Birmingham Women's NHS
NHS Foundation Trust

Caesarean Section Guideline

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Name/Designation of Lead Officer:	Tracey Johnston, Clinical Director for Maternity
Name/Designation of author:	Nina Johns, Obstetric Lead for Delivery Suite
Review date:	20/03/2018
Reviewer Designation Title:	Obstetric Lead for Delivery Suite
Target audience:	All staff in the Maternity Directorate

NB. Hard copies of this policy are not permitted as they **cannot guarantee** that they contain the most up to date information and **risk** the content being out of date.

For assurance that the most up to date policy is being used, staff should refer to the version held on the Trust intranet policies link. Only under exceptional circumstances should hard copies from the Trust intranet be made.

Version Control Sheet

Version	Date	Author	Status	Description of Amendment
1.0	Oct 2008	T Johnston, Clinical Director for Maternity Services	Archived	
2.0	5th Feb 2010	N Johns, Lead Consultant for Delivery Suite P Salisbury, Audit Midwife	Archived	Agreed at Maternity Services Directorate Ratified by CGC
3.0	4th June 2010	Nina Johns, Lead Consultant for Delivery Suite	Archived	Updated Policy
4.0	21st October 2010	Nina Johns, Lead Consultant for Delivery Suite	Archived	Ratified by CGC
5.0	1st June 2012	Nina Johns, Lead Consultant for Delivery Suite	Archived	New trust format and updated monitoring section
6.0	Sept 2014	Becky Wilson. Audit and Guidelines Specialist Midwife	Archived	Updated section 6.8- Antibiotic cover post blood loss of 1500mls or more
7.0	March 2015	Nina Johns, Lead Consultant for Delivery Suite	Approved	Section 6.9 maternal choice added. Cat 2 CS timing changed. Addition of wearing 'double gloves' for cases where the woman has tested positive for HIV

Contents

1. Introduction

This guideline outlines the management of birth by caesarean section.

2. Objectives

- To define categories of Cesarean Section
- To define decision to delivery interval for each category
- To ensure decisions are made by the most appropriate clinician
- To ensure post operative care is consistent and appropriate.

3. Policy Scope

This guideline applies to all women at Birmingham Women's NHS Foundation Trust who are delivered by caesarean section.

4. Definitions

4.1 Caesarean section (C/S)

An obstetric operation whereby the fetus is extracted from the uterus through an incision made in the abdominal and uterine walls

4.2 Labour Records

Refers to both paper and/or electronic records used to document care provided to a woman during labour and birth.

4.2 Category & Grade of urgency for Caesarean section

1. Immediate threat to the life of the woman or fetus.
2. Maternal or fetal compromise, which is not immediately life threatening.
3. No maternal or fetal compromise but needs early delivery.
4. Delivery timed to suit the woman and staff.

4.3 Emergency Caesarean Section

Categories 1 and 2 are referred to as emergency caesarean section throughout this guideline.

5. Duties and Responsibilities

5.1 Obstetric Medical Staff

- Junior Medical staff need to liaise with their senior colleagues regarding decision to deliver by caesarean section
- To ensure all decisions for emergency caesarean section must be discussed with the Consultant on call
- To have the knowledge skills and experience necessary to perform the delivery

- To communicate to the woman reasons for delivery by caesarean section
- To obtain informed consent
- To document in case-notes or electronic labour records the indication for caesarean section, time & date of decision, classification of urgency of delivery, which consultant has been involved in the decision and that informed consent (verbal or written) has be obtained from the woman.
- Complete appropriate electronic operation record, print out and file in case-notes.
- Review women in the postnatal period
- Prescribe drugs as required
- Receive ongoing training with regular supervision and completion of OSATS
- Medical staff should see woman postnatally to explain the reason for C/S and plans for subsequent pregnancies and document in CS discharge letter.

5.2 Anaesthetic Staff

Provide assistance to medical staff, give anaesthetic to woman and monitor her condition until fit for transfer to postnatal ward.

5.3 Midwifery Staff

- To continue providing midwifery care to the woman during the procedure and to the mother and the baby following delivery
- Ensure appropriate documentation is completed in the hospital records
- Take over from theatre staff in recovery and provide ongoing care in recovery (see Recovery guideline) and transfer to postnatal ward.

5.4 Theatre Staff

Prepare and staff theatres before, during and after the operation.
Undertake initial recovery duties.

6. Procedure

6.1 Introduction

Caesarean sections (CS) were historically classified as elective or emergency. In England the rates of Caesarean section (CS) have risen from 9% of births in 1980 to 24.8% in 2011. In Birmingham Women's Hospital approximately 14% of deliveries are by emergency CS. This covers a wide spectrum of indications, as well as a spectrum of urgency in which delivery needs to be undertaken. The risks associated with emergency CS are higher than those for elective section and vaginal delivery, particularly for the woman and it is therefore important that no unnecessary risks are taken.

6.2 Measures that influence the Chance of Emergency CS

The following have not been shown to influence on the likelihood of CS (although they may affect other outcomes):

- Walking in labour
- Non-supine position during the second stage of labour

- Immersion in water during labour
- Epidural analgesia in labour
- The use of raspberry leave tea
- Complementary therapies e.g. acupuncture aromatherapy.

The following are known to reduce the risk of intrapartum CS:

- One to one care in labour (Hodnett et al 2003)
- Induction of labour beyond 41 weeks gestation (see Guidelines for Induction of Labour) (Crowley P 2003)
- Use of partograms with a 4 hour action line (Lavender T et al1998 & NICE 2004)
- Involvement of a consultant obstetrician in the decision making process for emergency CS (NICE 2004)
- Use of FBS (see Guidelines for Fetal Monitoring)
- Consultant involvement in trials of vaginal delivery (see operative Vaginal Delivery Guidelines) (Olah KS 2005)

For these reasons, all emergency CS should be discussed with and sanctioned by the consultant obstetrician on-call. In the majority of cases, this should be done before the woman is moved to theatre, as the consultant may not agree with the decision. In the case of a Category 1 CS (see Table 1), such as prolonged, profound fetal bradycardia, cord prolapse or abruption there should be no delay in transfer, but the consultant must be notified. If medical staff are busy dealing with the emergency, a senior midwife should inform the consultant of the situation. In all cases, the decision regarding CS is an obstetric decision, taken in conjunction with the woman. Caesarean section should not be routinely offered for preterm birth as the effect of planned caesarean section on the neonatal morbidity and mortality of preterm infants is uncertain. (NICE 2011)

Incident Form Trigger

Failure to inform the consultant of an emergency CS should trigger an incident form.

6.3 Classification of CS

Clear classification of the degree of urgency in an emergency situation is needed for improved communication between the professional groups. It can be crucial in motivating those involved, reduce delays and enable audit of these events and outcomes. It is essential to realise that all emergency CS should be carried out AS SOON AS POSSIBLE, taking into account both fetal and maternal wellbeing and safety, as well as the other workload on the Delivery Suite.

NCEPOD recommended classification of surgical operations into four grades of urgency; this classification has been adapted and endorsed by the RCOG, NICE and the RCA. The National Caesarean Section Audit also used this agreed classification, as the standard for urgency of delivery and it is now the approved standard on Delivery Suite at Birmingham Women's NHS Foundation Trust (Table 1).

Table 1.

Grade of urgency for Caesarean section
Category 1. Immediate threat to the life of the woman or fetus.
Category 2. Maternal or fetal compromise, which is not immediately life threatening.
Category 3. No maternal or fetal compromise but needs early delivery.
Category 4. Delivery timed to suit the woman and staff.

In the NICE Caesarean Section Guideline, examples are given as what different indications fit into different categories. In BWNFT, the clinical indications consistent with **Category 1** include: placental abruption, cord prolapse, uterine rupture, actively bleeding placenta praevia, intrapartum haemorrhage, presumed fetal compromise with severely abnormal CTG or an FBS pH less than 7.2. i.e. any indication where there is a threat to the life of the woman or fetus.

The clinical indications consistent with Category 2 include failure to progress, early labour with 2 or more previous sections and aiming for delivery by CS, suspicious CTG in early labour, established labour with a breech booked for CS with a normal CTG; essentially any reason that requires urgent delivery but no immediate threat to fetus or woman. It must be remembered that in obstetrics the situation can change rapidly, and all cases of Category 2 CS must be kept under regular review until delivery to ensure that the categorisation doesn't progress from 2 to 1 if delivery cannot be achieved urgently (see below re timings).

Category 3 includes ruptured membranes in those booked for elective CS with no signs of labour, hypertensive disease or fetal growth restriction where early delivery is indicated. Essentially there is no sign of significant compromise but early delivery is indicated.

Category 4 covers elective CS. Elective caesarean section should not be performed until 39+0 weeks gestation to reduce respiratory morbidity in the neonate. Antenatal corticosteroids should be given to all women for whom elective caesarean section is planned prior to 38+6 weeks of gestation (RCOG 2010).

In all cases, CS must be categorised and this must be documented in the case notes.

6.4 Decision to Delivery Interval (see Table 2)

The decision to delivery interval for caesarean is defined as the interval in minutes from the date and time of decision to carry out the caesarean section, with consent of the woman, to the date and time of delivery of the baby. Once the decision for emergency section has been made, this should be carried out as soon as possible in all cases, ensuring that maternal or fetal safety is not compromised.

To help improve intrapartum fetal care the NICE clinical guideline on electronic fetal monitoring recommends that "in cases of suspected or confirmed acute fetal compromise, delivery should be accomplished as soon as possible, accounting for the severity of the fetal heart rate abnormality and relevant maternal factors. The accepted standard has been that, ideally this should be accomplished within 30

minutes. The National Sentinel audit further recommended the standard decision to delivery interval in category 1 emergencies to be 30 minutes. This is the agreed decision to delivery interval for category 1 emergency caesarean sections in Birmingham Women's NHS Foundation Trust. Despite this being the generally accepted standard in cases of serious maternal or fetal compromise, there is minimal research evidence to show that this standard improves fetal outcomes. It has been shown that rapid delivery, by emergency caesarean section, can be associated with lower cord pH results and greater admissions to Neonatal Unit. However, the babies with greater degrees of compromise, predisposed to a poorer outcome, are also often delivered more quickly, rather than a specific interval being important.

It is accepted that any emergency CS should be done as soon as practicable. In BWNFT in accordance with NICE guidance (NICE 2011), the agreed decision to delivery interval for Category 2 caesarean sections is 75 minutes. It is, however, essential that the case is kept under regular review to ensure that the category does not shift from 2 to 1.

In BWNFT, the time limit for the decision to delivery interval for category 3 sections is 24 hours. However, these should be done as soon as practicable, but at a time that suits the woman and the staff. If a woman booked for elective CS is admitted with ruptured membranes and has just eaten, it is safer to wait for 6 hours to ensure the woman is properly fasted, as long as fetal monitoring is reassuring. In the case of hypertensive disease, it is better to allow stabilisation of the maternal condition and return of blood results before proceeding, rather than rush into theatre. Once the decision for section has been made (involving the consultant obstetrician), the case must be discussed with the anaesthetist, and the existing workload on the department assessed. A joint decision should then be made as to the timing of delivery. This will ensure that the mother and fetus are not exposed to unnecessary risk, and that other cases on the department are prioritised appropriately.

Table 2

Category 1 - Immediate threat to the life of the mother or fetus	Women who fit this category will be deemed the most urgent for delivery. Caesarean section must be undertaken within 30 minutes of the decision being made that delivery is necessary.
Category 2 - Maternal or fetal compromise which is not immediately life-threatening	These women should be delivered as soon as possible, and within 75 minutes. If not taken directly to theatre, the case must be kept under regular review to ensure that the category does not escalate from 2 to 1.
Category 3 - No maternal or fetal compromise but needs early delivery	Where there is no maternal or fetal compromise a delivery time should be agreed and planned within 24 hours. This should be done after assessing the case from both the obstetric and the anaesthetic perspective, and taking the existing workload on the department into account.
Category 4 - Delivery timed to suit the woman and staff	Delivery date and time should be agreed and planned i.e. elective caesarean section

Reasons for delay in the decision to delivery interval

The reasons for delay e.g. the second theatre team being called and awaiting their arrival, maternal stabilisation, or awaiting senior obstetric or anaesthetic medical assistance, must be documented clearly in the hospital notes and electronically on the computer system.

Breaching a decision to delivery interval should trigger an incident form.

Incident Form Trigger

6.5 Management Following Decision

- The time of the decision, the indication for CS and the category of CS (see below) must be documented by the person making the decision in the labour records for all CS, as must the fact it has been discussed with the consultant unless doing so would be life threatening to the woman or fetus,
- The indication for CS for elective CS (see below) must be documented in the women's green hand-held notes and hospital case-notes
- The shift leader must be informed to facilitate contacting the anaesthetist and the theatre team – communication is vital in this situation, and the category of CS must be stated to all concerned. In a Category 1 CS the theatre team must be contacted via 2222.
- The woman should be informed of the reasons for CS and consent obtained. This should be written consent, but in some Category 1 circumstances, verbal consent will suffice but this must be documented in the notes – as per Consent to Examination or Treatment Procedures and Policy
- Information must be given to the patient about risks, benefits and appropriate alternatives of the procedure in a manner that they understand.
- At Birmingham Women's NHS Foundation Trust, consent is sought from patients by doctors who are either competent to perform the procedure or who have sufficient knowledge of the procedure and have been assessed as competent to take consent. (see Appendix E for RCOG guidance on consent for caesarean section)
- Blood should be taken for FBC and Group and Save if this has not been done previously
- In a Category 1 CS, the woman should then be moved to theatre without delay, and the obstetrician responsible should remain with the woman to provide ongoing care and avoid delay
- The decision regarding type of anaesthetic is always an anaesthetic decision. Even in Category 1 CS, spinal anaesthesia can be used and is safer for the woman (NICE 2004, 2011) In extreme emergencies, the obstetrician can advise the anaesthetist as to how quickly delivery should ideally be achieved and may suggest GA, but the decision lies with the anaesthetist who may be able to achieve a spinal as quickly as a GA. Maternal safety must come first, and should not be potentially compromised by an unnecessary GA if there is

time for a spinal to be used (NICE 2004, 2011). Again, communication between the team is paramount.

- The individual roles in obstetric theatres will be outlines in the standard operating policy for that area
- Healthcare professionals should wear double gloves when performing or assisting at CS on women who have tested positive for HIV to reduce the risk of HIV infection of healthcare professionals during surgery (NICE 2004)
- The woman's preferences for birth, such as music playing in theatre, should be accommodated where possible and practical. (NICE 2011)

6.6 If the Woman Declines CS

Women have the right to decline CS in any circumstances unless they have been deemed incapable of making decisions. CS should not be carried out in the absence of either written or verbal consent. If this situation arises, the reasons for CS should be clearly explained to the woman, along with the risks to her and her baby if CS is declined, and fully documented in the maternal case notes. If consent still cannot be obtained the consultant on call should be contacted to come and review the woman as a matter of urgency. In cases where language may be a relevant factor, every attempt must be made to ensure interpretation is appropriate.

Incident Form Trigger

A woman declining an emergency CS should trigger an incident form.

6.7 Difficulty with Delivery of Fetal Head at Caesarean Section

If difficulty is anticipated, for example at caesarean section at full dilation with persistent occipitoposterior position, call for senior obstetric help early.

If difficulty is experienced at the time of delivery, the following should be considered:

- Do not try to deliver against uterine activity, insert hand and wait for the uterus to relax between contractions
- Rotate the head to the transverse position
- Flex the head into the wound
- Swap hands and repeat attempt to deliver
- Relax the uterus further with tocolysis, e.g. Terbutaline subcutaneously
- Extend the uterine incision – inverted T-shape or J-shaped incision
- Deliver the baby breech (Patwarden technique)
- Consider conversion to general anaesthetic from regional.

Following a difficult delivery of the head be aware of the increased risk of tears to the uterine angles and postpartum haemorrhage.

6.8 Peri and Post Operative Care

- Antenatal corticosteroids should be given to all women for whom elective caesarean section is planned prior to 38+6 weeks of gestation to reduce

respiratory morbidity in the neonate – see BWNFT guideline for the Management of premature Labour for antenatal corticosteroid regime

- All women undergoing CS should have prophylactic intrapartum antibiotics. An additional dose of prophylactic antibiotic is recommended in case of major blood loss (>1500ml) or if the surgery lasts for more than 4 hours. Please refer to the BWNFT Antibiotic Prescribing Guidelines for Maternity.
- All emergency CS should have paired cord gases taken following delivery – see BWNFT Fetal Monitoring guideline. The midwife in charge of the case is responsible for performing these
- It is not necessary to have a paediatrician at all cases of CS - refer to BWNFT Guideline Paediatric Attendance at Delivery and subsequent transfer and admission of a baby to the Neonatal Directorate.
- Babies born by CS are at greater risk of hypothermia. Skin to skin contact should be initiated as soon as possible and assistance given to initiate breastfeeding – See Skin to Skin Guideline and Breast Feeding Guideline
- For immediate recovery care following delivery – see BWNFT recovery guideline.
- After transfer from recovery, all women should have observations taken at a minimum of every 4 hours for the first 24 hours.
- For further postnatal care – see Postnatal Care guidelines.
- All women undergoing CS should wear knee high TED stockings and be given at least 5 days of low molecular weight heparin postnatally – see BWNFT VTE guideline
- All women should be seen by medical staff prior to discharge to have the indication for CS explained again, and the implications for future pregnancies should be discussed and documented on the CS discharge letter.

6.9 Maternal Request for caesarean section

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- The exact extent to which women request CS in the absence of clinical indications is not clear, although studies suggest it varies from 0.3 to 14 percent.
- Reasons for this decision include fear of childbirth, avoidance of the pain of labour and of the risk of damage to the perineum, previous birth experiences , as well as convenience of a planned birth.
- Recent evidence has suggested that, while support and control are important
- The National Institute of Health and Clinical Excellence (NICE) 2011 guideline states that, for women requesting CS, if after discussion and offer of support, a vaginal birth is still not an acceptable option, she should be offered one and that an obstetrician unwilling to perform a CS should refer the women to an obstetrician who will. The current recommendation also states that the overall risks and benefits of CS compared with vaginal birth should be discussed, but the evidence available upon which to base a decision is very low quality, includes only relatively short term outcomes and does not include the risks to future fertility or further pregnancies.
- Since publication this guidance, the agreed pathway for women is as follows:

- **At booking** – information is given about different modes of birth is given to woman and women informed that there will be a discussion about mode of birth around 16 week appointment

- **At 16 weeks** - Community Midwife discusses type of birth the woman is considering;
  If woman wishes MRCS:
- Assess and consider individual to see whether an appointment with healthcare professional for support and information would be useful (e.g. Consultant Midwife, counsellor) Examples include previous traumatic or difficult birth, de-brief, anxious/tocophobia, undecided. Following that consultation, if CS requested refer to Consultant Obstetrician.
- If woman has decided on CS, make referral for consultant obstetrician appointment at 20/40
- **At 20 week** appointment with consultant obstetrician - detailed discussion re mode of birth:
  - Risks and benefits explained
  - Detailed documentation of discussion and current preferences
  - Book appointment for 24-28
- **At 24-28 weeks** appointment with same obstetrician
  - Make decision / agreement / consent about type of birth and document clearly in hospital and hand held records the final decision for type of birth that is planned (possible use of sticker or proforma in casenotes)
  - Discuss plans for what happens if woman goes into spontaneous labour prior to date for elective CS, including differing risks and benefits depending on stage in labour and emergency vs elective CS
  - Give Elective CS leaflet
- **At every subsequent AN appointment** re-confirm (not challenge) decision (e.g. 'Are you happy with the plan made?') which provides opportunity for woman to change her mind but not to be repeated challenged about her decision. If booked for CS and changes her mind an appropriate plan for birth will be made dependent on individual circumstances
- If previously midwife led care, then woman will remain under shared care but all other appointments (except 36/40) can be in the community
- **At 36 week appointment** - Sign consent form (if not already signed) at 36/40 and book CS for 39/40

7. Review, Monitoring and Revision Arrangements

Auditable Standards

a. All caesarean sections are classified for urgency of delivery at the time of decision for delivery
b. The indication for CS is documented in all cases

All Trust policies / guidelines will be monitored for compliance in one of three ways:

- **Review** is normally proactive and designed to evaluate the effectiveness of systems and processes;
- **Audit** is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria;
- **Continuous Audits** are repeated audit cycles to ensure new controls can be identified and tested as they arise.

Where deficiencies have been identified through any of the above, there must be evidence that recommendations and action plans have been developed and changes implemented.

The frequency and detail of the monitoring process is described in the table below:

Monitoring	Method	Frequency	Lead	Reporting to	Action Plan Review
• Classification of urgency for all CS • Decision to delivery interval in Category 1. • Indication for caesarean section documented by the person making the decision • Consultant involvement in decision • Documentation of reasons for delays • Woman offered prophylactic antibiotics and thromboprophylaxis • Discussion with the woman of implications for future	Continuous Audit	Quarterly	Obstetric Lead for Delivery Suite	Delivery Suite Group (DSG)	DSG

pregnancies before discharge					
Actions resulting from deficiencies identified from any of the above	Review	As specified by DSG	Obstetric Lead for Delivery Suite	DSG	DSG

7.1 Audit Proforma for Caesarean Sections

Patient Details:	
Date of delivery:	
Category of Urgency:	
Date of Decision	
Time of Decision:	
Time of Delivery (on labour summary pg)	
If inaccurate times documented, name of surgeon	
Decision to Delivery Interval	**mins**
Compliance with decision to delivery interval (must be 30 minutes or less)	**YES / NO**
If delay in decision to delivery interval was a reason documented If yes, please state reason.	YES / NO / NA
Was decision with consultant documented?	YES / NO
Indications for delivery documented by the person making the decision	YES / NO
If not documented by person making decision, who was it documented by?	
Was a Consultant Obstetrician involved in the decision making process?	YES / NO
Consent obtained	YES / NO VERBAL / WRITTEN
Prophylactic antibiotics given in theatre (operation notes)	YES / NO / NOT DOCUMENTED
Were anti embolic stockings and LWMH given? (Post delivery, VTE risk assessment tool)	YES / NO / NOT DOCUMENTED

Implications for future pregnancies discussed prior to discharge?	YES / NO / NOT DOCUMENTED

8. Associated Documents

- Fetal Monitoring Guideline
- Antibiotic Prescribing Guidelines for Maternity
- Paediatric Attendance at Delivery and Subsequent Transfer and Admission of a Baby to the Neonatal Directorate Guideline
- Breast Feeding Guideline
- Recovery Guideline
- VTE Guideline
- Bladder Care Guideline
- Postnatal Care Guideline
- Management of Premature Labour

9. References

Royal College of Obstetricians and Gynaecologists; classification of urgency of caesarean section –a continuum of risk. Good Practice No. 11 London:RCOG Press, April 2010

Royal College of Obstetricians and Gynaecologists: Consent Advice No. 7 October 2009 Consent Advice 7 (May 2006) Caesarean Section, London: RCOG Press, April 2010

National Institute for Health and Clinical Excellence. (2004). Caesarean Section. London: NICE. Available at: www.nice.org.uk
NHS Institute for Innovation and Improvement. (2007). Focus on normal birth and reducing Caesarean section rates. Coventry: NHS Institute for Innovation and Improvement. Available at: www.institute.nhs.uk

Crowley P. Interventions for preventing or improving the outcome of delivery at or beyond term. Cochrane Database Syst Rev 2003;

Hodnett ED, Gates S, Hofmeyr GJ, Sakala C. Continuous support for women during childbirth. Cochrane Database Syst Rev 2003;(3)

Lavender T, Alfirevic Z, Walkinshaw S. Partogram action line study: a randomised trial. Br J Obstet Gynaecol 1998;105:976–80.

NICE CS Guideline. National Collaborating Centre for Women's and Children's Health. RCOG Press, London 2004

Thacker SB, Stroup DF. Continuous electronic heart rate monitoring for fetal assessment during labor. Cochrane Database Syst Rev 2000;(1).

Vintzileos AM, Antsaklis A, Varvarigos I, Papas C, Sofatzis I, Montgomery JTA randomized trial of intrapartum electronic fetal heartrate monitoring versus intermittent auscultation. Obstet Gynecol 1993;81:899–907.

Olah KS (2005) Reversal of the decision for CS in the 2nd stage of labour on the basis of a consultant VE. J Obstet Gynaecol

NCEPOD. Report of the National Confidential Enquiry into Perioperative Deaths 1992/93. London: NCEPOD; 1995

Lucas D, Yentis S, Kinsella SM, Holdcroft A, May AE, Wee M, et al. Urgency of caesarean section: a new classification. J R Soc Med 2000;**93**:346–50.

Royal College of Obstetricians and Gynaecologists. The use of electronic fetal monitoring: the use and interpretation of cardiotocography in intrapartum fetal monitoring. No 8. London:RCOG Press, 2001

Royal College of Obstetricians and Gynacologists. Antenatal Corticosteroids to reduce neonatal morbidity and mortality. Greentop Guideline No. 7. London. RCOG Press; 2010

J Thomas, S Paranjothy Royal College of Obstetricians and Gynaecologists. Clinical Effectiveness Support Unit. National Sentinel Caesarean Section Audit Report. RCOG Press; 2001.

Thomas J, Shantini Paranjothy and David James (2004) National cross sectional survey to determine whether the decision to delivery interval is critical in emergency caesarean section. BMJ 2004;**328**;665-9.

Tuffnell DJ, Wilkinson K, Beresford N. Interval between decision and delivery by caesarean section–are current standards achievable? Observational case series.BMJ 2001;**322**:1330–3.

Department of Health. Maternity matters: choice, access and continuity of care in a safe service. HMSO, 2007. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_073312 Accessed 25th May 2012

Hospital Episode Statistics. Maternity data 2010-2011. http://www.hesonline.nhs.uk/Ease/servlet/ContentServer?siteID=1937&categoryID=1815

National Institute for Health and Clinical Excellence. Caesarean section (update). (Clinical guideline 132). 2011. http://guidance.nice.org.uk/CG132.

Appendix A – Plan for Dissemination of Procedural Documents

To be completed by the Head of Corporate Affairs and attached to any document which guides practice when submitted to the appropriate committee for consideration and approval.

Title of document:	Caesarean Section Guideline		
Date finalised:	20/03/2015	**Dissemination lead: Print name and contact details**	Nina Johns
Previous document already being used?	**Yes**		
If yes, in what format and where?	Currently Available on the Intranet		
Proposed action to retrieve out-of-date copies of the document:	Archive out of date copy and replace with new version		

To be disseminated to:	**How will it be disseminated, who will do it and when?**	**Paper or Electronic**	**Comments**
Trust Wide	Via Email	Electronic	

Dissemination Record to be used once document is approved.

Date put on register / library of procedural documents	20/03/2015	**Date due to be reviewed**	20/03/2018

Disseminated to: (either directly or via meetings, etc)	**Format (i.e. paper or electronic)**	**Date Disseminated**	**No. of Copies Sent**	**Contact Details / Comments**
Trust Wide	Via Email		0	Staff informed that policy has been updated and is available on-line

Appendix B – Equality Impact Assessment Tool

To be completed and attached to any procedural document when submitted to the appropriate committee for consideration and approval.

Policy/Function Details	
Name of Policy/Function[1], Service, Plan, SLA, Function, Contract or Framework:	Caesarean Section Guideline
Is this a new policy or function?	New ☐ Existing ☐ Updated ☒
Responsible Manager	Nina Johns, Lead Consultant for Delivery Suite
Date Assessment Completed:	20/03/2015
Sources of Data	

Screening Assessment					
Equality Group	**Impact**		**Status of Impact**		**Brief Detail of impact**
	Yes	**No**	**Positive**	**Negative**	
Race, Ethnicity, Colour, Nationality or national origin (incl. Romany Travellers, refugees and asylum seekers)		**X**			
Gender or Marital Status of Men or Women		**X**			
Gender or Marital Status of Transsexual or Transgender people		**X**			
Religion or belief		**X**			
Physical or Sensory Impairment		**X**			
Mental Health Status		**X**			
Age or perceived age		**X**			
Sexual Orientation (Gay, Lesbian, Bisexual)		**X**			
Offending Past		**X**			
Other Grounds (i.e. poverty, homelessness, immigration status, language, social origin)		**X**			
Please provide details of any mitigation you can provide against negative impacts highlighted above					

[1] Policy/Function for the purpose of this document also includes Services, Plans, SLAs, Contracts, Care Pathways and Service or Care Frameworks.

Assessment Narrative
Are there any alternative service/policy provisions that may reduce or eradicate any negative impacts?
None
How have you consulted with stakeholders and equalities groups likely to be affected by the policy?
Yes
What are your conclusions about the likely impact for minority equality groups of the introduction of this policy/service?
None
How will the policy/service details (including this Equality Impact Assessment) be published and publicised?
See dissemination appendix
How will the impact of the policy/service be monitored and reviewed?
See section 7 of Policy

Assessor Name:	**Nina Johns**
Assessor Job Title:	**Lead Consultant for Delivery Suite**
Date Completed:	**20/03/2015**

Appendix C – Policy Checklist

	Title of document being reviewed:	Yes/No/ Unsure	Comments
1.	**Title**		
	Is the title clear and unambiguous?	Yes	
	Has all the information on the front page been completed?	Yes	
	Is it clear whether the document is a guideline, policy, protocol or standard?	Yes	
2.	**Rationale**		
	Are reasons for development of the document stated?	Yes	
3.	**Development Process**		
	Is the method described in brief?	Yes	
	Is the responsible policy leads name and title clearly printed?	Yes	
	Do you feel a reasonable attempt has been made to ensure relevant expertise has been used?	Yes	
	Is there evidence of consultation with stakeholders and users?	Yes	Maternity Directorate, CGC
4.	**Content**		
	Is the objective of the document clear?	Yes	
	Are the intended outcomes described?	Yes	
	Is the language used in the document clear, jargon free and spelt correctly?	Yes	
5.	**Format**		
	Does the policy conform to the prescribed policy format?	Yes	
6.	**Evidence Base**		
	Is the type of evidence to support the document identified explicitly?	Yes	
	Are key references cited using Harvard referencing?	Yes	

	Title of document being reviewed:	Yes/No/ Unsure	Comments
7.	**Approval**		
	Does the document identify which committee/group will approve it?	Yes	
	If appropriate have the joint Human Resources/staff side committee (or equivalent) approved the document?	N/A	
8.	**Document Control**		
	Has a version control sheet been placed at the front of document, and been filled out correctly?	Yes	
9.	**Process to Monitor Compliance and Effectiveness**		
	Is there a plan to review or audit compliance with the document?	Yes	
10.	**Review Date**		
	Is the review date identified?	Yes	
	Is the frequency of review identified? If so is it acceptable?	Yes	
11.	**Equality Assessment**		
	Has an equality impact assessment been carried out?	Yes	

Individual Approval			
If you are happy to approve this document, please sign and date it below, and put the document onto the DMS for final approval			
Name	Nina Johns, Lead Consultant for Delivery Suite	Date	20/03/2015
Signature			

Committee Approval			
If the committee is happy to approve this document, please sign and date it and forward copies to the person with responsibility for disseminating and implementing the document and the person who is responsible for maintaining the organisation's database of approved documents.			
Name	Peter Thompson, Medical Director and Chair of Clinical Governance Committee	Date	20/03/2015
Signature			

Appendix D – RCOG Consent Advice No. 7

Royal College of Obstetricians and Gynaecologists

Consent Advice No. 7

October 2009

CAESAREAN SECTION

This is the second edition of this guidance, which was previously published in 2006 under the same title.

This paper provides advice for clinicians in obtaining consent of a woman undergoing caesarean section.

This paper is intended to be appropriate for a number of procedures and combinations and the consent from should be carefully edited under the heading 'Name of proposed procedure or course of treatment' to accurately describe the exact procedure to be performed, after discussion with the woman. The paper follows the structure of Consent Form 1 of the Department of Health, England/ Welsh Assembly Government/Scottish Government/Department of Health, Social Services and Public Safety, Northern Ireland. It should be used in conjunction with RCOG Clinical Governance Advice, *Obtaining Valid Consent*.[1]

The aim of this advice is to ensure that all women are given consistent and adequate information for consent; it is intended to be used together with dedicated patient information. After discharge, women should have clear direction to obtaining help if there are unforeseen problems.

Clinicians should be prepared to discuss with the woman any of the points listed on the following pages.

Presenting information on risk

Term	Equivalent numerical ratio	Colloquial equivalent
Very common	1/1 to 1/10	A person in family
Common	1/10 to 1/100	A person in street
Uncommon	1/100 to 1/1000	A person in village
Rare	1/1000 to 1/10 000	A person in small town
Very rare	Less than 1/10 000	A person in large town

The above descriptors are based on the RCOG Clinical Governance Advice, *Presenting Information on Risk*.[2] They are used throughout this document.

To assist clinicians at a local level, we have included at the end of this document a fully printable page 2 of the Department of Health, England/Welsh Assembly Government/Scottish Government/Department of Health, Social Services and Public Safety, Northern Ireland, Consent Form 1. This page can be incorporated into local trust documents, subject to local trust governance approval.

CONSENT FORM

1. Name of proposed procedure or course of treatment

Caesarean section.

2. The proposed procedure

Describe the nature of caesarean section. Explain the procedure as described in the patient information.

Note: If any other procedures are anticipated, these must be discussed and a separate consent obtained. A decision for sterilisation should not be made while the woman is in labour or immediately prior to the procedure. An additional specific consent form should be used for sterilisation at caesarean section.

3. Intended benefits

To secure the safest and/or quickest route of delivery in the circumstances present at the time the decision is made, where the anticipated risks to mother and/or baby of an alternative mode of delivery outweigh those of caesarean section.

4. Serious and frequently occurring risks[2,3]

It is recommended that clinicians make every effort to separate serious from frequently occurring risks. Women who are obese, who have significant pathology, who have had previous surgery or who have pre-existing medical conditions must understand that the quoted risks for serious or frequent complications will be increased.

Complication rates for all caesarean sections are very common. Complication rates from caesarean section performed during labour have overall complication rates greater than during a planned procedure (24 women in every 100 compared with 16 women in every 100). Complication rates are higher at 9–10 cm dilatation when compared with 0–1 cm (33 women in every 100 compared with 17 women in every 100).

4.1 Serious risks

Serious risks include:

Maternal:

- emergency hysterectomy, seven to eight women in every 1000 (uncommon)
- need for further surgery at a later date, including curettage, five women in every 1000 (uncommon)
- admission to intensive care unit (highly dependent on reason for caesarean section), nine women in every 1000 (uncommon)
- thromboembolic disease, 4–16 women in every 10 000 (rare)
- bladder injury, one woman in every 1000 (rare)
- ureteric injury, three women in every 10 000 (rare)
- death, approximately one woman in every 12 000 (very rare).

Future pregnancies:

- increased risk of uterine rupture during subsequent pregnancies/deliveries, two to seven women in every 1000 (uncommon)
- increased risk of antepartum stillbirth, one to four woman in every 1000 (uncommon)
- increased risk in subsequent pregnancies of placenta praevia and placenta accreta, four to eight women in every 1000 (uncommon).

4.2 Frequent risks

Frequent risks include:

Maternal:

- persistent wound and abdominal discomfort in the first few months after surgery, nine women in every 100 (common)
- increased risk of repeat caesarean section when vaginal delivery attempted in subsequent pregnancies, one woman in every four (very common)
- readmission to hospital, five women in every 100 (common)
- haemorrhage, five woman in every 1000 (uncommon)
- infection, six women in every 100 (common).

Fetal:

- lacerations, one to two babies in every 100 (common).

5. Any extra procedures which may become necessary during the procedure

- Hysterectomy
- Blood transfusion
- Repair of damage to bowel, bladder or blood vessels.

6. What the procedure is likely to involve, the benefits and risks of any available alternative treatments, including no treatment

Delivery of the baby or babies and placenta or placentas through an open approach through an abdominal incision and an incision into the uterus. Both incisions are usually transverse. If either a midline abdominal incision or a classical uterine incision is being considered, the woman must be informed of the reasons and the added risks. Sometimes forceps are used to deliver the head, especially with breech presentations. The reason for the caesarean section must be clearly discussed, as must the risks to mother and/or baby of not performing the caesarean section. An informed, competent pregnant woman may choose the no-treatment option; that is, she may refuse caesarean section, even when this would be detrimental to her own health or the wellbeing of her fetus.

7. Statement of patient: procedures which should not be carried out without further discussion

Other procedures, which may be appropriate but not essential at the time, such as ovarian cystectomy/oophorectomy, should be discussed and the woman's wishes recorded.

8. Preoperative information

A record should be made of any sources of information (e.g. RCOG or locally produced information leaflets/tapes) given to the woman prior to surgery.

9. Anaesthesia

Where possible, the woman must be aware of the form of anaesthesia planned and should be given an opportunity to discuss this in detail with the anaesthetist before surgery. It should be noted that, with obesity, there are increased risks, both surgical and anaesthetic.

References

1. Royal College of Obstetricians and Gynaecologists. *Obtaining Valid Consent*. Clinical Governance Advice No 6. London: RCOG; 2008 [**www.rcog.org.uk/womens-health/clinical-guidance/obtaining-valid-consent**].
2. Royal College of Obstetricians and Gynaecologists. *Presenting Information on Risk*. Clinical Governance Advice No. 7. London: RCOG; 2008 [**www.rcog.org.uk/womens-health/clinical-guidance/presenting-information-risk**].
3. Hager RM, Daltveit AK, Hofoss D, Nilsen ST, Kolaas T, Oian P, *et al*. Complications of caesarean deliveries: rates and risk factors. *Am J Obstet Gynecol* 2004;190:428–34.
4. National Collaborating Centre for Women's and Children's Health. *Caesarean Section*. Clinical Guideline. London: RCOG Press; 2004. [**www.nice.org.uk/Guidance/CG13**].
5. Royal College of Obstetricians and Gynaecologists. *Birth After Previous Caesarean Section*. Green-top Guideline No. 45. London: RCOG; February 2007 [**www.rcog.org.uk/womens-health/clinical-guidance/birth-after-previous-caesarean-birth-green-top-45**].

This Consent Advice was produced by Mr EP Morris FRCOG, with the support of the Consent Group of the Royal College of Obstetricians and Gynaecologists.
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The final version is the responsibility of the Consent Group of the RCOG.

Consent Advice review process will commence in 2013 unless otherwise indicated

DISCLAIMER

The Royal College of Obstetricians and Gynaecologists produces consent advice as an aid to good clinical practice. The ultimate implementation of a particular clinical procedure or treatment plan must be made by the doctor or other attendant after the valid consent of the patient in the light of clinical data and the diagnostic and treatment options available. The responsibility for clinical management rests with the practitioner and their employing authority and should satisfy local clinical governance probity.