Caesarean Section

Classification :	Guideline
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Authors Division:	Women's and Children's
Departments/Group this Document applies to:	Maternity

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Guideline to be followed by (target staff): All staff working within the maternity department

To be read in conjunction with the following documents:

- Antimicrobial guidance
- Fetal Monitoring
- Fetal Scalp Blood Sampling (FBS)
- Recovery (Maternity) Guideline
- Enhanced Recovery Guideline
- Thromboprophylaxis in pregnancy and puerperium
- Obstetric Hemorrhage Guideline

Are there any eCARE implications? No

CQC Fundamental standards:

Regulation 9 – person centred care
Regulation 10 – dignity and respect
Regulation 11 – Need for consent
Regulation 12 – Safe care and treatment
Regulation 13 – Safeguarding service users from abuse and improper treatment
Regulation 14 – Meeting nutritional and hydration needs
Regulation 15 – Premises and equipment
Regulation 16 – Receiving and acting on complaints
Regulation 17 – Good governance
Regulation 18 – Staffing
Regulation 19 – Fit and proper

Disclaimer

Since every patient's history is different, and even the most exhaustive sources of information cannot cover every possible eventuality, you should be aware that all information is provided in this document on the basis that the healthcare professionals responsible for patient care will retain full and sole responsibility for decisions relating to patient care; the document is intended to supplement, not substitute for, the expertise and judgment of physicians, pharmacists or other healthcare professionals and should not be taken as an indication of suitability of a particular treatment for a particular individual.

The ultimate responsibility for the use of the guideline, dosage of drugs and correct following of instructions as well as the interpretation of the published material **lies solely with you** as the medical practitioner.

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Guideline Statement

There are four different categories of caesarean section (CS) and category 1 to 3 are reserved for emergencies based on RCOG guidance.

Figure 1. A classification relating the degree of urgency to the presence or absence of maternal or fetal compromise

Urgency	Definition	Category
Maternal or fetal compromise	Immediate threat to life of woman or fetus	1
	No immediate threat to life of woman or fetus	2
	Requires early delivery	3
No maternal or fetal compromise	At a time to suit the woman and maternity services	4

For a category 1 CS, following examination and review of the CTG whether antenatal or in Labour, women can be transferred from **any department** (ADAU, Ward 9 or Ward 10) **to theatre directly**.

CS may not always be in the interests of the Mother or her baby especially <26 weeks gestation or in the presence of severe maternal illness – these cases should be discussed with the on-call consultant as a matter of urgency.

Executive Summary

The objective of this guideline is to ensure all staff know how to safely manage women requiring CS and their babies using evidence-based recommendations. It aims to improve the consistency and quality of care for women who require CS.

Treatment and care should take into account women's needs and preferences. Pregnant women should be offered evidence-based information and support to enable them to make informed decisions about their care and treatment.

1. Roles and Responsibilities:

Obstetricians – decision making, prescribing, operative
Midwives – decision making, pre and post-operative care, care of the neonate
Anaesthetists – anaesthesia, pre, intra and postoperative care
Nurses – pre and post-operative care
Maternity care assistants – pre and post-operative care
Paediatricians – care of the neonate

2.0 Implementation and dissemination of document

This Guideline has followed the Guideline review process and is accessible via the Trust Intranet.

3.0 Processes and procedures

Make sure all the following have been considered and documented prior to proceeding to CS:

Decision

- The decision for CS should be made by a Consultant. However, if a Registrar makes a decision the Consultant must always be informed.
- If Elective CS - book with Antenatal Clinic or Labour Ward out of Antenatal Clinic hours. The Risk Scoring form for booking elective caesarean sections needs to be filled in prior to booking cases. See Appendix 1
- If emergency CS, inform Midwife-in-Charge and discuss degree of urgency.

Pre- Operative Assessment

Ensure enhanced recovery information including leaflet is given to the woman.

Fasting is also explained. The woman is encouraged to eat normally until midnight the day before the operation. She is also advised to drink a non-fizzy iso-osmolar energy drink such as Ribena or non-fizzy isotonic sports drink (400ml/200kcal) no later than 6am on the day of the operation. Water only can be taken up to 2 hours before the operation and black tea and coffee (no milk).

To distribute colostrum collection packs at pre-op appointment.

Process

Consultant led sessions are on each day of the week. A maximum risk score of 6 should be booked on the lists.

Women should be informed about the Enhanced Recovery Pathway and appropriate paperwork should be done.

Consent should be obtained in the clinic, at the time caesarean section is booked and CS's are booked for 39 weeks gestation unless clinically indicated otherwise. If CS's are performed below 38+6 weeks, please ensure corticosteroids are given.

Antenatal thromboprophylaxis assessment should be completed.

Appropriate booking forms should be completed. Theatre staff should be informed about the category of CS.

The Surgeon should be in theatre once anaesthesia has commenced.

Indication

The indication must be documented and written on the operation notes.

- Consent: *Written consent is essential apart from Category 1 CS where there is fetal bradycardia and can be done with verbal consent.*
- *Procedure specific consent forms to be used preferably.*

- Consent for CS should be obtained after providing pregnant women with evidence-based information and in a manner that respects the woman's dignity, privacy, views and culture, while taking into consideration the clinical situation.

Preparation

- Tape wedding band and give all other jewellery to partner for safekeeping.
- MRSA (see Trust Infection Prevention and Control Manual). All pregnant women booked to give birth at Milton Keynes maternity unit should be screened for MRSA at 34-35 weeks gestation. If admission to maternity unit and screening has not occurred, then women to be screened within 12 hours of admission and swab results reviewed at 48-72 hours by the Postnatal Ward team.

Anaesthesia

- Regional anaesthesia is safer than General Anaesthesia (GA) for CS.
- In emergencies, the Obstetrician must inform the Anaesthetist of the degree of urgency and indication.
- For Elective CS – Anaesthetists for the elective list will review the patients routinely.
- *Each maternity unit should have a drill for failed intubation during obstetric anaesthesia.*

Blood

- Blood for FBC and G&S is sent after siting an IVI (16G or 14G cannula). Must have recent (one week) antibody screen if not x-matched

Theatre preparation

- WHO team brief / checklist (may be on eCare in time).
- Partners can be present in theatre for the spinal for elective CS providing there is a support for the family by maternity staff responsible for looking after the partner if they faint.
- Catheterisation - In theatre, either immediately before CS if GA, or once spinal / epidural effective.
- Paediatrician - Should be present at all emergency CS and elective procedures where there is a risk of neonatal respiratory depression (e.g., under GA, severe IUGR). Inform Paediatrician of estimated time of delivery and give further call if not already present when scrubbing up.
- Position - If being transferred on a bed, place woman in left lateral position. All CS should be performed with left uterine displacement (15 degrees) using a wedge.

Document CS procedure in eCare drop down menu for cesarean section.

Women's preferences during CS

Women's preferences for the birth, such as music playing in theatre, lowering the screen to see the baby born, delivery of baby onto her chest or silence so that the mother's voice is the first the baby hears, should be accommodated, where possible (NICE).

3.1 Classifications to Define CS

There are 4 (four) different categories of CS and category 1 to 3 are reserved for emergencies based on RCOG guidance.

NB: the following lists of examples for different categories of CS are not exhaustive and each case should be managed on an individual risk-based assessment.

3.1.1 Category 4 - Elective Caesarean section

- Women should normally be given a date for delivery at 39 weeks gestation (unless decided otherwise for medical reasons).
- The Midwife in ANC should book an appointment for the woman to attend the pre-operative clinic prior to surgery.
- Communication with the Paediatric team and NNU is essential, particularly if admission to NNU is anticipated.
- If there are any risk factors ensure that review by Senior Obstetrician/Anaesthetist is arranged
- Details of the woman, indication for CS and documentation of risk factors (Obstetric and anaesthetic) should be entered in the CS diary.
- Women should be offered a pre-operative assessment appointment in ANC prior to surgery, where they will be seen by the Midwife who will complete the pre-operative assessment, which will include:
    - Ensuring the consent form is signed and necessary paperwork present.
    - Blood tests to include FBC and Group and Save (X-Matched if indicated).
    - Antacid prophylaxis as per the time of scheduled CS
    - For an AM list, Omeprazole 20 mg should be given orally at 22:00 hrs the night before and at 06:00 hrs on the day of surgery.
    - For a PM list, Omeprazole 20 mg should be given orally at 22:00 hrs the night before and 11:30 hrs on the day of surgery
    - Nil by mouth as per the time of scheduled CS see below.
    - For an AM list – 02:00 hrs for food or milk and 06:00 hrs for water.
    - For a PM list – light breakfast before 07:30 hrs and water until 11:30 hrs.

Discussion around the benefits of colostrum collection, due to risk of delayed Lactogenesis II after CS and where the baby is at risk of hypoglycaemia. Colostrum collection packs are available from the Infant Feeding Team. The woman will request this when she comes for the preoperative appointment.

- Where the indication for CS is malpresentation, emphasise the need for an ultrasound scan on the day of surgery to confirm presentation. Women should be advised if the presentation has changed to cephalic, this may change the plan for CS.

- Women should attend the Antenatal Ward 9 at 07.30 hours on the morning of surgery, **(this excludes women who are HIV positive and may require admission overnight in order to commence AZT therapy and those diabetic mothers who require a sliding scale).**

- The Midwife should ensure that the following are undertaken;
    - Thromboprophylaxis
    - Complete theatre check list.
    - Palpate and auscultate fetal heart

- Ensure name bands and drug allergy bands are correct and applied
- Enter admission details
- If women who are booked for an elective CS have any concerns, midwives should immediately raise these concerns to the obstetrician to enable prioritising the timing of the procedure.

The Paediatrician is not required to attend an elective LSCS unless GA or identified risk factors are present.

3.1.2 Emergency caesarean section

- The urgency of the CS must be clearly stated following these guidelines so that the theatre staff, Anaesthetists and surgeons involved will know what is expected of them.
- Wherever possible regional anaesthesia (spinal/epidural top-up) should be used as there is no doubt that GA increases maternal morbidity and mortality. Where there is a need for rapid delivery, e.g. Category 1 CS, clear communication of the timescale for delivery is vital to ensure that delivery is not delayed by inappropriate anaesthesia, wherever possible.
- The time of decision to delivery should be clearly documented as well as the category of CS and time to delivery.
- The situation may change after delivery decision e.g. recovery of bradycardia, improvement of CTG. Reasons for change of priority or decision should equally be documented contemporaneously and communicated to the labour ward co-ordinator.
- Lack of multidisciplinary co-operation, in particular failure to consult with Anesthetic colleagues at an early stage, has been identified as a significant contributory factor in a number of maternal mortalities. Analysis of potential risk factors should be undertaken for all women undergoing CS. If risk factors are identified the Anaesthetist should be notified in an appropriate and timely fashion.
- Give Ranitidine 50mg IV or IM as soon as the decision to operate is made. If ranitidine is unavailable, check with the Anaesthetist regarding available medicine and the dose.
- NB: There is no need to give sodium citrate for elective CS's.

3.1.3 Category 1 Caesarean section

Following examination and review of the CTG whether antenatal or in labour, women can be transferred from any department (ADAU or antenatal ward) to theatre directly for a Category 1 CS. Inform Switchboard to place Category 1 CS call out.

Where it is deemed that there is an immediate risk to the life of mother +/or her baby. Urgent delivery of the fetus is required as soon as possible and within 30 minutes of the decision to deliver wherever possible. Examples of such situations are:

- prolonged fetal bradycardia (move to theatre at 6 mins, decision at 9mins)
- pre-terminal CTG
- abnormal CTG with fetal blood sampling / scalp pH <7.20
- failed trial of forceps / ventouse in the presence of abnormal CTG
- delivery of the second twin with acute fetal distress as above
- uterine rupture
- cord prolapse
- large ongoing APH e.g. placenta praevia with maternal or fetal compromise
- large placental abruption with fetal heart activity demonstrated
- maternal acute cardiovascular compromise where continuing the pregnancy is deemed harmful e.g. large Pulmonary Embolus, amniotic fluid embolism

If verbal consent is obtained for CS, please ensure that the discussion is documented at the time of decision and in the CS operation notes on Page 16.

Category 1 Caesarean Actions to be taken by Midwife and Obstetric team
Dial 2222 and state "Category 1 Caesarean"

a) Explain and get consent
b) IV access
c) Blood for Hb and X match
d) Switch off oxytocin if in use

e) Consider tocolytic (IV or SC Terbutaline 0.25µg)
f) Shave/Catheter
g) Om by IM or intravenous injection – if needed or seek clarification from an Anaesthetist for a substitute if ranitidine unavailable.

Transfer to theatre for Category 1 Caesarean section

- The Midwife and the Obstetric team are responsible for the transfer of women to the operating theatre.
- Women should be maintained in the left uterine displacement position during transfer to theatre and on positioning on the operating table.
- Fetal heart rate should be monitored during the time from arrival in theatre/during siting of epidural/spinal until commencing CS (Fetal Monitoring Guideline).
- If there is any reason for a delay in transferring the woman to theatre this should be documented in the health records and a Datix completed.
- Emergency WHO Checklist should be completed.

NB: A Datix must also be completed for ALL Category 1 CS.

3.1.4 Category 2 – Caesarean section

Indicated where maternal or fetal compromise is not immediately life threatening. Urgent delivery of the fetus is required between 30 minutes up to a maximum of 75 mins of the decision to deliver wherever possible. Examples include:

- presumed fetal distress (taking the whole clinical picture) in 1st stage
- failed forceps delivery without evidence of fetal distress
- failure to progress in 2nd stage and unsuitable for instrumental delivery
- delivery of the second twin with no apparent fetal distress
- eclampsia after maternal stabilization

Category 2 Caesarean Actions to be taken by Midwife and Obstetric team

Inform:

- Bleep theatre staff (bleep 1327)
- Anaesthetist (bleep 1876), who, following assessment, will discuss the woman with the Anesthetic Consultant, if required.
- Obstetric SHO
- Paediatrician

Ensure Theatre Booking Form is completed
Prepare for Theatre as per Emergency CS.
Transfer to Theatre as per Emergency CS

3.1.5 Category 3 - Emergency "non-urgent" Caesarean section

No maternal or fetal compromise but needs early delivery.

Delivery of the fetus is required as soon as is safely possible, practical and feasible when other labour ward risks have been considered. The timing of delivery is at the discretion of the Obstetrician and Anaesthetist, Examples include:

- failure to progress / obstructed labour in the 1st stage with a normal CTG
- booked elective CS in early labour
- undiagnosed breech presentation in early labour
- preterm delivery for pre-eclampsia after stabilisation of BP

Category 3 Caesarean Actions to be taken by Midwife and Obstetric team

Inform:

- Bleep theatre staff (bleep 1327)
- Anaesthetist (bleep 1876), who, following assessment will discuss the woman with the Anaesthetic Consultant.
- Obstetric SHO
- Paediatrician

Ensure Theatre Booking Form is completed. This may change to electronic on eCare with time.
Prepare for Theatre as per Emergency CS.
Transfer to Theatre as per Emergency CS

3.2 Surgical techniques for CS

- 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.
- General recommendations for safe surgical practice should be followed at CS to reduce the risk of HIV infection of staff.
- CS should be performed using a transverse abdominal incision because this is associated with less postoperative pain and an improved cosmetic effect compared with a midline incision.
- The transverse incision of choice should be the Joel Cohen incision (a straight skin incision, 3 cm above the symphysis pubis; subsequent tissue layers are opened bluntly and, if necessary, extended with scissors and not a knife), because it is associated with shorter operating times and reduced postoperative febrile morbidity.
- The use of separate surgical knives to incise the skin and the deeper tissues at CS is not recommended because it does not decrease wound infection
- When there is a well formed lower uterine segment, blunt rather than sharp extension of the uterine incision should be used because it reduces blood loss, incidence of postpartum haemorrhage and the need for transfusion at CS
- Forceps should only be used at CS if there is difficulty delivering the baby's head. The effect on neonatal morbidity of the routine use of forceps at CS remains uncertain.
- Delayed cord clamping is advised when feasible whilst maintaining baby's birth temperature.
- At CS, the placenta should be removed using controlled cord traction and not manual removal as this reduces the risk of endometritis and post-partum haemorrhage.
- Intraperitoneal repair of the uterus at CS should be undertaken. Exteriorisation of the uterus is not recommended because it is associated with more pain and does not improve operative outcomes such as haemorrhage and infection
- The effectiveness and safety of single layer closure of the uterine incision is uncertain. Except within a research context, the uterine incision should be sutured with two layers

- Neither the visceral nor the parietal peritoneum should be sutured at CS because this reduces operating time and the need for postoperative analgesia and improves maternal satisfaction. In the rare circumstances that a midline abdominal incision is used at CS, mass closure with slowly absorbable continuous sutures should be used because this results in fewer incisional hernias and less dehiscence than layered closure. Use sutures rather than staples for wound closure in caesarean section.
- PICO wound dressing to be considered as per guidelines. Pressure dressing should not be used.
- Use of fetal pillow for disimpaction of fetal head. See relevant document.
- Paired umbilical samples should be taken after all CS for suspected fetal compromise to allow review of fetal wellbeing and guide ongoing care of the baby

3.3 Management of women at known risk of haemorrhage

- Consultant presence is mandatory for all women undergoing CS who are at known risk of haemorrhage.
- Where a delivery is known to be one with a higher risk of major bleeding, for example placenta praevia, especially with previous CS, myomectomy scars, uterine fibroids, placental abruption or previous third stage complications the following steps are essential:
- antepartum anemia should be identified and corrected where possible
- Any Anaesthetic should be given by a senior Anaesthetist
- Adequate intravenous access (two large bore cannulas) should be in place before surgery start
- At least four units of blood should be cross-matched and immediately available.
- If bleeding is excessive, the Obstetrician should consider either embolisation of uterine arteries by an interventional radiologist or further surgical procedures such as internal iliac artery ligation, B-Lynch suture, and hysterectomy. If hysterectomy is required a second Consultant Obstetrician should immediately be called to assist. If internal iliac artery ligation is performed a vascular surgeon needs to be called to assist.
- Massive haemorrhage should be managed according to the Postpartum Haemorrhage Guideline. Consideration should also be given to the Massive Haemorrhage Protocol. The advice of a Consultant Haematologist should be sought at an early stage.

3.4 Prophylactic measures to be followed at Caesarean section

<u>Prophylaxis against haemorrhage</u>

Estimate blood loss as accurately as possible.

Surgeons may request that drugs be administered by the Anaesthetist to prevent postpartum haemorrhage. The Anaesthetist has a responsibility to exclude contraindications to giving the drug and to ensure that drugs are given in the correct dose, at the correct rate, by the correct route and by the most accurate means.

- Oxytocin 5 units IV, by slow intravenous injection (**higher doses by bolus intravenous injection are not recommended)**
- 0.5 mg Ergometrine–oxytocin may be used in the absence of hypertension in women at increased risk of haemorrhage
- 40 units Oxytocin added to 500mls 0.9% saline, via an infusion pump over 4 hours.
- Clinicians should consider the use of intravenous tranexamic acid (0.5–1.0 g), in addition to oxytocin, at caesarean section to reduce blood loss in women at increased risk of PPH.

- IM Carboprost 250 mcg maximum of 8 doses 15 minutes apart
- 1000mcg of misoprostol PR or 800mcg sublingual.

Antibiotic Prophylaxis

- Give prophylactic antibiotics at CS before skin incision as this reduces the risk of maternal infection.
- Consider Cefuroxime 750mg IV as stat dose before skin incision.
- If women are allergic to Penicillin, consider 900mg of IV clindamycin.
- If antibiotic prophylaxis is not already given before skin incision a single dose of antibiotic prophylaxis should be given during the CS.

Thromboprophylaxis

All women undergoing emergency CS should be fitted with thrombo-embolic stockings and receive prophylactic low molecular weight Heparin. Continue low molecular weight Heparin for 7 days or longer if medically indicated, please refer to Thromboprophylaxis guidelines.

For Elective CS, assess the thromboembolism risk and consider prophylactic low molecular weight heparin accordingly.

3.5 Postpartum management of women following Caesarean section

Refer to Recovery (Maternity) Guideline or Enhanced Recovery Guideline as appropriate

- Determine the most appropriate place for the women to be recovered and subsequently nursed
- Confirm the appropriate antibiotic (if needed to be given longer)
- Thromboprophylaxis regimes have been implemented
- Document a clear management plan to include details of frequency and type of observations, fluid replacement regimes, analgesia, repeat blood tests and indications for medical review
- Ensure that the Paediatricians have all relevant information pertinent to the management of the baby if not discussed prior to delivery
- If appropriate, update relatives on the condition of both mother and baby
- Inform the Consultant Obstetrician or Anaesthetist of any significant complications at operation or any concerns over the condition of mother or baby
- Ensure that appropriate operation records are completed
- Maternal observations should be continued every half hour for 2 hours and 4 hourly thereafter if stable. If there are concerns, then refer to a medical practitioner.
- If intrathecal opioids are given 15 minutes observations of respiratory rate, sedation & pain scores should be continued for the first hour, hourly observations for the next 4 hours and 4 hourly thereafter to a total of 12 hours.
- Regular analgesia should be prescribed, and pain levels monitored. Women are encouraged to take regular analgesia. Providing there are no contra-indications, non-steroidal anti-inflammatory drugs should be offered as they reduce the need for opioids.
    - For severe pain, consider morphine
    - For moderate pain, NSAID's if not contraindicated
    - For mild pain, paracetamol
    - Appropriate analgesia should be prescribed ready for discharge.
- Women can eat or drink when they feel hungry or thirsty if no complications.

- Urinary catheter can be removed once regional anaesthesia has worn off (usually 6 hours for spinal and can be for 12 hours for epidural top up). Follow enhanced recovery guidelines when applicable.
- Wound dressing can be removed after 24 hours. Advise mother on importance of keeping wound clean and dry. Wound care should include:
  - Specific monitoring for fever
  - assessing the wound for signs of infection (such as increasing pain, redness or discharge), separation or dehiscence
- Women who are recovering well, are apyrexial and who have no complications can go home after 24 hours providing the baby is also fit for discharge at this point. Woman can be advised to resume activities such as driving and exercise when the pain is not distracting or restricting.
- Irregular vaginal bleeding is more likely to be due to endometritis than retained products of conception.
- Midwife or medical staff to discuss reasons for CS and possible complications before discharge home and document all discussions. The implications for future pregnancy should be documented. A postnatal follow-up should be arranged if required.
- Women who have had a CS are at increased risk of thromboembolic disease (both deep vein thrombosis and pulmonary embolism), so healthcare professionals need to pay particular attention to women who have chest symptoms (such as cough or shortness of breath) or leg symptoms (such as painful swollen calf).
- Women who have had a CS should resume activities such as driving a vehicle, carrying heavy items, formal exercise and sexual intercourse once they have fully recovered from the CS (including any physical restrictions or distracting effect due to pain)
- Healthcare professionals caring for women who have had a CS should inform women that after a CS they are not at increased risk of depression, post-traumatic stress symptoms, dyspareunia and faecal incontinence. However, CS does have an impact on establishing breastfeeding in the initial postpartum period and often delays Lactogenesis II (milk coming in) by several days. While women are in hospital after having a CS, give them the opportunity to discuss with healthcare professionals the reasons for the CS and provide both verbal and printed information about birth options for any future pregnancies. If the woman prefers, provide this at a later date.

3.6 The responsibility and role of the midwife in theatre

- The Midwife is responsible for the provision of care to the mother, birthing partner and baby pre and post-operatively, including the documentation.
- The midwife does not have to scrub to receive the baby in elective and emergency caesarean sections. Baby needs to be placed in the cot, draped with sterile drapes, by the operating surgeon.
- Check placenta and membranes, taking cord blood for cord pH and Coombs Test (if required). The cord pH is the responsibility of the Midwife receiving the baby unless arranged with surgeon (in which case double-clamp the cord). If baby is admitted to NNU or if indicated (e.g., prematurity / stillborn / abruption / chorioamnionitis), send placenta for histology.
- Clean and restock resuscitaire.
- During recovery the woman will be cared for by a Recovery staff nurse along with midwife or health care assistant.
- **Check that the Caesarean Section wound surveillance form is completed**

3.6.1 Care of the baby

- All babies are to remain with their mothers in theatre.

- Early skin-to-skin should be encouraged and facilitated. An MCA will attend theatre recovery for women having an Elective CS to facilitate skin-to-skin and early breastfeeding.
- Support to facilitate the self-attachment of baby ('breast crawl') should be given. Inform mother that this may take some time.
- If the baby is "at risk" of hypoglycaemia, ensure it is fed within one hour as per Hypoglycaemia of the Newborn guideline and has a RED hat applied.
- Babies born by CS are more likely to have a lower temperature therefore appropriate thermal care should be considered. This includes skin-to-skin contact with mother, ensuring baby is covered well and wearing a hat. Mum may require warmer or blankets to keep her temperature optimal, in that case, partner can provide skin to skin.
- If the mother has a regional block, she should be encouraged to hold her baby in skin-to-skin contact. Examine and weigh baby, but limit time away from mother to reduce impact on the 'breast crawl' reflexes. The baby should stay with the mother unless there is a clinical reason for them to be parted.

3.7 Record Keeping

In all cases a decision to proceed to CS should have been discussed with the woman including the benefits and risks of CS compared to vaginal birth and a written consent for the operation needs to be obtained. This should also be discussed with a Consultant Obstetrician when a CS is contemplated because of abnormal fetal heart rate pattern, fetal blood sampling should be offered if no contra-indications (Fetal Blood Sampling Policy). The following information should be recorded in the notes. There is a section in fluid balance/ assessment in eCare that requires completing as this forms part of our MSDS reporting.

- Indication for CS and factors influencing the decision.
- Time of decision
- Category of CS
- Analysis of risk factors that would indicate that Consultant Obstetrician and/or Anaesthetist should be involved at an early stage
- Consultant with whom decision discussed. In the case of 'Category 1 CS' the on-call Consultant Obstetrician should still be notified as soon as possible of the decision to transfer the woman to theatre**.**
- Any delay in performing a Category 1 or Category 2 CS should be documented in the birth record
- Datix form to be completed for all Category 1 CS.
- **Ensure that appropriate operation records are complete.**

4.0 Statement of evidence/references

- CMACE Report (2011) *Saving Mother's lives* 2006-2008 RCOG Press.
- Milton Keynes University Hospital NHS Foundation Trust: Enhanced Recovery Pathway Guideline, 2019
- National Institute of Clinical Excellence – *Caesarean Section Clinical Guideline* 2011, DOH, updated 2019
- RCOG Guideline no 28 (Feb 2007) *Thromboembolic disease in pregnancy and the puerperium: acute management*
- Postpartum Haemorrhage, Prevention and Management (Green-top Guideline No. 52) published: 16/12/2016.

- RCOG Good practice guidance No 11 *Classification of Urgency of Caesarean section –A Continuum of Risk*, April 2010

5.0 Governance

5.1 Document review history

Version number: 6.1		**Date:** August 2019		
Section Number	**Amendment**	**Deletion**	**Addition**	**Reason**
Appendix 2			Caesarean section booking form	New form

5.2 Consultation History

Stakeholders Name/Board	**Area of Expertise**	**Date Sent**	**Date Received**	**Comments**	**Endorsed Yes/No**
Rebecca Daniels	Consultant midwife			Accepted	Yes
Lydia Stratton-Fry	Labour Ward Matron			Accepted	Yes
Cath Hudson	Risk Midwife			Accepted	Yes
Mary Plummer	Matron			Accepted	Yes
Janice Styles	Matron			No comments	N/A
Julie Cooper	HOM			Accepted	Yes

5.3 Audit and monitoring

This Guideline outlines the process for document development will be monitored on an ongoing basis. The centralisation of the process for development of documents will enable the Trust to audit more effectively. The centralisation in recording documents onto a Quality Management database will ensure the process is robust.

Audit/Monitoring Criteria	**Tool**	**Audit Lead**	**Frequency of Audit**	**Responsible Committee/Board**
a) Pregnant women who have had 1 or more previous CS have a documented discussion of the option to plan a vaginal birth. b) Pregnant women who request a CS (when there is no clinical indication) have a documented discussion with members of the maternity team about the overall	Audit	Midwives and doctors as designated by audit leads	Every 2 years	Audit

risks and benefits of a CS compared with vaginal birth. c) Pregnant women who request a CS because of anxiety about childbirth are referred to a healthcare professional with expertise in perinatal mental health support. d) Pregnant women who may require a planned CS have consultant involvement in decision-making. e) Pregnant women having a planned CS have the procedure carried out at or after 39 weeks 0 days, unless an earlier delivery is necessary because of maternal or fetal indications. f) Women being considered for an unplanned CS have a consultant obstetrician involved in the decision. g) Women in labour for whom a caesarean section is being considered for suspected fetal compromise are offered fetal blood sampling to inform decision-making. h) Women who have had a CS are offered a discussion and are given written information about the reasons for their CS and birth options for future pregnancies. i) Women who have had a CS are monitored for postoperative complications. j) Percentage of CS where the woman receives prophylactic antibiotics / thromboprophylaxis k) Audit on Classification of CS l) Audit on decision to delivery interval for emergency CS				

5.4 Equality Impact Assessment

As part of its development, this Guideline and its impact on equality has been reviewed. The purpose of the assessment is to minimise and if possible remove any disproportionate impact on the grounds of race, gender, disability, age, sexual orientation, religion or belief, pregnancy and maternity, gender reassignment or marriage and civil partnership. No detriment was identified. Equality Impact assessments will show any future actions required to overcome any identified barriers or discriminatory practice.

Equality Impact Assessment			
Division	Women's and Children's	Department	Obstetrics

Person completing the EqIA	Erum Khan	Contact No.	
Others involved:		Date of assessment:	04/2020
Existing policy/service	Yes	New policy/service	No

Will patients, carers, the public or staff be affected by the policy/service?	Yes
If staff, how many/which groups will be affected?	Midwives, Anaesthetists, Doctors working in the Obstetric department, Maternity Care Assistants, Theatre staff

Protected characteristic	Any impact?	Comments
Age	NO	Positive impact as the policy aims to recognise diversity, promote inclusion and fair treatment for patients and staff
Disability	NO	
Gender reassignment	NO	
Marriage and civil partnership	NO	
Pregnancy and maternity	NO	
Race	NO	
Religion or belief	NO	
Sex	NO	
Sexual orientation	NO	

What consultation method(s) have you carried out?

Circulation by email
Guidelines meeting

How are the changes/amendments to the policies/services communicated?

By upload to the trust intranet

What future actions need to be taken to overcome any barriers or discrimination?

What?	Who will lead this?	Date of completion	Resources needed
Review date of EqIA			

Appendix 1: Elective Caesarean Section Risk Scoring Booking form

Elective Caesarean Section Booking Form

Surname:
Forename:
DOB:
Hospital No:
Or affix Patient Label

EDD:
Gestation:
Parity:
Tel:
Named Consultant:

Identify all risk factors
Select highest score as overall for patient
Maximum score for any one patient: 6

Maximum score to be booked on any one ELCS list: 6
Maximum 3 cases per ELCS list

Risk - Low	Circle	
Maternal Request	1	**Patient Score: 1**
Previous traumatic delivery	1	
Previous 3rd/4th degree tear	1	
Breech	1	
Gestational Diabetes	1	
Prematurity 34 to 37 weeks	1	

Risk – Moderate	Circle	
Type 1 or 2 Diabetes	2	**Patient Score: 2**
Prematurity 28 to 33+6 weeks	2	
Maternal red cell antibiotics requiring cross matched blood	2	
1 x previous CS	2	
Small or clinically non-significant fibroids	3	
Unstable or transverse lie	3	
BMI> 35	3	
Tubal ligation / salpingectomy/cystectomy	3	
2 x previous CS	3	**Patient Score: 3**
Prematurity under 28 weeks	3	

Risk – High	Circle	
Multiple pregnancy (MW	4	**Patient Score: 4**
Previous midline laparotomy	4	
Placenta Praevia	4	
High risk of abdominal adhe-	4	
Large or clinically significant	4	
BMI > 45	4	
3 x previous CS	4	
Patient declining blood prod-	4	
Spinal injury patient	4	

Risk -Very High	Circle	
BMI > 50	5	**Patient Score: 5**
4 or more previous CS	5	
Placenta accreta	6	**Patient Score: 6**

HIGHEST RISK SCORE	

Special Features	Tick	Specify Details
Consultant Obstetrician		
Anaesthetic review needed pre-op		
Antenatal steroids (<39wks gestation)		
Cross match / Cell Salvage (circle appropriately)		
Neonatal cot		
Other specialty (e.g General surgery / Urology)		

APPENDIX 2: Points to Ponder

1. Please consent the patient at the time of booking the patient on the list. Even if booking tentatively, consent needs to be taken.

2. If a plan for ELECTIVE c/s has been made in ward 9 during an inpatient episode, please book a date and consent as per usual.

3.If it is a failed ECV, please consent the patient for caesrean section at the time.

4. Please only book caesarean sections prior to 39+0 weeks for clear obstetric indications and after d/w a consultant.

5. Women undergoing c/s for breech presentation and no other obstetric reason need to be counselled that they will be sent home with a plan for vaginal delivery if the baby is cephalic at bedside scan on the morning of c/s.

6. All c/s booked prior to 38+6 weeks need to have steroids administered.

7. The Elective obstetric list gets printed for next day around mid day. If you are booking a patient on the elective list for the next day after 12:00, please bleep theatre 1327/1081 so that she can be put on the list. Continue to inform Sam Griffin / LilaRival in ANC, labour ward in charge as usual , please.