

# Queensland Clinical Guidelines

*Translating evidence into best clinical practice*

## Maternity and Neonatal Clinical Guideline

### Supplement: Vaginal birth after caesarean section (VBAC)

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## 1 Introduction

This document is a supplement to the Queensland Clinical Guideline *Vaginal birth after caesarean section (VBAC)*. It provides supplementary information regarding guideline development, makes summary recommendations, suggests measures to assist implementation and quality activities and summarises changes (if any) to the guideline since original publication. Refer to the guideline for abbreviations, acronyms, flow charts and acknowledgements.

### 1.1 Funding

The development of this guideline was funded by the Health Systems Innovation Branch, Queensland Health. Working party members participated on a voluntary basis.

### 1.2 Conflict of interest

Declarations of conflict of interest were sought from working party members as per the Queensland Clinical Guidelines [Conflict of Interest](#) statement. Conflicts of interest were registered and can be accessed through emailing [Guidelines@health.qld.gov.au](mailto:Guidelines@health.qld.gov.au).

### 1.3 Guideline review

Queensland Clinical Guidelines are reviewed every 5 years or earlier if significant new evidence emerges. Table 1 provides a summary of changes made to the guidelines since original publication.

Table 1. Summary of change

Publication date	Identifier	Summary of major change
1/12/2009	MN0911.12-V1-R11	First publication
22/08/2011	MN09.12-V2-R11	New website. Name and format changes
15/09/2011	MN09.12-V3-R14	Review date extended
05/06/2015	MN15.12-V4-R19	First full review of original publication <ul style="list-style-type: none"> <li>• Guideline supplement published</li> <li>• Considerations of planned VBAC following 2 previous caesarean sections included</li> <li>• Increased focus on shared decision making</li> <li>• Expanded Sections:               <ul style="list-style-type: none"> <li>○ Flow chart</li> <li>○ Antenatal care</li> <li>○ Discussion and planning</li> <li>○ Induction of labour</li> <li>○ Uterine rupture</li> </ul> </li> <li>• Section Intrapartum care: aligned to QCG Normal birth guideline where appropriate</li> </ul>

## 2 Methodology

The Queensland Clinical Guideline (QCG) follows a rigorous process of guideline development. This process was endorsed by the Queensland Health Patient Safety and Quality Executive Committee in December 2009. The guidelines are best described as 'evidence informed consensus guidelines' and draw from the evidence base of existing national and international guidelines and the expert opinion of the working party.

### 2.1 Topic identification

The topic was identified as a priority by the Statewide Maternity and Neonatal Clinical Network at a forum in 2009.

## 2.2 Scope

The scope of the guideline was determined using the PICO (Population, Intervention, Comparison, and Outcome) Framework as outlined in Table 2.

Table 2. PICO Framework

PICO	
<b>Population</b>	Women planning their next birth after a caesarean section (NBAC)
<b>Intervention</b>	Vaginal birth after caesarean (VBAC)
<b>Comparison</b>	Elective repeat caesarean section (ERCS)
<b>Outcome</b>	Guidance and evidence-based information for Queensland Maternity Clinicians to provide women: <ul style="list-style-type: none"> <li>• Support in making informed choices for their NBAC; and</li> <li>• Care associated with the key considerations of:               <ul style="list-style-type: none"> <li>○ NBAC antenatal care</li> <li>○ VBAC intrapartum care</li> </ul> </li> </ul>

## 2.3 Clinical questions

The following clinical questions were generated to inform the guideline scope and purpose:

- What information and support should be provided to a woman and her partner when considering the next birth after caesarean section?
- What are the key components of intrapartum and postpartum care for planned VBAC?

## 2.4 Exclusions

The following exclusions were identified in the guideline scope:

- Pregnant women or babies with rare conditions or with complex or unusual comorbidities (e.g. congenital heart disease)
- Women with clinical conditions that arise during pregnancy (e.g. pre-eclampsia, gestational diabetes) which require specialist care
- Antenatal and intrapartum conditions/factors (e.g. pre-eclampsia) that would affect the likelihood of the woman being assessed as requiring a planned or emergency caesarean section
- Routine antenatal, intrapartum, and postnatal care
- Emergency antenatal, intrapartum, and postnatal care

## 1.1 Search strategy

A search of the literature was conducted during September 2014 using multiple techniques including search and review of:

- Known guideline sites (e.g. Royal Australian and New Zealand College of Obstetricians and Gynaecologists, National Guideline Clearing House, Royal College of Obstetrician and Gynaecologists, Society of Obstetricians and Gynaecologists of Canada, American Academy of Pediatrics)
- Synthesised evidence (e.g. Dynamed, Cochrane reviews)
- Summaries of relevant literature (e.g. identified using Cinahl, PubMed)
- Individual case reports, studies and trials identified in the literature
- Relevant reference lists

## 2.5 Consultation

Major consultative and development processes occurred between November 2014 and April 2015. These are outlined in Table 3.

Table 3. Major guideline development processes

Process	Activity
<b>Clinical lead</b>	<ul style="list-style-type: none"> <li>The nominated Clinical Lead was approved by QCG Steering Committee</li> </ul>
<b>Consumer participation</b>	<ul style="list-style-type: none"> <li>Consumer participation was invited from a range of consumer focused organisations who had previously accepted an invitation for on-going involvement with QCG</li> </ul>
<b>Working party</b>	<ul style="list-style-type: none"> <li>An EOI for working party membership was distributed via email to Queensland clinicians and stakeholders (~1000) in October 2014</li> <li>The working party was recruited from responses received</li> <li>Working party members who participated in the working party consultation processes are acknowledged in the guideline</li> <li>Working party consultation occurred in a virtual group via email</li> </ul>
<b>Statewide consultation</b>	<ul style="list-style-type: none"> <li>Consultation was invited from Queensland clinicians and stakeholders (~1000) during December 2014 and February 2015</li> <li>Feedback was received primarily via email</li> <li>All feedback was compiled and provided to the clinical lead and working party members for review and comment</li> </ul>

## 2.6 Endorsement

The guideline was endorsed by the:

- Queensland Clinical Guidelines Steering Committee in May 2015
- Statewide Maternity and Neonatal Clinical Network [Queensland] in May 2015

## 2.7 Publication

The guideline and guideline supplement were published on the QCG website in June 2015.

The guideline can be cited as:

Queensland Clinical Guidelines. Vaginal birth after caesarean section (VBAC). Guideline No. MN15.12-V4-R20. Queensland Health. 2015. Available from: <http://www.health.qld.gov.au/qcg/>.

The guideline supplement can be cited as:

Queensland Clinical Guidelines. Vaginal birth after caesarean section (VBAC). Guideline No. MN15.12-V4-R20. Queensland Health. 2015. Available from: <http://www.health.qld.gov.au/qcg/>.

### 3 Summary recommendations

The evidence grades identified by the National Health and Medical Research Council (NHMRC)<sup>1</sup>, were used to inform the summary recommendations. Definitions for grades of recommendations are outlined in Table 4. Grade of recommendation and summary recommendations are outlined in Table 5. The assigned grades are derived from the grades of evidence provided in the source document or consensus recommendations of the working party and clinical lead as indicated.

Table 4. Grade of recommendation

Grade of recommendation	Description
<b>A</b>	Body of evidence can be trusted to guide practice
<b>B</b>	Body of evidence can be trusted to guide practice in most situations
<b>C</b>	Body of evidence provides some support for recommendation(s) but care should be taken in its application
<b>D</b>	Body of evidence is weak and recommendation must be applied with caution
<b>Consensus*</b>	Opinions based on respected authorities, descriptive studies or reports of expert committees or clinical experience of the working party

\*The 'consensus' definition in Table 4 relates to the clinical experience of the guideline's clinical lead and working party.

Table 5. Summary recommendations

Recommendation	Grading of recommendation
1. Following a primary CS and during the immediate postnatal period, offer all women the opportunity to talk and debrief about their birth experience. <sup>2,3</sup>	<b>Consensus</b>
2. Ensure the maternity service is capable of providing <sup>4-6</sup> : <ul style="list-style-type: none"> <li>• Access to an emergency CS<sup>7,8</sup></li> <li>• Continuous intrapartum monitoring<sup>3,7</sup></li> <li>• One-to-one midwifery care during labour<sup>2</sup></li> <li>• Advanced neonatal resuscitation<sup>7</sup></li> <li>• Onsite blood transfusion.<sup>7,8</sup></li> </ul>	<b>Consensus</b>
3. Through shared decision making on the mode of birth after a previous CS, discuss and document <sup>8</sup> : <ul style="list-style-type: none"> <li>• Maternal preferences and priorities</li> <li>• The risks and benefits of repeat CS</li> <li>• The risks and benefits of planned VBAC, including the risk of unplanned CS.</li> </ul>	<b>Consensus</b>
4. Provide the woman with written information to assist in decision making. <sup>3</sup>	<b>Consensus</b>
5. Inform the woman, overall the planned VBAC success rates are in the range of 60-80%. <sup>9</sup>	<b>C</b>
6. Inform women considering the options for birth after a previous caesarean that the absolute overall risk of uterine rupture in <sup>9</sup> : <ul style="list-style-type: none"> <li>• Planned VBAC is approximately 5 per 1000 women <ul style="list-style-type: none"> <li>○ The subsequent perinatal mortality is approximately 62/1000 uterine ruptures</li> </ul> </li> <li>• ERCS is approximately 0.4/1000 women.</li> </ul>	<b>C</b>
7. Inform women the absolute risk of birth related perinatal loss with planned VBAC (1.3/1000 women compared to 0.5/1000 ERCS <sup>9</sup> ) is comparable to the risk for women having their first birth. <sup>3</sup>	<b>C</b>

Recommendation	Grading of recommendation
8. Inform women considering the options for birth after a previous caesarean that ERCS may increase the risk of serious complications in future pregnancies. <sup>3</sup>	B
9. Agree a final decision for mode of birth between the woman and her obstetric care provider before the expected/planned delivery date (ideally by 36 weeks gestation). <sup>3</sup>	Consensus
10. Document a plan for the situation of labour commencing prior to the scheduled/expected date. <sup>3</sup>	Consensus
11. Inform pregnant women with both previous CS and a previous vaginal birth that they have an increased likelihood of achieving a vaginal birth than women who have had a previous CS but no previous vaginal birth. <sup>8</sup>	B
12. Recommend an 18 month minimum interval from previous CS to VBAC. <sup>9</sup>	C
13. Document obstetrician involvement in decision to induce labour. <sup>3</sup>	Consensus
14. Insert an intravenous cannula <sup>7</sup> of sufficient size to allow rapid resuscitation (16 gauge or larger) from the onset of labour.	Consensus
15. Offer women planning a vaginal birth who have had a previous CS <sup>8</sup> : <ul style="list-style-type: none"> <li>• Electronic fetal heart rate monitoring during labour.<sup>3</sup></li> </ul>	Consensus
16. Document obstetrician involvement in decision to augment labour. <sup>3</sup>	Consensus

## 4 Implementation

This guideline is applicable to all Queensland public and private maternity facilities. It can be downloaded in Portable Document Format (PDF) from [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg)

### 4.1 Guideline resources

The following guideline components are provided on the website as separate resources:

- Flowchart: Vaginal birth after caesarean section (VBAC)
- Education resource: Vaginal birth after caesarean section (VBAC)
- Knowledge assessment: Vaginal birth after caesarean section (VBAC)

### 4.2 Suggested resources

During the development process stakeholders identified additional resources with potential to complement and enhance guideline implementation and application. The following resources have not been sourced or developed by QCG but are suggested as complimentary to the guideline:

- Consumer information [e.g. New South Families: Your next birth after caesarean section – information about your birth options<sup>10</sup>]

### 4.3 Implementation measures

Suggested activities to assist implementation of the guideline are outlined below.

#### 4.3.1 QCG measures

- Notify Chief Executive Officer and relevant stakeholders
- Monitor emerging new evidence to ensure guideline reflects contemporaneous practice
- Capture user feedback
- Record and manage change requests
- Review guideline in 2020

### 4.3.2 Hospital and Health Service measures

Initiate, promote and support local systems and processes to integrate the guideline into clinical practice, including:

- Hospital and Health Service (HHS) Executive endorse the guidelines and their use in the HHS and communicate this to staff
- Promote the introduction of the guideline to relevant health care professionals
- Support education and training opportunities relevant to the guideline and service capabilities
- Align clinical care with guideline recommendations
- Undertake relevant implementation activities as outlined in the *Guideline implementation checklist* available at [www.health.qld.gov.au/qcg](http://www.health.qld.gov.au/qcg)

## 4.4 Quality measures

Auditing of guideline recommendations and content assists with identifying quality of care issues and provides evidence of compliance with the National Safety and Quality Health Service (NSQHS) Standards.<sup>11</sup> Suggested audit and quality measures are identified in Table 7. Clinical quality measures.

Table 6. NSQHS Criterion 1.7

NSQHS Standard 1: Governance for Safety and Quality in Health Service Organisations	
Clinical Practice: Care provided by the clinical workforce is guided by current best practice	
Criterion 1.7:	Actions required:
Developing and/or applying clinical guidelines or pathways that are supported by the best available evidence	1.7.1 Agreed and documented clinical guidelines and/or pathways are available to the clinical workforce
	1.7.2 The use of agreed clinical guidelines by the clinical workforce is monitored

### 4.4.1 Clinical quality measures

The following clinical quality measures are suggested [refer to Table 7]:

Table 7. Clinical quality measures

No	Audit items	Guideline Section
1.	Following a primary CS, the proportion of women with a documented antenatal discussion:	
1.1	<ul style="list-style-type: none"> <li>• Before the 24<sup>th</sup> week of pregnancy</li> </ul>	3 Antenatal Care
1.2	<ul style="list-style-type: none"> <li>• On the risks and benefits of planned VBAC and ERCS<sup>3</sup></li> </ul>	3.1 Discussion and planning
2.	Following a primary CS, the proportion of women with documented:	
2.1	<ul style="list-style-type: none"> <li>• Obstetric involvement in the decision to induce labour in planned VBAC</li> </ul>	3.3.5 Induction of labour
	<ul style="list-style-type: none"> <li>• Obstetric involvement in the decision to augment labour in planned VBAC</li> </ul>	4.5.1 Augmentation of labour
2.2	<ul style="list-style-type: none"> <li>• Continuous electronic fetal heart rate monitoring during planned VBAC labour</li> </ul>	4.4 Fetal heart rate monitoring



## References

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