to allow rapid resuscitation (16 gauge or larger) is recommended from the onset of labour
- Collect bloods:
  - Blood group and hold\(^{3,16}\)
  - Full blood count
- Notify anaesthetist and operating theatre of any patient for planned VBAC in birth suites and in labour. Take into account local arrangements/policy.

4.2 Maternal and fetal assessment

In addition, to routine assessment and observations\(^{37}\), assess:

- Vaginal examination with informed consent:
  - Within 1 hour of admission, and then
  - Once labour is established:
    - 4 hourly/if indicated until 7 cm dilated, then consider
    - 2 hourly/if indicated after 7 cm dilatation
- Maintain close surveillance:
  - Utilise partogram with warning and action lines to aid assessment of progress
  - Observe for signs and symptoms of uterine dehiscence or rupture [refer to Section 4.5.2]
- Refer to the National Consensus Statement: essential elements for recognising and responding to clinical deterioration\(^{39}\)

4.3 Discomfort and pain

Water immersion will depend on the availability of continuous electronic fetal monitoring (CEFMsuitable for water immersion.

4.4 Fetal heart rate monitoring

Following the onset of uterine contractions, CEFM is recommended.\(^{3}\) An abnormal fetal heart rate is the most consistent finding in uterine rupture.\(^{3}\) [Refer to the Queensland Clinical Guideline Intrapartum fetal surveillance.\(^{40}\)]

4.5 Indications for additional care

4.5.1 Augmentation of labour

If indicated, the use of ARM and/or Oxytocin to augment labour must be discussed with the woman and obstetrician prior to commencement.

- If there is a delay in progress and in the active stage of labour, perform ARM prior to consideration of Oxytocin augmentation [refer to Queensland Clinical Guidelines Normal birth\(^{37}\), and Induction of labour\(^{41}\)]
- Oxytocin augmentation is associated with:
  - An increased risk of uterine rupture [refer to Table 5] and should be used with caution
  - A VBAC rate of 68% (95% CI: 64–72%) (strength of evidence is low)\(^{7}\)
  - A history of previous uterine surgery is a (manufacturer recognised) contraindication\(^{36}\): Obtain informed consent and document in the woman's notes
Table 5. Augmentation of labour considerations

<table>
<thead>
<tr>
<th>Consideration</th>
<th>Per 1000 women (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Spontaneous labour onset – Oxytocin augmentation</td>
<td>VBAC achieved</td>
</tr>
<tr>
<td></td>
<td>(i) 616</td>
</tr>
<tr>
<td></td>
<td>(ii) 680 (640–720)</td>
</tr>
</tbody>
</table>

(i) Australian review2; (ii) International systematic review7

4.5.2 Uterine rupture – signs and symptoms

Uterine rupture may occur at any stage of labour and can occur during pregnancy or postpartum. There are no reliable clinical markers or models that predict uterine rupture.42 The signs and symptoms of uterine rupture are typically non-specific, some are rare and some may be associated with other obstetric circumstances42, making diagnosis of uterine rupture difficult.43 Assess in the context of the woman’s individual circumstances.

There are no reliable clinical signs or symptoms that predict the timing of uterine rupture.

Category 1 Caesarean Section is required for suspected uterine rupture as there is an urgent threat to the woman and her baby.18

The most common sign of uterine rupture is:

- Prolonged, persistent and profound bradycardia43 which occurs in approximately 80% of cases42 and is associated with poor perinatal outcomes7

Other non-specific signs and symptoms may include:

- Abnormal fetal heart rate pattern42,43 suggesting fetal compromise44
- Abdominal pain, acute onset of scar tenderness43
  - Pain may continue between contractions44
- Abnormal progress in labour43, prolonged first or second stage of labour43
- Vaginal bleeding43
- Cessation of previously efficient uterine activity43,44, including hyperstimulation42 and/or incoordinate contractions
- Loss of station of the presenting part43
- Chest pain or shoulder tip pain (particularly in the absence of vaginal bleeding)45
- Maternal tachycardia43, hypotension43 or shock42,43

4.6 Second stage of labour

Reassess and consult obstetrician if duration exceeds:

- 1 hour for passive descent, and/or
  - 1 hour for the active stage in the woman who has not been in the active stage previously
  - 30 minutes of the active stage in the woman who has previously laboured through second stage active labour

4.7 Third stage of labour

Routine exploration of the uterine scar is unnecessary and is not recommended14

5 Postpartum care

Women should be offered the opportunity to discuss the implications for future pregnancies of their birth experience. This discussion may be assisted by an interpreter and/or an Indigenous health worker where appropriate. Refer to Section 2 Care following the primary/prior CS.
References


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Working Party Clinical Lead
Dr Inez Bardell, Visiting Medical Specialist, Obstetrics and Gynaecology, Royal Brisbane and Women’s Hospital and Ipswich Hospital
Associate Professor Kassam Mahomed, Senior Staff Specialist, Obstetrics and Gynaecology, Ipswich Hospital and University of Queensland

Working Party Members
Mrs Kaye Amos-Fleming, Maternity Clinical Educator, Maternity and Women’s Health Unit, Sunshine Coast Private Hospital
Dr Fatima Ashrafi, Flying Obstetrician and Gynaecologist, South West Hospital and Health Service
Mrs Anne Barnes, Midwife, Women and Birthing, Redland Hospital
Dr Margaret Bickerstaff, Staff Specialist, Bundaberg Family Unit, Bundaberg Base Hospital
Mrs Lisa Birmingham, Women's Health Physiotherapist, Royal Brisbane and Women’s Hospital
Mrs Anne Bousfield, Midwifery Unit Manager, Roma Hospital
Dr Anthony Brown, Medical Superintendent, Mareeba Hospital
Ms Anne Clayton, Nursing and Midwifery Director, Caboolture Hospital
Dr Lindsay Cochrane, Staff Specialist Obstetrics and Gynaecology, Caboolture Hospital
Mrs Kelly Cooper, Midwife, Birth Suite, Royal Brisbane and Women’s Hospital; and Australian College of Midwives, Queensland Branch Executive Member
Mrs Cara Cox, Clinical Midwife, Birth Suite, Royal Brisbane and Women’s Hospital
Mrs Carole Dodd, Clinical Midwife, Maternity Unit, Caboolture Hospital
Ms Anne Eaton, Midwifery Unit Manager, Proserpine Hospital
Ms Kerri-Anne Gifford, Midwife, Ngarrama Midwifery Group Practice – Indigenous Maternity Service, Caboolture Hospital
Dr Sarah Gleeson, Visiting Medical Officer, Advanced Practice (Obstetrics), Maternity Service, Goondiwindi Hospital
Leah Hardiman, Rhianna Weekes, Alecia Staines, Bec Waqanikalou, Maternity Choices Australia
Mrs Penny Hill, Midwife, RBWH
Ms Louise Homan, Midwife/Nurse Unit Manager, Birth Suite, Cairns Hospital
Ms Pauline Inverarity, Clinical Caseload Midwife, Midwifery Group Practice, Birth Centre, Gold Coast University Hospital
Ms Kay Jones, Midwifery Lecturer/Researcher, School of Nursing and Midwifery, Griffith University
Mrs Fiona Kajewski, Clinical Midwife Consultant, Maternity Services, Toowoomba Hospital
Dr Nathan Kesteven, GP Obstetrician, Beaudesert Hospital
Associate Professor Rebecca Kimble, Clinical Director, Obstetrics and Gynaecology, Royal Brisbane and Women’s Hospital
Mrs Sarah Kirby, Midwifery Unit Manager, Birth Suite, Royal Brisbane and Women’s Hospital
Associate Professor Thomas McHattie, Clinical Director, Obstetrics and Gynaecology, Wide Bay Hospital and Health Service
Mrs Melanie McKenzie, Consumer Representative, High Risk Pregnancy and Bereavement, Director and Co-Founder, Harrison’s Little Wings Inc.
Dr Bruce Maybloom, Resident Medical Officer, Obstetrics and Gynaecology, Queensland
Dr Rachel Reed, Lecturer and Private Practice Midwife, School of Nursing and Midwifery, University of the Sunshine Coast
Mrs Pam Sepulveda, Clinical Midwife Consultant, Birth Suite, Logan Hospital
Mrs Susan Simpson, Clinical Midwife, Birth Suite, Ipswich Hospital
Dr Robyn Thompson, Midwife and Breastfeeding Consultant, Visiting Scholar, Mater Midwifery Research Unit
Dr Jocelyn Toohill, Midwifery Researcher/Lecturer, School of Nursing and Midwifery, Griffith University
Mrs Bethan Townsend, Clinical Midwife, Midwifery Group Practice, Birth Centre, Gold Coast University Hospital
Dr Clare Walker, Senior Medical Officer, Maternity Services, Longreach Hospital
Mrs Lyn Wardlaw, Executive Director Nursing and Midwifery, Torres Strait and Cape York Hospital and Health Service
Associate Professor Edward Weaver, Senior Medical Officer, Obstetrics and Gynaecology, Nambour General Hospital
Mrs Kay Wilson, Nursing and Midwifery Director, Birthing and Ambulatory Services, Mater Mothers’ Hospital
Mrs Vanessa Wright, Clinical Midwife, Birth Suite, Logan Hospital

Queensland Clinical Guidelines Team
Associate Professor Rebecca Kimble, Director
Ms Jacinta Lee, Manager
Ms Lyndel Gray, Clinical Nurse Consultant
Dr Brent Knack, Program Officer
Ms Stephanie Sutherns, Clinical Nurse Consultant
Steering Committee

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