Guideline

Maternity - Timing of Planned or Pre-labour Caesarean Section at Term

Summary The purpose of this Guideline is to provide guidance for the timing of planned or pre-labour caesarean section at term. Where there are no identified maternal, fetal or obstetric risks, it is advised that a planned or pre-labour caesarean section at term should not routinely take place prior to 39 weeks gestation (39+0 weeks).

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Distributed to Public Health System, Divisions of General Practice, Health Associations Unions, NSW Ambulance Service, Ministry of Health, Private Hospitals and Day Procedure Centres, Tertiary Education Institutes

Audience Maternity and neonatal clinicians;senior maternity managers and operating theatre managers

GUIDELINE SUMMARY

MATERNITY – TIMING OF PLANNED OR PRE-LABOUR CAESAREAN SECTION AT TERM

PURPOSE

The purpose of this document is to provide guidance for the timing of planned or pre-labour caesarean section at term. Where there are no identified maternal, fetal or obstetric risks, it is advised that a planned or pre-labour caesarean section at term should not routinely take place prior to 39 weeks gestation (39^{+0} weeks).

KEY PRINCIPLES

The risks of maternal and neonatal morbidity incurred by planned caesarean section birth prior to 39^{+0} weeks should be weighed carefully on a case by case basis, against the risks of spontaneous labour occurring prior to the planned procedure.

The risks of maternal and neonatal morbidity include a higher risk of neonatal respiratory distress syndrome, transient tachypnoea of the newborn, mechanical ventilation, transfer and admission to neonatal intensive care units, breastfeeding difficulties, increased maternal blood loss, and longer hospital stay.

Clinical decision-making about the timing of a planned caesarean section at term should follow a discussion with the woman and her family about the risks and benefits of all options for birth, and include information about the risks and benefits of birth after 39^{+0} weeks.

USE OF THE GUIDELINE

The Chief Executives of NSW PHOs are responsible for the implementation of this Guideline within their services / facilities to ensure that local protocols or operating procedures are in place, aligned and consistent with this Guideline. All maternity services staff should be aware of the Guideline and actively participate in its implementation.

REVISION HISTORY

Version	Approved by	Amendment notes
May 2016 (GL2016_015)	Deputy Secretary – Strategy and Resources	New guideline which replaces PD2007_024 and provides updated evidence in relation to the timing of planned or pre-labour caesarean section at term.
April 2007 (PD2007_024)	Director General	New policy

ATTACHMENT

1. Maternity – Timing of Planned or Pre-labour Caesarean Section at Term - Guideline

Maternity – Timing of Planned or Pre-Labour Caesarean Section at Term

NSW GOVERNMENT Health

GUIDELINE

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CONTENTS

1 BACKGROUND

1.1 Purpose

The purpose of this guideline is to provide guidance for the timing of planned or pre-labour caesarean section at term. Where there are no identified maternal, fetal or obstetric risks, it is advised that a planned or pre-labour caesarean section at term should not routinely take place prior to 39 weeks gestation (39^{+0} weeks).

1.2 Background

- Evidence supports the optimal timing for planned caesarean section as not routinely undertaken before 39^{+0} weeks. This recommendation is supported by the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG)[i] and the National Institute for Health and Care Excellence (NICE).[ii]
- The risks of maternal and neonatal morbidity incurred by planned caesarean section birth prior to 39^{+0} weeks should be weighed carefully on a case by case basis, against the risks of spontaneous labour occurring prior to the planned procedure.
- Women and their families should be fully informed of the risks and benefits associated with the timing of planned caesarean section, and involved in all stages of decision-making.

1.3 About this document

- This guideline replaces the Policy Directive *PD2007_024 Maternity – Timing of Elective or Pre-Labour Caesarean Section,* which required all (former) Area Health Services to have procedures controlling the timing of planned (elective) or pre-labour caesarean sections.
- The direction outlined in *PD2007_024 Maternity – Timing of Elective or Pre-Labour Caesarean Section* to not undertake pre-labour caesarean section prior to 39^{+0} weeks remains unchanged, where maternal, fetal or obstetric risks have not been identified.
- This guideline contains updated evidence to support the optimal timing of planned caesarean section in Section 2. Guidance about the evidence-based information women and families require to enable informed decision-making about the timing of planned caesarean section is provided in Section 3.
- This guideline should be read in conjunction with *GL2014_004 Maternity – Supporting Women in their Next Birth After Caesarean Section*. This guideline recommends that women who have undergone a previous caesarean section and who may be considering a planned repeat caesarean section should be provided with advice and information regarding all their options for birth. A final decision regarding mode of birth should be agreed before 36^{+0} weeks gestation allowing appropriate scheduling for planned caesarean to take place, if appropriate.

Key definitions

Planned caesarean section - caesarean section which is scheduled to occur prior to labour. It includes both those caesarean sections where maternal, fetal or obstetric risks have been identified, and those where no risk has been identified.

2 TIMING OF PLANNED OR PRE-LABOUR CAEAREAN SECTION

This section presents current evidence to support decision-making around the timing of planned caesarean section.

2.1 Maternal considerations

- Planned caesarean section at 39^{+0} weeks or later results in some women labouring spontaneously before the scheduled date. The estimated overall risk of in-labour caesarean before 39^{+0} weeks for low-risk women scheduled for a planned repeat caesarean section in New South Wales (NSW) at ≥39^{+0} weeks has been calculated as 8.5% (or 1 in 12).[iii] Women at increased risk of spontaneous labour before their planned caesarean section at ≥39^{+0} weeks are women with a history of previous spontaneous preterm labour, planned preterm birth by labour induction or prelabour caesarean, women who have had two or more previous caesarean births, and those women who smoke in pregnancy.[iii]
- The increased risk of intraoperative blood loss associated with repeat in-labour caesarean section may encourage a practice of scheduling the procedure before 39^{+0} weeks in order to avoid the risk of an unscheduled (unplanned) procedure. Evidence demonstrates however, that there is a higher incidence of blood transfusion and maternal hospitalisation (more than 5 days) amongst women having planned repeat caesarean sections at 37^{+0}- 38^{+0} weeks, compared to those at 39^{+0} weeks.[iv] Early repeat planned caesarean section (prior to 39^{+0} weeks) is therefore not recommended.

2.2 Neonatal considerations

- Evidence consistently states that respiratory distress syndrome, transient tachypnoea of the newborn, mechanical ventilation, transfer and admission to neonatal intensive care units, breastfeeding difficulties and longer hospital stay are more prevalent in babies born by planned caesarean section at 37^{+0} and 38^{+0} weeks, than those born at 39^{+0} weeks.[iv,v,vi,vii]
- Evidence demonstrates that with each week gained in-utero, where there are no maternal, fetal or obstetric risks identified, there is a gradual decrease in neonatal morbidity.[vii,viii] Birth by planned caesarean section at 38^{+4-6} weeks for example, carries a significantly higher risk for an adverse neonatal outcome, than those at 39^{+0-6} weeks.[vi]
- It is well understood that babies delivered preterm have an increased risk of neurodevelopmental problems. Evidence demonstrates that neurodevelopment continues to occur across the early term period (ie. 37^{+0} - 39^{+0} weeks). The risk for 'special educational need' is lowest in children born at 40^{+0} - 41^{+0} weeks[ix], and the risk

for behavioural problems is lower in children born at 39^{+0} weeks than for those born at 37^{+0} weeks.[x] Early repeat planned caesarean section (prior to 39^{+0} weeks) is therefore not recommended.

2.3 Scheduling considerations

The rate of planned, pre-labour caesarean section in NSW public health facilities rose from 13.4% in 2009 to 15% of all births in 2014.[xi] Facilities need to carefully consider elective surgery theatre list scheduling to ensure that planned caesarean sections are undertaken at the optimal gestation to maximise the health of both mother and baby.

3 FRAMEWORK FOR DECISION-MAKING

3.1 Factors to be considered in decision-making

- Planned caesarean section, where no maternal, fetal or obstetric risks are identified, for repeat caesarean section, maternal request, or breech position, should be scheduled no earlier than 39^{+0} weeks. Decision-making should follow a discussion about the risks and benefits of all options for birth with the woman and her family, and include information about the risks and benefits of birth after 39^{+0} weeks to the woman and her baby.
- Where maternal, fetal or obstetric risks are identified, a planned pre-labour caesarean should be scheduled as close to 39^{+0} weeks as possible, in view of the strong evidence for maternal and fetal benefit of birth at or after this gestation.
- Additional factors that may influence decision-making include considerations such as the geographical distance of the woman's home from the maternity facility where birth will take place, the woman's unique needs, expectations and aspirations, and local operational constraints.

3.2 Information to enable shared decision-making

- Effective communication between maternity care providers and women and their families is essential. Information should be offered in an unbiased manner that enables shared decision-making and informed consent.
- All women and their families should be informed of both the risks of maternal and neonatal morbidity incurred by birth prior to 39^{+0} weeks, and the risks of spontaneous labour occurring prior to a planned caesarean section.
- Addressing the woman's concerns should be recognised as being integral to the decision-making process. Discussion about the timing of a planned caesarean section should take place well before 39^{+0} weeks to allow women and families the opportunity to consider both the risks and the benefits, and for appropriate theatre scheduling to take place.

3.3 Documentation

- A consistent approach to accurate pregnancy dating should be undertaken in accordance with national guidance.[xii]
- Discussion regarding the risks and benefits associated with the timing of a planned caesarean section should be recorded in the woman's antenatal record. Documentation should include:
  - The details of the discussion
  - The options presented to the woman
  - Any written information provided
  - The agreed decision and planned date for the procedure.
- Identified clinical risks need to be sufficiently documented so that accurate coding of the procedure can take place.
- All documentation in the women's medical record should be in line with *PD2012_069 Health Care Records – Documentation and Management*

4 REFERENCES

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