Category: Clinical Guidance Statement

Caesarean Birth on Maternal Request (CBMR) (C-Obs 39)

This statement has been developed by the C-Obs 39 CBMR Statement Development Panel and approved by the RANZCOG Women's Health Committee and Council in July 2023.

A list of the Women's Health Committee membership can be found in Appendix A: Women's Health Committee Membership. A list of the Statement Development Panel Membership can be found in Appendix B: Statement Development Panel Membership.

Conflict of interest disclosures have been received from members of this committee. See Appendix C: Overview of the development and review process for this statement.

Disclaimer: This information is intended to provide general advice to practitioners. This information should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The document has been prepared having regard to general circumstances (Appendix D: Full Disclaimer)

Purpose:	To provide evidence-based guidance for registered health professionals in Australia and Aotearoa New Zealand when counselling low-risk women[1] who request elective caesarean birth, where there is no medical or obstetric contraindication to vaginal birth.
Target audience:	This statement was developed primarily for use by registered health professionals providing maternity care, and consumers.
Background:	This statement was first developed by the RANZCOG Women's Health Committee in July 2010. The statement was most recently updated by the C-Obs 39 CBMR Statement Development Panel, a working group of the Women's Health Committee in July 2023.
Funding:	The development and review of this statement was funded by RANZCOG.

[1] *RANZCOG currently uses the term 'woman' in its documents to include all individuals needing obstetric and gynaecological healthcare, regardless of their gender identity. The College is firmly committed to inclusion of all individuals needing O&G care, as well as all its members providing care, regardless of their gender identity.*

Contents

1. Purpose and scope

To provide evidence-based guidance for registered health professionals in Australia and Aotearoa New Zealand when counselling low-risk women[ii] who request elective caesarean birth, where there is no medical or obstetric contraindication to vaginal birth.

The SDP established the scope of this statement would include any maternal and neonatal outcomes associated with planned caesarean birth and planned vaginal birth.

Out of scope: Advice on surgical technique, wound management, and intrapartum requests for caesarean birth; advice to health services on the provision of CBMR; economic evaluation and analysis of CBMR.

2. Introduction

When planning for birth in the antenatal period, some women (wāhine) may ask their doctor or midwife if a caesarean birth is possible. When a request is made without any specific medical reason (i.e., the woman's personal preference), this is known as caesarean birth on maternal request (CBMR). It is important that women and their families (whānau) have a conversation with their doctor or midwife about the risks and benefits (both short and longer-term for the woman and her baby) associated with planned caesarean birth, compared with planned vaginal birth. With respectful consideration of a woman's birth preferences, the safety of the woman and her baby should be the foremost concern when making decisions about mode of birth.

3. Terminology

This Clinical Guidance Statement uses the following terms liberally throughout this document. Definitions are provided to assist the reader with interpretation of evidence.

Number needed to treat (NNT) equates to the number of patients who must be exposed to a treatment/intervention to prevent one additional bad result. i.e., The number of women required to have a caesarean birth to prevent one extra case of a complication compared with vaginal birth.

Number needed to harm (NNH) equates to how many patients must receive a particular treatment for 1 additional patient to experience a particular adverse outcome. i.e., The number of women required to have a caesarean birth to result in one extra case of a complication compared with vaginal birth.

Odds Ratio (OR) measures association between two events (i.e., intervention and outcome). An OR of 1 is indicative of no difference in the odds of an outcome with the intervention. An OR < 1 demonstrates reduced odds of an outcome. An OR > 1 shows increased odds of an outcome.

Relative Risk (RR) provides a ratio between the risk or probability of an outcome with the intervention, divided by the risk for the same outcome with the comparator. Like the OR, a RR of 1 suggests no difference. An RR > 1 suggests increased risk. An RR < 1 suggests decreased risk. The term Hazard Ratio (HR) may also be used and is similarly equivalent.

Low-risk women or women without identified risk factors: defined as where there is no medical or obstetric contraindication to vaginal birth (e.g., cephalic, singleton presentation, term 37^{+6} to 41 weeks, normally

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positioned placenta, no growth disorders detected, no maternal infections and no other chronic health conditions).[iii]

4. List of recommendations

Recommendation 1	Evidence based recommendation
Conditional: If, after a full discussion over time, of the benefits and harms of planned caesarean birth (without medical or obstetric contraindications to vaginal birth) and planned vaginal birth, the woman requests a caesarean birth, the obstetrician may: 1. Agree to perform the caesarean birth; or may 2. Refer to a second obstetrician for further discussion with the woman in order to reach a decision. Note: RANZCOG recommends planned caesarean birth for women without additional risks should not be undertaken before 39 weeks (see- Timing of planned caesarean section at term (C-Obs 23)). GRADE of evidence: Very low	

Good Practice Point 1
GPP: The use of a local decision aid with a detailed list of benefits and harms when discussing the request for planned mode of birth, including caesarean birth, is recommended.

5. Introduction

Rationale

The term Caesarean Birth on Maternal Request (CBMR) refers to elective birth by caesarean section at the request of a woman with no identifiable medical or obstetric contraindications to an attempt at vaginal birth. The preference for CBMR varies widely with many factors influencing the choice, including but not limited to geography, parity, previous birth experience and stage of reproductive life. Other factors may also influence a women's preference for caesarean birth, such as significant life trauma (e.g. loss of a child, or interpersonal or sexual violence).[1] In recognition of this, sensitivity should be used around the term CBMR, since these requests may legitimately be "medically indicated".

Planned caesarean birth and planned vaginal birth are each associated with increased risks for certain adverse and neonatal outcomes. The degree of risk is dependent on the outcome and may be marginal or significant.[1] The acceptability of risk is often dependent on the individual.

With increasing rates of caesarean birth, there is a need to ensure registered health professionals providing maternity care have access to up-to-date evidence to inform women of the benefits and harms associated with planned caesarean birth in the short and long-term for both mother and baby.[2]

Epidemiology

While the increasing prevalence of elective caesarean birth is recognised, the data rarely differentiates between cases with medical or obstetric indications and cases without (and where the request was made by the woman specifically). As such, there is great variability in the rates of reported CBMR, with published literature suggesting the global absolute proportion of CBMR ranges between 0.2% to 42%.[3]

[iii] Please note, this is not an exhaustive list of risk factors.

Although there is no standardised method or requirement to report CBMR, an Australian study analysing birth registry data from 2008-2017 in Queensland reported CBMR in low-risk women accounted for 18-29% of all caesarean births.[4]

In Aotearoa New Zealand, no national data is available, however recent clinical data (reported by National Women's Health, Auckland) reported that in 2011 maternal request was the indication in 7.6% and increased to 16% of elective and pre-labour caesarean births in 2021.[5, 6] Some of the variation in data from Australia and Aotearoa New Zealand may be explained by the absence of a consistent definition and differences in the reporting and collection of data.

6. Methods

In 2022, under the auspices of RANZCOG's Women's Health Committee, a Statement Development Panel (SDP) were convened to update the existing statement on CBMR (previously known as Caesarean Delivery at Maternal Request- CDMR). The SDP, consisting of members representing both Australia and Aotearoa New Zealand, determined the purpose of the statement would remain consistent with previous iterations of the document.

The statement was developed according to approved RANZCOG processes, available in the Manual for Developing and Updating Clinical Guidance Statements. Following these processes, including the development of two clinical questions, the Research and Policy Team identified several local and international guidelines published within the past five years. These included:

- NICE Guideline- Caesarean Birth NG192 (2021).[1]
- RCOG Consent Advice No. 14- Planned Caesarean Birth (Consent form for planned caesarean birth) (2022).[7]
- ACOG Committee Opinion No. 761- Caesarean Delivery on Maternal Request (2019).[8]
- SOGC Guideline- No. 361- Caesarean Delivery on Maternal Request (2018).[9]

An additional literature search was conducted to identify peer-reviewed studies, published from 2019 to 2022. A search was applied to Cochrane database Central, retrieving 10 publications and MEDLINE, retrieving 90. Following screening, two systematic reviews were selected for inclusion (NICE 2021, SBU 2022). Both reviews were critically appraised using the AMSTAR 2 tool and assessed as high quality.[10]

Assessment of the rigour, quality of evidence was performed using the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach.

The terms and phrases used in recommendations are dependent on the strength and quality of the evidence body- further explanation of recommendation types and classifications can be found in the Manual.

Search strategy

A primary literature search was undertaken to identify studies published after the NICE systematic review searches (search date- August 2019). The searches were undertaken in November 2022.

- "Caesarean section" OR "caesarean" OR "caesarean" AND "no medical" OR "non-medical" OR "maternal request" OR "without medical indication" [Mesh]
- Published between 2019-2022 (present)
- Limited to human populations and published and/or translated into English language.

7. Clinical Questions and Recommendations

Detailed Evidence to Decision summaries for each clinical question, including the study results, absolute effect estimates and quality of evidence for the reported outcomes, can be found in Appendix E- Evidence to Decision framework.

Clinical Question 1

For women who request a caesarean birth where there is no identifiable medical or obstetric need at term, what are the short and long term maternal, neonatal and child health outcomes?

P[iv]- Women who request a caesarean birth when there is no identifiable medical (physical and/or mental health) or obstetric contraindication to a planned vaginal birth.

I- C-Section

C- Vaginal birth, assisted vaginal birth, emergency caesarean birth.

O- Maternal- morbidity and mortality; perineal trauma; pelvic floor damage; postpartum recovery time; breastfeeding ability; length of hospital stay; maternal wellbeing/mental health; maternal/infant bonding; future fertility potential; chronic pain; scar ectopic pregnancy; risk of repeat abdominal surgery; risks associated with anaesthesia; endometrial related complications

Neonatal- morbidity and mortality; pulmonary health; respiratory distress; Apgar score; microbiome studies; Hypoxic Ischaemic Encephalopathy (HIE); NICU admission; length of hospital stay.

Child health (up to 4-5yo)- respiratory health (asthma etc); frequency of illness; childhood obesity; neurodevelopmental/cognitive functioning disorders

Clinical Question 2

What impact does CBMR have on subsequent pregnancies?

P- Multiparous pregnant women/people without medical (physical and/or mental health) or obstetric contraindications to a planned vaginal birth

I- Caesarean birth by maternal request for index birth

C- Planned vaginal birth, assisted vaginal birth, emergency caesarean birth for index birth

O- Maternal (in any subsequent pregnancy)- placenta accreta spectrum (PAS); VBAC; other pregnancy complications- incidence of intrauterine growth restriction; pre-term birth; ectopic pregnancy; scar dehiscence; risk of thromboembolic event; blood loss/transfusion; hysterectomy

Neonatal- morbidity and mortality (perinatal death); pulmonary health; respiratory distress; Apgar score; microbiome studies; Hypoxic Ischaemic Encephalopathy (HIE); neonatal intensive care unit (NICU) admission; length of hospital stay.

Summary of evidence

Two systematic reviews and a large cohort study using registry data from Sweden reporting on the benefits and harms of planned caesarean birth compared with planned vaginal birth.[1, 11, 12]

- In the NICE systematic review, four studies informed maternal and infant short-term outcomes and 20 studies informed maternal and infant/child long-term outcomes. For short-term outcomes, the analysis was intention to treat. Women who planned a vaginal birth (but had either vaginal birth or an emergency caesarean birth) were compared to those who planned a caesarean birth (but on occasions may have had a vaginal birth instead).[1]

[iv] Please note, PICO is a framework for developing a focused clinical question. The letters represent Population, Intervention, Comparator, Outcome. See RANZCOG Manual on Developing and Updating Clinical Guidance Statements- pp. 10 for further detail.

- A systematic review by the Swedish Agency for Health Technology Assessment and Assessment of Social Services (SBU) reported on short and long-term perinatal outcomes and the long-term maternal outcomes.[11]
- A whole-of-population cohort study (the Swedish National Birth Registry) was used by SBU to report on short-term risks for maternal complications with a caesarean birth on maternal request and following a prior caesarean birth.[12]
- Both systematic reviews included women who may have had an elective caesarean birth for indications other than maternal request only, as existing registers (the source of most evidence in the included systematic reviews) do not always contain information on whether the caesarean birth occurs in the absence of a medical or obstetric contraindication to vaginal birth. While not the exact population of interest, included studies in the systematic reviews were adjusted for possible confounding factors that may contribute to a decision on planning to have a caesarean birth. Thus, the studies can be considered as indirect evidence taking into account these limitations and evidence quality was downgraded for this reason. (See Limitations in the evidence).

Outcomes are presented in four categories:

1. Short term complications for the woman

For the following outcomes there are **increased risks** for women having elective caesarean births (not exclusively maternal request) (GRADE Low or Very Low).

- Maternal deaths (OR 5.63 (95% CI 2.52-12.55))[v],with baseline risk for planned vaginal birth is 0.4/10,000, NNH = 4762
- Peripartum hysterectomy (OR 1.81 (95% CI 1.36-2.40)) with baseline risk 8/10,000, NNH = 1250),
- Endometritis (OR 1.12 (95% CI 1.07-1.19)) with baseline risk of 16.4% for vaginal birth NNH=480
- Wound infection (OR 2.60 (95% CI 2.47-2.75)) with baseline risk of 6.9% for vaginal birth NNH 90

For women having planned vaginal births, there is risk of having assisted vaginal birth (includes vacuum extraction and forceps deliveries). There is no comparison group for this outcome when compared with caesarean birth in the evidence from the systematic reviews, which precludes a relative risk calculation. The rate of assisted vaginal births was 12% of all births in Australia in 2021[13], and 17% of standard primipara births in Aotearoa New Zealand in 2020.[14] Assisted vaginal births maybe associated with an increase in anal sphincter injury and are listed in Table 1- Benefits and risks associated with planned caesarean birth and planned vaginal birth.

Pain (median) was reported as lower in elective caesarean births during birth (1.0 vs 8, 10-point visual analogue scale), higher in elective caesarean births 3 days postpartum (5 vs 4 days) and no difference in pain at 4 months (0.0 vs 0.17, 10-point visual analogue scale) between elective caesarean births and planned vaginal birth. (GRADE very low).[vi]

There were conflicting results for bleeding complications possibly because of differing definitions.
Uncertain results: VTE

2. Long term complications for the woman (subsequent pregnancies)

There are **increased risks** for woman having elective caesarean births (not exclusively maternal request) compared to planned vaginal birth. (GRADE- Low – very low)

[v] Maternal deaths from large cohort study (US, n = 442,067, 2003-2011) of women (35 years or older) having their first baby without labour compared to women having a planned vaginal birth. Adjustments were made for maternal age.
[vi] Schindl et al 2003, as reported in NICE systematic review 2019.

- Uterine rupture in a future pregnancy (OR 24.40, 95% CI 22.80-26.00) (Baseline risk for no previous CS 0.02/10,000) NNH = 190)
- Placenta accreta (OR 10.90, 95% CI 8.40-14.00) (Baseline risk for no previous CS 0.003/10,000) NNH = 3,500)
- Surgery for adhesions (RR 2.80, 95% CI 2.60-3.10) (Baseline 40/10,000 for vaginal birth) NNH 130,
- Surgery for anterior abdominal wall hernia (RR 3.2 95% CI 3.00-3.40) (Baseline 60/10,000 for vaginal birth) NNH 80.

Uncertain results: stillbirth in subsequent pregnancy (conflicting results between NICE and SBU systematic reviews).

There are **decreased risks** for woman having planned caesarean births (not exclusively maternal request) for the following outcomes (GRADE Low to very low):

- Surgery for prolapse within 25 years (RR 0.2, 95% CI 0.1-0.2) (Baseline 190/10,000 for vaginal birth). NNT 70.
- Urinary incontinence at one year after elective caesarean section, compared to unassisted vaginal birth (OR 0.4, 95% CI 0.29-0.56) (Baseline risk 48.7% for vaginal birth) NNH = 3.4 (2 studies)
- Urinary incontinence at one year after elective caesarean section compared to assisted vaginal birth (OR 0.22 95% CI 0.1-0.46) (Baseline risk 19.8% for vaginal birth) NNH = 8 (1 study)
- Surgery for stress incontinence within 25 years (OR 0.3, 95% CI 0.2-0.3) (baseline 110/10,000 for vaginal birth) NNT=150
- Faecal incontinence at one year postpartum for assisted vaginal birth (OR 0.45, 95% CI 0.21-0.94)), NNT 14.

Anal sphincter injury was not reported in the caesarean section group of the SBU systematic review, precluding a relative risk calculation. NNT to avoid an instance of anal sphincter injury in the vaginal birth group was 30.

3. Short term complications for the baby:

There are **increased risks** for woman having elective caesarean births (not exclusively maternal request) for the following outcomes:

- Neonatal mortality (OR 1.93, 95% CI 1.67-2.4) (Baseline 30/100,000 for vaginal birth) NNH = 5.882 (GRADE- Low).

Uncertain results: respiratory disorders in the neonatal period (this may be explained by different definitions used in studies); NICU admissions (differing results from the two systematic reviews (SBU RR 1.92, 95% CI 1.44-3.40); NICE (RR 0.86, 95% CI 0.50-10.49), infectious morbidity (RR 0.43, 95% CI 0.16 - 1.19).

4. Long term complications for the baby:

There are **increased risks** for the woman having planned caesarean birth (not exclusively maternal request) for the following outcomes:

- Hospitalisation for respiratory infections in first year of life (RR 1.14 (1.09 — 1.19) (baseline 321/10,000 for vaginal birth) NNH = 130
- Hospitalisation for GI infections in childhood (RR 1.21 95% CI 1.16-1.25) (Baseline 370/10,000 for vaginal birth) NNH =130
- Asthma (RR 1.19, 95% CI 1.17-1.21) (baseline 560/10,000 for vaginal birth) NNH = 120. (GRADE-Low or Very Low (for all)).

Uncertain results: infant mortality up to one year (HR 1.43, 95% CI 0.95 - 2,15), confidence interval crosses null hypothesis threshold); obesity (RR 1.17 95% CI 1.07-1.29) NNH = 100, childhood diabetes (RR 1.11 95% CI 1.04-1.17), no baseline data available, NNH = 1,800; cerebral palsy (OR 0.08 95% CI 0.01-0.64), NNT = 12) - very low quality study with highly selected population and incidence of cerebral palsy well above internationally reported rates; autism spectrum disorder (ASD) (OR 1.25 CI 95% 1.16 - 1.36) – Conflicting data with different results according to study design.

Conclusions

Planned caesarean birth may be associated with reduction in risk for surgery for prolapse and surgery for incontinence, anal sphincter injury/faecal incontinence.

Planned caesarean birth may be associated with an increase in risk of post-partum hysterectomy, maternal death, endometritis, wound infection, uterine rupture in future pregnancy, PAS in a future pregnancy.

Planned caesarean birth may be associated with an increase in risk of NND, respiratory and GI infections requiring hospitalisation in childhood, diabetes, and asthma. All evidence quality for all outcomes associated with an increase or reduction in risk was graded as low-very low.

Planned vaginal birth may be associated with risk of having an assisted vaginal birth (vacuum extraction and/or forceps deliveries) and anal sphincter injury.

Limitations in the evidence

- Some of the women in studies of planned caesarean birth groups in the NICE (n = 14) and the Swedish SBU systematic reviews and the Swedish registry data may have had medical indications for a planned caesarean birth.
- Women who choose one mode of birth over another are likely to be inherently different which may lead to differences in outcomes. In both systematic reviews adjustments of the OR were made to account for this confounder.
- In the SBU review, for long term maternal outcomes such as prolapse and faecal and urinary incontinence, results for all types of caesarean births were included, both planned and during labour, regardless of whether medical indications were present or not.
- In the NICE evidence review, it was noted that the number of women included in the intervention group (planned caesarean birth) in some studies was very low compared to the control arm.
- As these are observational studies and not the exact population of interest, it is not possible to conclude that caesarean birth is a cause of the outcomes, only that there is an association with caesarean birth.
- The quality of the evidence was downgraded for being indirect evidence.

Recommendation 1	Evidence based recommendation

Conditional: If, after a full discussion over time, of the benefits and harms of planned caesarean birth (without medical or obstetric contraindications to vaginal birth) and planned vaginal birth, the woman requests a caesarean birth, the obstetrician may:

1. Agree to perform the caesarean birth; or may
2. Refer to a second obstetrician for further discussion with the woman in order to reach a decision.

Note: RANZCOG recommends planned caesarean birth for women without additional risks should not be undertaken before 39 weeks (see- Timing of planned caesarean section at term (C-Obs 23)).

GRADE of evidence: Very low

Good Practice Point 1

GPP: The use of a local decision aid with a detailed list of benefits and risks when discussing the request for planned mode of birth, including caesarean birth, is recommended.

Table 1- Benefits and risks associated with planned caesarean birth and planned vaginal birth.

The following table provides a summary of maternal, neonatal and childhood health outcomes relating to planned caesarean birth compared with planned vaginal birth[7].

Time frame	Complication	Planned caesarean birth	Planned vaginal birth	Statistical measures	Interpretation in plain language, including the number needed to treat or harm (NNT/NNH)
Increased risk for women with planned caesarean birth compared with planned vaginal birth					
Short term - During labour and up to six weeks after birth	Maternal deaths[1]	2.3/10,000 (1 in 4300)	0.4/10,000 (1 in 25000)	OR 5.63 (95% CI 2.52-12.55) NICE 2019[1]	Maternal deaths are **rare** but may be increased with planned caesarean birth – there is 1 additional death every 4762 planned caesarean births. **GRADE of evidence: Low**
	Hysterectomy around the time of birth[1]	16.0/10,000 (1 in 625)	8/10,000 1 in 1250)	OR 1.81 (95% CI 1.36-2.40) NICE 2019	Hysterectomy around the time of birth is **rare** but may be increased with planned caesarean birth – there is 1 additional hysterectomy every 1250 planned caesarean births. **Grade of evidence: Low**
	Endometritis (uterine infection)	18.4/100 (1 in 5)	16.4/100 (1 in 6)	OR 1.12 (95% CI 1.07-1.19) NICE 2019	Uterine infection is **common** and may be slightly increased for caesarean birth – There is one additional infection for every 480 planned caesarean births. **GRADE of evidence: Very low (indirectness)**
	Wound infection	18.0/100 (1 in 5- 6)	6.9/100 (1 in 14)	OR 2.60 (95% CI 2.47-2.75) Swedish National Birth Registry 2021.[11]	Wound infection is **common** and may be increased with caesarean births– there is 1 additional wound infection every 90 planned caesarean births. **GRADE of evidence: Very low (indirectness)**

[7] Assisted vaginal birth includes vacuum extraction and forceps births.

Future pregnancies	Uterine rupture if labours[3]	103/10,000 (NICE) (1 in 97) 97/10,000 (SBU) (1 in 103)	4/10,000 (NICE) (1 in 2500)	OR 25.81 (95% CI 10.97 to 60.71) NICE 2019 OR 24.4 (95% CI 22.8-26.0) National Board of Health and Welfare (Sweden) report 2018.[12]	Uterine rupture is **uncommon** and may be increased with caesarean births – there is 1 additional uterine rupture for every 190 planned caesarean births (Swedish data). **GRADE of evidence: Low**
	Placenta accreta spectrum[3]	100/100,000 (1 in 1000)	40/100,000 (1 in 2500)	OR 2.43 (95% CI 1.74 – 3.40) NICE 2019 RR 10.9 (95% CI 8.4-14.0) Swedish National Birth Registry 2021	Placenta accreta spectrum is **uncommon** and may be increased in subsequent pregnancy in a woman who had a caesarean birth – there is one additional placenta accreta for 1750 planned caesarean births (NICE) and 3500 (Swedish). Increasing risk with each caesarean birth (Silver 2006). **GRADE of evidence: Low for both**
Long term- from six weeks to many years later	Surgery for adhesions	100/10,000 (1 in 100)	40/10,000 (1 in 250)	RR 2.80 (95% CI 2.60-3.10) National Board of Health and Welfare (Sweden) report 2018.[12]	Surgery for adhesions is **uncommon**– there is one additional surgery for adhesions for 130 caesarean births. **GRADE of evidence: Very low**
	Surgery for abdominal wall hernia (25 years)[1]	160/10,000 (1 in 62)	60/10,000 (1 in 167)	RR 3.2 (95% CI 3.00-3.40) National Board of Health and Welfare (Sweden) report 2018.[12]	Surgery for abdominal wall hernia is **common**– there is one additional surgery for abdominal wall hernia for 80 caesarean births. **GRADE of evidence: Very low**

Decreased risk for women with planned caesarean birth compared with planned vaginal birth					
Short term	Anal sphincter injury[1]	0 per 100,000 (No risk)	UK: 560 per 100,000 (about 1 in 179) – risk is higher in assisted deliveries AUS-SCV: 3.8% (1 in 26) for unassisted vaginal birth) and 5% (1 in 20) for assisted deliveries	NICE/RCOG – 2022 consent form Safer Care Victoria data 2018	UK: 1in 179 (unclear if first time births). AUS-SCV: Anal sphincter injuries are **common** and only reported with planned vaginal birth, 1 in 26 for unassisted vaginal births and 1 in 20 for assisted vaginal deliveries for first time mothers. 75% decrease with second vaginal births. **GRADE of evidence: Very low**
Long term – from 6 weeks to many years later	Symptoms of prolapse	121/10,000 (1 in 83)	243/10,000 (1 in 41)	OR 0.52 (0.28-0.99) Swedish SR	Symptoms of prolapse are **common**. Planned caesarean birth may decrease symptoms of prolapse. There is one additional woman with symptoms for every 60 planned vaginal births. **GRADE of evidence:** Low
	Surgery for prolapse (25 year follow up)	30/10,000 (1 in 333)	190/10,000 (1 in 53)	RR 0.2 (95% CI 0.1-0.2) National Board of Health and Welfare (Sweden) report 2018	Planned caesarean birth may decrease surgery for prolapse up to 25 years later – there is one additional surgery for prolapse avoided for 70 caesarean births after 25 years. **GRADE of evidence:** Low
	Urinary incontinence more than 1 year – unassisted birth[2]	19.6/100 (1 in 5)	48.7/100 Unassisted birth (1 in 2)	OR 0.4 (95% CI 0.29-0.56) NICE 2019	Urinary incontinence is **very common** and planned c-section may decrease urinary incontinence more than one year after unassisted vaginal birth – there is one case of urinary incontinence avoided for three to four caesarean births. **GRADE of evidence:** Very low

	Urinary incontinence more than 1 year – assisted birth[2]	7.3/100 (1 in 14)	19.8/100 Assisted (forceps or ventouse) births (1 in 5)	OR 0.22 (95% CI 0.1-0.46) NICE 2019	Urinary incontinence is **common** and planned c-section may decrease stress incontinence more than one year after an assisted vaginal birth – there is one case of urinary incontinence avoided for eight caesarean births. **GRADE of evidence:** Low
	Stress incontinence (10 years)	10/10,000 (1 in 1000)	40/10,000 (1 in 250)	OR 0.42 (95% CI 0.31-0.59) National Board of Health and Welfare (Sweden) report 2018	Stress incontinence is **common** and planned c-section may decrease surgery for stress– there is one case of urinary incontinence avoided for 10 caesarean births after 10 years. **GRADE of evidence:** Low
	Surgery for stress incontinence – 25 year follow up	30/10,000 (1 in 333)	110/10,000 (1 in 91)	OR 0.3 (95% CI 0.2-0.3) National Board of Health and Welfare (Sweden) report 2018	Surgery for stress incontinence is **common** and planned c-section may decrease surgery for stress incontinence – there is one case of surgery for stress incontinence avoided for 150 caesarean births after 25 years. **GRADE of evidence:** Low
	Faecal incontinence > 1 year after birth[2]	7.8/100 (1 in 13) 8.9/100 (1 in 11)	15.1/100 Assisted vaginal birth (1 in 7) 11.5/100 Unassisted vaginal birth (1 in 9)	OR 0.45 (95% CI 0.21-0.94) NICE 2019 OR 0.71 (95% CI 0.46-1.11) NICE 2019	Faecal incontinence is **common** and planned c-section may decrease symptoms of faecal incontinence compared with women having assisted vaginal deliveries – there is one case of faecal incontinence avoided for every 14 caesarean births one year after birth. The rates of faecal incontinence with unassisted vaginal birth are similar to planned caesarean birth. **GRADE of evidence:** Low
Increased risk for child born following caesarean birth* compared with planned vaginal birth					
Short term	Neonatal mortality within 28 days[1]	50/100000 (1 in 2000)	30/100000 (1 in 3333)	OR 1.93 (95% CI 1.67-2.24) NICE 2019	Neonatal deaths are **rare** but may be increased with planned caesarean birth – there is one additional neonatal death every 5882 planned caesarean births. **GRADE of evidence: Low**

	Hospital admission for respiratory problems in first year of life	513/10,000 (1 in 19)	321/10,000 (1 in 31)	RR: 1.14 (95% CI 1.09-1.19). Swedish SR	Hospital admissions for respiratory problems are **common** but may be increased with planned caesarean birth – there is one additional hospital admission for respiratory problems every 130 planned caesarean births. **GRADE of evidence: Very low**
	Hospital admission for GI infections in first year of life	430/10,000 (1 in 23)	370/10,000 (1 in 27)	RR: 1.21 (95% CI 1.16-1.25). Swedish SR	Hospital admissions for GI infections are **common** but may be increased with planned caesarean birth – there is one additional hospital admission for GI infections every 130 planned caesarean births. **GRADE of evidence: Very low**
	Asthma[2]	660/10,000 (1 in 15)	560/10,000 (1 in 18) No baseline data reported.	RR: 1.19 (1.17-1.21). Swedish SR 2021 RR: 1.21 (95% CI 1.17-1.25) NICE 2019	Asthma in childhood is **common** but may be increased with planned caesarean birth – there is one additional case of childhood asthma for every 120 planned caesarean births. **GRADE of evidence: Low**
	Childhood diabetes	No baseline data reported		1.11 (95% CI 1.04 – 1.187) Swedish SR RR Type 1 diabetes 1.15 (95% CI 1.06 – 1.25) NICE 2019	No baseline data available. **GRADE of evidence: Very low (Sweden), Low (NICE)**
Uncertain if increased or decreased risks with caesarean section for women (limited evidence or conflicting evidence) compared with planned vaginal birth					
	Obstetric haemorrhage				Conflicting results from NICE and Swedish data with varying definitions of major obstetric haemorrhage.
	Pulmonary embolism	1.03/100 (1 in 100)	0.6/100 (1 in 17) UK: 0.01% (1 in 10000)	OR 1.72 (95% CI 1.38-2.14) Swedish National Birth Registry 2021 OR 1.87 (95% CI 0.84-4.18) NICE 2019	Conflicting results from NICE and Swedish data: Pulmonary embolism is **uncommon** and may be increased with caesarean births – there is one additional pulmonary embolism for every 2300 planned caesarean births. (Swedish) **GRADE of evidence: (Both)- Very low (indirectness, imprecision)**

	Postnatal depression		No baseline data	OR 1.15 (95% CI 0.92 – 1.44 NICE 2019	Postnatal depression is not decreased or increased with planned caesarean birth. **GRADE of evidence: Very low**
Uncertain if increased or decreased risk with caesarean section for child born following caesarean birth (limited or conflicting evidence) compared with planned vaginal birth					
	Breathing disorder (included a broad group of definitions)			OR 2.02 (95% CI 1.49-2.73) Swedish SR 2021	ORs for respiratory outcomes are conflicting between different definitions of respiratory morbidity. **GRADE of evidence: Very Low**
	Respiratory morbidity (TTN, RD, MAS, use of respirator, CPAP)		1.3%	OR 0.94 (95% CI 0.36-2.46) NICE 2019	
	Respiratory Distress (no definition reported)		1.0%	OR 2.7 (95% CI 1.8-4.05) NICE 2019	
	Neonatal intensive care admission	4.3%	4.5%	RR 0.86 (95% CI 0.50-10.49) NICE 2019 RR 1.92 (95% CI 1.44 – 3.40) Swedish SR 2021	Conflicting results between NICE and Swedish systematic reviews. **GRADE of evidence: Very low**
	Infant mortality – within one year of life	0.21%	0.15%	OR 1.43 (95% CI 0.95- 2.15) NICE 2019	**GRADE of evidence: Very low**
	Obesity in childhood[2]	No baseline data 2.2-5.5%	No baseline data 2.8-5.3%	RR: 1.17 (95% CI 1.07-1.29). Swedish SR RR 1.16 (95% CI 0.93 – 1.45) HR 1.13 (95% CI 1.00 – 1.27) NICE 2019	Conflicting evidence between studies in NICE dependent on study design, and between NICE and SBU. **GRADE of evidence: Very low**

	Cerebral palsy	18.2%	26.6%	OR 0.08 (95% CI 0.01 – 0.64) NICE 2019	Evidence from a single case control study with a very small number of cases. 18% of the children included were born preterm. Diagnosis of cerebral palsy was not based on a standardised criterion. **GRADE of evidence: Very low**
	Autistic spectrum disorders	0.8%	0.59%	OR 1.25 (95% CI 1.16 – 1.36) NICE- Sibling control analysis OR 0.89 (95% CI 0.76 – 1.13) HR 1.16 (95% CI 1.07 – 1.27) NICE- Sibling control analysis HR 0.97 (95% CI 0.83 – 1.13) NICE 2019	Conflicting data with different results according to study design. **GRADE of evidence: Very low**

[1] Planned mode of birth
[2] Actual mode of birth (may include emergency CS in the vaginal birth arm)
[3] Emergency CS in the planned CS arm

Box 1 Outcomes included in PICO not reported in included studies:

Maternal

- Length of ICU stay
- Breastfeeding
- Infant bonding
- Infertility
- Chronic pain
- Risks of anaesthesia

Neonatal/child

- Length of stay/days in NICU
- Infant microbiome

Box 2 Descriptors of frequency:

- **Very common** – from 1 in 10 or more
- **Common** – 1 in 10 to 1 in 100
- **Uncommon** 1 in 100 to 1 in 1000
- **Rare** – 1 in 1000 to 1 in 10,1000
- **Very rare**- 1 in 10,1000 to 1 in 100,000

Box 3 GRADE descriptors**:**

GRADE		DEFINITION
High	⨁⨁⨁⨁	We are very confident that the true effect lies close to that of the estimate of the effect
Moderate	⨁⨁⨁◯	We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
Low	⨁⨁◯◯	Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.
Very low	⨁◯◯◯	We have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of the effect.

8. Legal and ethical implications

Caesarean birth on maternal request often raises ethical concerns regarding patient/consumer and clinician autonomy. Shared decision making about maternal request for caesarean birth should acknowledge the right of the consumer to be provided with information on benefits and harms of mode of birth. All women making decisions about mode of birth have a right to make an informed choice about their care. It is the clinician's responsibility to ensure informed consent is obtained and this is an interactive process between the patient, her family, and the clinician. The clinician should respect and acknowledge the validity of the request and explore reasons underlying it. Concerns may be alleviated by a thorough discussion addressing any concerns, particularly fear of pain, labour and/or birth (tokophobia). Any decision making should take into account local policies and protocols. The clinician also has the right to decline if they consider the risks outweigh the benefits to the individual. In this case, both the clinician and the consumer have a right to seek a second opinion.

Although the absolute risk increases are often small, this constitutes an ethical problem as to where the burden of risk falls, either for mother or baby. There are considerations between a possible increase in maternal birth trauma with planned vaginal birth and possible increases in maternal and neonatal harms with planned caesarean birth without medical or obstetric indication. Adverse outcomes may occur with any mode of birth, even in women without identified risk factors for adverse pregnancy outcomes.

Additionally, the uneven access to planned caesarean birth without medical or obstetric indication may lead to inequities, as service capacity varies. Increasing access to caesarean birth without medical or obstetric indication may lead to a reduction in access to theatres for other non-obstetric planned surgery.

9. Recommendations for future research

- Other possible contributing factors (i.e., levator avulsion) to female pelvic organ prolapse were not included as outcomes in the reported systematic reviews. This may be due to a paucity of evidence which compares caesarean section with other modes of birth. The SDP suggest this may be a future area of research.
- Further studies to assess the association between CBMR and breastfeeding, maternal/infant bonding and maternal mental health and wellbeing.
- Intrapartum requests for caesarean birth.
- Birth satisfaction and other quality of life measures in association with mode of birth and CBMR.
- Further studies to assess the role of decision aids for women requesting a caesarean birth.

10. References

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11. Links to relevant College Statements

- Timing of elective caesarean section at term (C-Obs 23)
- Birth after previous caesarean section (C-Obs 38)
- Categorisation of Urgency for Caesarean Section (C-Obs 14)
- Evidence-based Medicine, Obstetrics and Gynaecology (C-Gen 15)
- Care in labour in the absence of pregnancy complications (previously- Provision of routine intrapartum care in the absence of pregnancy complications) (C-Obs 31)
- Consent and Provision of Information to Patients in Australia Regarding Proposed Treatment (C-Gen 2a)
- Consent and Provision of Information to Patients in New Zealand (C-Gen 2b)
- Placenta Accreta Spectrum (PAS) (C-Obs 20)

12. Links to relevant Consumer resources

- Caesarean Section- RANZCOG Patient Information Pamphlet

13. Links to relevant ATMs and learning modules

None identified.

14. Useful links/support groups

Appendices

Appendix A: Women's Health Committee Membership

Name	Position on Committee
Dr Scott White	Chair and Councillor
Dr Gillian Gibson	Deputy Chair, Gynaecology
Dr Anna Clare	Deputy Chair, Obstetrics
Associate Professor Amanda Henry	Member and Councillor
Dr Samantha Scherman	Member and Councillor
Dr Marilla Druitt	Member and Councillor
Dr Frank O'Keeffe	Member and Councillor
Dr Kasia Siwicki	Member and Councillor
Dr Jessica Caudwell-Hall	Member and Councillor
Dr Sue Belgrave	Member and Councillor
Dr Marilyn Clarke	Aboriginal and Torres Strait Islander Representative
Professor Kirsten Black	SRHSIG Chair
Dr Nisha Khot	Member and SIMG Representative
Dr Judith Gardiner	Diplomate Representative
Dr Angela Brown	Midwifery Representative, Australia
Ms Adrienne Priday	Midwifery Representative, Aotearoa New Zealand
Ms Leigh Toomey	Community Representative
Dr Rania Abdou	Trainee Representative
Dr Philip Suisted	Māori Representative
Prof Caroline De Costa	Co-opted member (ANZJOG member)
Dr Steve Resnick	Co-opted member

Appendix B: Statement Development Panel Membership

Name	Position on Committee
Dr Nisha Khot	Chair
A/Prof Fiona Brownfoot	Member
Dr Jenny King	Member (CU)
Dr Judy Ormandy	Member
Dr Lisa Rofe	Member
Dr Harsha Ananthram	Member
Dr Chantelle Ferreira	Member
Ms Naomi Simpson	Member, Midwifery representative
Ms Amy Dawes	Member, Consumer representative
Research & Policy Team	**Position**
Professor Cindy Farquhar	Dean of Research & Policy
Ms Jinty Wilson	Head of Research & Policy
Ms Katie Coulthard	Senior Coordinator, Research & Policy

Research preparation	Position
Professor Cindy Farquhar	Dean of Research & Policy
Dr Karyn Anderson	Researcher, University of Auckland

Appendix C: Overview of the development and review process for this statement

i. Declaration of interest process and management

Declaring interests is essential in order to prevent any potential conflict between the private interests of members, and their duties as part of RANZCOG Women's Health Committee or working groups.

A declaration of interest form specific to guidelines and statements (approved by the RANZCOG Board in September 2012). All members of the Statement Development Panels, Statement and Guideline Advisory Group (SaGG) and Women's Health Committee were required to declare their relevant interests in writing on this form prior to participating in the review of this statement.

Members were required to update their information as soon as they become aware of any changes to their interests and there was also a standing agenda item at each meeting where declarations of interest were called for and recorded as part of the meeting minutes.

There were no significant real or perceived conflicts of interest that required management during the process of updating this statement. It is noted Ms Amy Dawes, consumer representative on this SDP, is the cofounder and CEO of the Australasian Birth Trauma Association (ABTA).

ii. Steps in developing and updating this statement

This statement was developed from August 2022 to May 2023 by the by the C-Obs 39 CBMR Statement Development Panel, a working group established by the Women's Health Committee. It was most recently reviewed by the Women's Health Committee and RANZCOG Council in July 2023. The Women's Health Committee carried out the following steps in reviewing this statement:

- Declarations of interest were sought from all members prior to reviewing this statement.
- Structured clinical questions were developed and agreed upon.
- An updated literature search to answer the clinical questions was undertaken.
- At the July 2023 meeting of the Women's Health Committee, the existing consensus-based recommendations were reviewed and updated (where appropriate) based on the available body of evidence and clinical expertise, as set out in the Methodology section below.

RANZCOG statements are developed according to the standards of the Australian National Health and Medical Research Council (NHMRC), which includes the use of GRADE methodology. The Evidence to Decision framework embedded within the MAGIC (Making GRADE the Irresistible Choice) digital platform (https://magicevidence.org) is used to publish the updated statement recommendations. The recommendations published by RANZCOG are approved by the RANZCOG Women's Health Committee and Council respectively. The processes used to develop RANZCOG clinical guidance statements are described in detail at: https://ranzcog.edu.au/wp-content/uploads/2022/08/Manual-for-developing-and-updating-clinical-guidance-statements.pdf

iii. Developing recommendations using GRADE methodology

The relevant GRADE assessments for each recommendation are presented within the online platform used to structure the clinical guidance statement (MAGICapp; https://magicevidence.org/magicapp/).

Appendix D: Full Disclaimer

Purpose

This Statement has been developed to provide general advice to practitioners about women's health issues concerning management of a maternal request for caesarean birth (where there is no identifiable medical or obstetric contraindication for an attempt at vaginal birth) and should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any person. It is the responsibility of each practitioner to have regard to the particular circumstances of each case. Clinical management should be responsive to the needs of the individual person and the particular circumstances of each case.

Quality of information

The information available in this statement is intended as a guide and provided for information purposes only. The information is based on the Australian/New Zealand context using the best available evidence and information at the time of preparation. While the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) has endeavoured to ensure that information is accurate and current at the time of preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become subsequently available. The use of this information is entirely at your own risk and responsibility.

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These terms and conditions will be constructed according to and are governed by the laws of Victoria, Australia.

Benefits and harms	Important harms

Two large systematic reviews of observational studies (NICE 2021, SBU 2022) were identified which consider the benefits and harms of planned elective caesarean section compared to planned vaginal birth. No RCTs were included in the systematic reviews. A whole-of-population cohort study (the Swedish National Birth Registry) was used by SBU 2022 to inform maternal benefits and harms.
These reviews include elective caesarean section for indications other than maternal request as existing registers (the source of most evidence in these systematic reviews) do not always contain information on whether the caesarean section is carried out in the absence of a medical indication. Although this is not the population of interest, indirect evidence can be obtained from these reviews as included studies were adjusted for possible confounding factors that may contribute to a decision on caesarean section.

Outcomes are presented in four categories:

1. Short term complications for the woman:

For the following outcomes there are increased risks for woman having elective caesarean births (not exclusively maternal request): maternal deaths (OR 5.63 (95% 2.52-12.55)) baseline risk for planned vaginal birth is .4/10,000, NNH = 4762), peripartum hysterectomy (OR 1.81 (95% CI 1.36-2.40)) (baseline risk 8/10,000) NNH = 1250), endometritis (OR 1.12 (1.07-1.19) baseline was 16.4% for vaginal birth NNH=480, wound infection OR 2.60 (2.47-2.75) baseline was 6.9% for vaginal birth NNH 90, (Quality all low or very low).
There were conflicting results for bleeding complications possibly because of differing definitions.
Uncertain results: VTE

2. Long term complications for the woman:

Complications in subsequent pregnancies: there are increased risks of uterine rupture in a future pregnancy (OR 24.40, 95% CI 22.80-26.00) (Baseline risk for no previous caesarean birth 0.02/10,000) NNH = 190) and placenta accreta (OR 10.90, 95% CI 8.40-14.00) (Baseline risk for no previous caesarean birth 0.003/10,000) NNH = 3,500) for woman having elective caesarean birth (not exclusively maternal request) compared to planned vaginal birth. (GRADE- Low).

Uncertain results: stillbirth in subsequent pregnancy (conflicting results between NICE and SBU systematic reviews).

For the following outcomes there are increased risks for woman having elective caesarean births (not exclusively maternal request): surgery for adhesions (RR 2.80, 95% CI 2.60-3.10) (Baseline 40/10,000 for vaginal birth) NNH 130, surgery for anterior abdominal wall hernia (RR 3.2, 95% CI 3.00-3.40) (Baseline 60/10,000 for vaginal birth) NNH 80. (GRADE- Very Low)
For the following outcomes there are decreased risks for woman having elective caesarean births (not exclusively maternal request): surgery for prolapse within 25 years (RR 0.2, 95% CI 0.1-0.2) (Baseline 190/10,000 for vaginal birth). NNT 70. (GRADE- Low); Urinary incontinence at one year elective caesarean birth compared to unassisted vaginal birth (OR 0.4, 95% CI 0.29-0.56) (Baseline risk 48.7% for vaginal birth) NNH = 3.4 (2 studies, GRADE- Very Low); urinary incontinence at one year elective caesarean birth compared to assisted vaginal birth (OR 0.22 95% CI 0.1-0.46) (baseline risk 19.8% for vaginal birth) NNH = 8 (1 study, low quality); surgery for stress incontinence within 25 years (OR 0.3, 95% CI 0.2-0.3) (Baseline 110/10,000 for vaginal birth) NNT=150 (GRADE- Low).

Anal sphincter injury was not reported in the caesarean section group of the SBU systematic review, precluding a relative risk calculation. NNT to avoid an instance of anal sphincter injury in the vaginal birth

group was 30. Faecal incontinence at >1 year postpartum for assisted vaginal birth was a reported outcome for NICE (OR 0.45, 95% CI 0.21 to 0.94), NNT 14).

3. Short term complications for the baby:

For the following outcomes there are increased risks for woman having elective caesarean births (not exclusively maternal request: neonatal mortality (OR 1.93 95% CI 1.67-2.4) (Baseline 30/100,000 for vaginal birth), NNH = 5.882 (GRADE- Low).

Uncertain results: respiratory disorders in the neonatal period (due to difference in definitions used in studies); NICU admissions (differing results from the two systematic reviews (SBU RR 1.92, 95% CI 1.44-3.40); NICE RR 0.86, 95% CI 0.50-10.49), infectious morbidity (RR 0.43, 95% CI 0.16 - 1.19)).

4. Long term complications for the baby:

For the following outcomes there are increased risks for woman having elective caesarean births (not exclusively maternal request): hospitalization for respiratory infections in first year of life (RR 1.14 (1.09 — 1.19) (Baseline 321/10,000 for vaginal birth) NNH = 130; hospitalization for GI infections in childhood (RR 1.21, 95% CI 1.16-1.25) (Baseline 370/10,000 for vaginal birth) NNH =130;, no baseline data available, NNH = 1,800; asthma (RR 1.19, 95% CI 1.17-1.21) (Baseline 560/10,000 for vaginal birth) NNH = 120. (GRADE- Low and Very Low).

Uncertain results: infant mortality up to one year (HR 1.43 (0.95 - 2,15), confidence interval crosses null hypothesis threshold); obesity (RR 1.17 95% CI 1.07-1.29) NNH = 100, childhood diabetes (RR 1.11 95% CI 1.04-1.17); cerebral palsy (OR 0.08 95% CI 0.01-0.64), NNT = 12) - very low quality study with highly selected population including preterm births; autism spectrum disorder (ASD) (OR 1.25, CI 95% 1.16 - 1.36) – Conflicting data with different results according to study design.

Final summary:

Planned caesarean birth reduces surgery for prolapse and surgery for incontinence (GRADE- Low), anal sphincter injury/faecal incontinence.

Planned caesarean birth is associated with increased risk of post-partum hysterectomy, maternal death, endometritis, wound infection, uterine rupture in future pregnancy, placenta accreta spectrum in a future pregnancy, NND, respiratory and GI infections requiring hospitalisation in childhood, diabetes, and asthma.

Certainty of the Evidence	Very low

Additional considerations

Using pooled data from all planned elective caesareans may result in an inaccurate estimation of the risk due to confounding (despite adjustment) as many of the women would have required the procedure for medical reasons.

Many national registry studies restrict to low-risk women undergoing caesarean section, however, there is likely to be residual confounding due to mental health or other reasons not identified in the low-risk definition used.

Summary

All studies included in systematic reviews were observational studies with a comparator group.

Many studies downgraded for indirectness due to population dissimilarity.

Values and preferences	Substantial variability is expected or uncertain

Research evidence

Eide et al., (2019) - 17 semi structured interviews with women and 6 focus groups with midwives and obstetricians - Fear of birth emerged most commonly as a result of a previous traumatic birth experience that prompted a preference for a planned caesarean birth to avoid a repetition of the trauma. For some women postnatal care and the puerperal period were their crucial past experiences, and giving birth by planned caesarean was seen as a way to ensure mental rather than physical capability to care for the expected child after birth. Others were under the impression of being at high risk for an emergency C-section, and requesting a planned one was based on their perceived risk. Such perceptions included having a narrow pelvis, hereditary factors, or previous birth outcomes. Some primiparas requested a planned caesarean birth based on a deep-seated fear since their early teens, accompanied by alienation towards the idea of giving birth.

Maternal reasons for requesting planned caesarean section in Norway: a qualitative study | BMC Pregnancy and Childbirth | Full Text (biomedcentral.com)

Robson (2008) - survey of 78 women who had CBMR in Australia about their reasons for requesting CS. The most common reason given was, 'I was concerned about risks to the baby' (46%). On a scale from 1 (totally unsatisfied) to 10 (completely satisfied), the mean satisfaction rating reported was 9.25/10 (95% confidence interval: 8.89, 9.60).

SBU systematic review of qualitative studies (2022) (13 studies): The women requesting a caesarean section often regarded vaginal birth as being associated with risks and caesarean section as a more predictable and controlled mode of birth, associated with small or no risks. The women's view of the information about risks they had been given varied, ranging from adequate, insufficient to contradictory. The health care staff's acceptance of their preferred mode of birth was more important to them than receiving information about risks. (Moderate quality evidence)

Additional considerations

Patients with tokophobia who received fear reducing intervention (non-pharma) may have a reduction in caesarean birth (O'Connell 2021 Cochrane review).

Summary

There are a wide range of views and preferences likely

Resources	Important negative issues

Research evidence

Calander et al., 2021 and Masters thesis by K Anderson 2022 (*under examination*) look at the cost differences between elective caesarean section and planned vaginal birth in Australia and Aotearoa New Zealand respectively. In both studies, planned vaginal birth is substantially less costly than elective

caesarean section in term singleton pregnancies. Neither study includes a timeframe beyond the postpartum period for mother or baby.

Additional considerations

SBU Economic analysis (part of 2022 systematic review):

For first pregnancy: At a time horizon of 1 year, the increased cost per planned caesarean section is around SEK 28,700 (AUD$4,080) compared to planned vaginal birth.

At a time span of 20 years, for the woman there is an average benefit gain of 0.003 QALYs with planned caesarean section (which is largely driven by a lower risk of prolapse in caesarean section). From the woman's perspective, the cost per QALY after 20 years is around SEK 9.3 million (AUD$1.3 million). However, when the baby's perspective is taken into account, its health losses (–0,004 QALY) due to long-term complications (asthma, diabetes, hospitalisations for infections etc) mean that planned vaginal birth overall brings cost savings and health benefits.

Summary

It is already current practice to discuss the risks and benefits of alternative modes of birth during the antenatal period. If the evidence discussed with women leads to changes in the choices that women make with respect to mode of birth, then this recommendation could potentially have a “downstream” effect on costs.

An economic analysis was performed by the National Institute of Health and Clinical Excellence (NICE) when they reviewed their clinical guidelines on CBMR in 2011. The findings suggest that immediate costs would be lower for a planned vaginal birth than a planned caesarean section. However, the analysis failed to incorporate many long-term adverse outcomes, such as urinary incontinence, which would inevitably alter the outcome of the analysis.

An economic analysis was also performed by SBU (Sweden) as part of their 2022 systematic review of CBMR. This analysis takes into account the costs for mode of birth, hospital costs for short- and long-term complications for women and children, as well as impacts on quality of life for a 20yr time horizon. Planned vaginal birth entails lower costs for healthcare compared to planned caesarean section without medical indication in both the short- and long-term time horizons. Although there is uncertainty in the effects on quality of life these results were unchanged in a sensitivity analysis.

Equity — Intervention likely increases inequity

Research evidence

A Birthrights report on maternal request for caesarean (August 2018) highlights the disparity in access to maternal request caesarean births across the UK. Only 26% of trusts were deemed to offer maternal requests for caesarean births in line with NICE guidance, a further 47% were partially offering maternal requests for caesarean births (for example incomplete guidelines or compulsory mental health assessments), and 15% of trusts did not offer maternal requests for caesarean births.

Summary

Reduces equity because the access to elective CS isn't always available.

Acceptability	Important issues, or potential issues not investigated

Research evidence

E Dwight's thesis 2015 (*NZ study*):

This qualitative study explored the perceptions of a group of New Zealand obstetricians' and midwives' on CBMR. The information was obtained via 12 face-to-face semi-structured interviews.

Ethical themes reported included:

- Autonomy - woman's autonomy vs professional autonomy, informed choice (is there enough information provided)
- Distributive justice - economics in a public healthcare system, resource allocation, accessibility and the postcode lottery, CBMR in the private system
- Harms and benefits - perception of risk, impacts on maternal wellbeing, limited evidence

Boucherie et al., 2022 - Survey of French Obstetricians - Twenty-three (27.7%) OB/GYN seniors were ready to perform a CBMR, mostly because they think that mode of birth is a woman's choice. Physicians working in a private maternity unit or having an exclusive private practice were significantly more willing to perform a caesarean birth on maternal request.

Habiba et al., 2006 - survey of the attitudes of obstetricians in 8 European countries to perform a caesarean birth on maternal request in the absence of medical indication. Compliance with a hypothetical woman's request for elective caesarean birth simply because it was 'her choice' was lowest in Spain (15%), France (19%) and Netherlands (22%); highest in Germany (75%) and UK (79%) and intermediate in the remaining countries.

Caesarean section on request: a comparison of obstetricians' attitudes in eight European countries - Habiba - 2006 - BJOG: An International Journal of Obstetrics & Gynaecology - Wiley Online Library

Additional considerations

SBU (2022) qualitative systematic review (13 studies): Health care staff had widely varying views regarding to what extent the woman has a right to choose the mode of birth herself. Members of the staff also had different opinions regarding medical indications for caesarean section, including if fear of birth constitutes such an indication or not. The staff emphasized that evidence is an important basis for the decision, but also that factors such as the organization and capacity of the health care system affected the decision. (Moderate quality evidence)

Health care staff in included studies viewed the women's request for a caesarean birth to be grounded in a misunderstanding regarding advantages and disadvantages concerning caesarean birth, and that it was challenging to manage the requests. Staff also highlighted that the high workload in birth units can complicate deliveries, result in negative birth experiences, limit the possibility of follow-up after birth and thus lead to future requests for caesarean birth. (Moderate quality evidence)

Feasibility	Intervention is likely difficult to implement

Version	Date of Version	Pages revised / Brief Explanation of Revision
V3.0	July/ 2023	Full update using evidence-based processes. Approved by RANZCOG Women's Health Committee and Council.
V2.0	July/ 2017	Revision.
v1.0	July / 2010	First endorsed by RANZCOG.

Policy Version:	Version 3.0
Policy Owner:	Women's Health Committee
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Review of Policy:	July / 2028