Clinical Procedural Document

Document Title: Elective and Emergency Caesarean Sections

This document is relevant for staff at: *(please indicate)*	**Luton Hospital site X**	**Bedford Hospital site**		**Both Hospital sites**
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Theatre team
Anaesthetists
Midwives
Circulated to all obstetricians and midwives

Is this document new or revised / or has minor amendments?
New – Replacing CG264 Non-Elective Caesarean Section and adding information on Elective Caesarean

Reason for minor amendments?

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Elective and Emergency Caesarean Sections

1. INTRODUCTION

Caesarean section (CS) is a major abdominal surgery with associated risks, therefore pregnant women should be provided with evidence-based information about CS during the antenatal period, as one in four women will have a CS.

The five most common indications for CS include failure to progress in labour, fetal compromise, previous CS, breech and maternal request.

Appropriate and expedient timing of caesarean section is necessary for good fetal and maternal outcome. If timing allows, a regional block is safer than general anaesthesia as it results in less maternal and neonatal morbidity.

If a trial of operative vaginal delivery is undertaken in theatre, the possibility of an emergency section needs to be anticipated therefore appropriate working regional blocks should be instituted and appropriate consent taken before the procedure begins.

The aim of this guideline is to ensure safety and consistency in the quality of care experienced by pregnant women who undergo a caesarean section. Where appropriate, separate guidelines indicating additional management should be used in conjunction with this guideline.

2. SHARED DECISION MAKING AND CONSENT

2.1 Provision of information

- The information during consent should include the following:
    1. Indication for CS
    2. What the procedure involves
    3. Benefits and risks
    4. Implications for future pregnancies and birth after CS.
- Each patient should have a consultation with an obstetric registrar or consultant in order to make an informed decision. An obstetric trainee SHO may complete the consultation and gain consent under supervision.
- Ensure the patient’s dignity, privacy; views and culture are respected, while considering the clinical situation.

- The benefits and risks of caesarean section should be discussed in accordance with RCOG Consent Advice 7 (Appendix- 4)
- Written consent (or verbal in exceptional circumstances like a Category 1 CS) must be obtained prior to transfer to theatre.
- A copy of the consent form must be offered to the patient.
- An interpreter must be used either in person or via 'Language Line' for those speaking a different language.
- Patients with disabilities or learning difficulties should be individually assessed for capacity prior to any decision making or taking of consent.

2.2 Patients who decline a caesarean section:

- A mother with full capacity is entitled to decline treatment such as CS even when it may appear to be safest mode of delivery. Document the factors based on which patient declines the CS.
- If out of hours, the consultant must be immediately informed when this situation arises. A second consultant opinion may be sought in such situations.

2.3 Elective caesarean section:

- The caesarean section should be booked using the relevant form (Appendix-1) around 36 weeks or earlier and submitted to the Antenatal Clinic Office.
- When steroids are required, appointments must be made with DAU or ward 31 (out of hours).
- The consultant obstetrician/ registrar should document the proposed plan and date for caesarean section in the notes.
- The patient will be contacted by the booking team to confirm the dates of caesarean section and preoperative assessments.

Elective caesarean section for maternal request:

Women, who request CS, when there is no clinical indication, should be offered the opportunity to explore the reasons behind the request in a non-judgemental way. Clear documentation of the reason for request, benefits and risks of caesarean section should be maintained.

If caesarean section is requested due to tocophobia or severe anxiety around childbirth (following abuse or previous traumatic birth), a referral to Ocean service should be offered (email- elft.bedlutonocean@nhs.net)
If vaginal birth is still not an acceptable option, two consultant obstetricians are required to approve the request.

Patient should also be offered a referral to the birth options clinic.

This should be clearly documented as informed maternal choice.

2.4 Non-elective caesarean section

All CS should be graded in accordance with NICE 2011 definitions:

CATEGORY	PREVIOUS NOMENCLATURE	DEFINITION	MAXIMUM DECISION TO DELIVERY INTERVAL TIME
1	Emergency	Immediate threat to life of woman or baby	30 minutes
2	Urgent	Maternal/ fetal compromise, which is not immediately lifethreatening.	75 minutes
3	Scheduled	No maternal/ fetal compromise but needs early delivery	Preferably daytime within 24 hours
4	Elective	Delivery timed to suit woman or staff	No timing limitations

If the obstetric registrar makes the decision, the indication and urgency of delivery must be addressed with the consultant obstetrician on call. If the obstetric registrar is occupied facilitating the birth another senior member of the team should inform the consultant as soon as practical.

- The Labour ward coordinator must be informed as soon as the decision and level of urgency for CS is confirmed. She would then alert the appropriate teams including the anaesthetist, theatre team and neonatologist.
- The time of decision and urgency of delivery must be clearly documented in the maternity notes using the categorisation sticker (Appendix 7).
- If there is any change in the clinical situation while waiting the case should be escalated to the obstetric registrar or consultant on call and recategorised.
- If oxytocin was being administered in labour, it should be stopped when a decision for delivery by CS is made.
- If the woman is nearly fully dilated before transfer to theatre, an examination under anaesthesia should be performed before proceeding to caesarean section.
- A Category 1 CS should be performed if there is a failed trial of operative vaginal delivery.

Delay in undertaking the caesarean section:

The decision to delivery interval depends on the categorisation of CS. If there is a delay, the time and reason for delay in undertaking the CS must be clearly

documented on the available sticker. An incident form should be completed if the delivery could not be achieved in the appropriate time-frame.

Category 1 caesarean section:

When a decision is made for Cat 1 CS, assistance should be summoned by contacting switchboard with information on which theatre the team should attend. The switch will put out a voice over message on the bleeps of the labour ward registrar (726), gynae registrar (028), SHO (140), consultant (515), senior midwife (550), anaesthetist (600), ODP (800), neonatal SHO (195) and neonatal registrar (731).
There is an additional WHO surgical checklist for all category 1 caesarean sections (Appendix 6). This needs to be completed on top of the routine maternity adapted WHO checklist (Appendix 5).

Opening a second obstetric theatre:
If the use of a second obstetric operating theatre is required out of hours, the consultant must be called in if non-resident. The Labour Ward and Theatre coordinators must be informed and SOP for Opening Extra Obstetric Theatre arrangements must be followed.

3. PREPARATION FOR CAESAREAN SECTION

3.1 Preparation for caesarean section (Category 4/elective)

All women should be invited to a preop appointment and provided with a pack that includes information on the following:

1. What caesarean section involves (Appendix 2)
2. MRSA (Appendix 3), Covid swabs
3. Blood tests (Full blood count, Group and save) 4. Notes for mother if listed in the am list include: Advice on no food from midnight, water up to 06:00 am Take 40mg Omeprazole oral tablet - one at 18:00 the evening before surgery and one at 06:00 on the morning of the surgery with sip of water To arrive on ward at 07:30
5. Notes for mother if listed in the pm list include: Advice on no food from 06:00 am, water up to 10:00 am Take 40mg Omeprazole oral tablet - one at 18:00 the evening before surgery and one at 06:00 on the morning of the surgery with sip of water

   To arrive on ward at 11:30

3.2 Preparation for Category 1 or 2 (non-elective) caesarean section

1. A recent full blood count and group and save should be sent unless done in the preceding 72 hours. If bloods are to be taken it would be appropriate to site a venflon at the same time
2. MRSA, Covid swabs should be obtained.
3. The mother should receive omeprazole. Route of administration should be discussed with the anaesthetist
4. Decision to wait for blood and swab results would depend on the urgency of the caesarean section

4. MANAGEMENT IN THEATRE AND CHECKLISTS

- All patients should wear patient identity wrist bands (x2)
- A surgical safety checklist (WHO) should be completed in presence of obstetrician, anaesthetist, ODP, midwife, theatre scrub team, recovery nurse and a neonatologist if required (Appendix 5)
- A team huddle should take place before transfer of patient to theatre (except Category 1and Category 2 caesarean sections).

4.1 Antibiotic prophylaxis

- Offer women prophylactic antibiotics at CS before skin incision

- The anaesthetist should give 1.5g Cefuroxime intravenously **before "knifeto-skin"**. This can be administered up to 30 minutes before the anticipated start to the procedure in the theatre

- Substitute 900mg Clindamycin intravenously, if there is a history of allergy to Penicillins or Cephalosporins. Add intravenous Teicoplanin or vancomycin (**after cord-clamping**) if high risk of methicillin-resistant *Staphylococcus aureus.*

4.2 Skin and Vaginal preparation

Skin prep:
An alcohol-based chlorhexidine skin preparation should be used. If allergic to chlorhexidine or unavailable, alcohol-based iodine skin preparation can be used.

Vaginal prep:
Aqueous iodine vaginal preparation should be used for all patients undergoing nonelective caesarean section, who have been in labour, to reduce the risk of endometritis. If unavailable or allergic to iodine, aqueous chlorhexidine vaginal preparation can be used.

4.3 Management specific to caesarean section under general anaesthesia

- Birth partner request to remain in Delivery Suite outside obstetric theatre.
- Insert urinary catheter, antiseptic skin preparation and surgical draping completed prior to induction of general anaesthesia.
- Ensure neonatal staff are present to help the midwife as babies may be born in poor condition.

4.4 Women's preferences during CS

Women's preferences for the birth, such as playing music in theatre, lowering the surgical drapes to see baby being born, birth partner trimming the cord, should be accommodated whenever possible. To maintain sterility we recommend partner trim the cord once baby is with the midwife.

4.5 At delivery

An indwelling urinary catheter should be inserted prior to surgery and should be left in situ at least until any regional anaesthesia has worn off and the woman is fully mobile. If case of any surgical complications that necessitate the catheter being left in for longer than usual, this must be clearly documented in the post-operative instructions section of the C/S proforma, which must be read by all members of staff involved in the care of the woman post-operatively.

Paired cord blood samples must be taken for all non-elective CS.

4.6 Care of the newborn

An appropriately trained practitioner (member of neonatal team) skilled in the resuscitation of a newborn should be present at CS performed under general anaesthesia or where there is suspected fetal compromise as these infants are a greater risk of needing resuscitation. Early skin-to-skin contact for mother and baby improves bonding and breast-feeding outcomes. The baby should therefore be given to the mother or her partner and not be removed from the mother to the crib/resuscitaire unless there is evidence of neonatal compromise. Performance of routine checks and weighing should follow the same procedure as at a vaginal birth.
Mothers who have had CS should be given additional support to establish breast feeding.

4.7 After delivery

The findings and procedure must be discussed with the woman and partner by the obstetrician. Implications for future delivery must be discussed and documented.

4.8 VTE prophylaxis

All women admitted in maternity should undergo a risk assessment for thrombo-embolic disease following the RCOG guideline for VTE. This should be reviewed for all women who undergo caesarean section. It is the responsibility of the surgeon and anaesthetist to undertake the risk assessment and ensure that LMWH/ TED stockings or alternative (Geko®/Flowtrons) is prescribed.

4.9 Record keeping

The documentation tool to record elective and emergency caesarean sections are different (Appendix 8- Pink elective CS documentation tool, Appendix 9- non-elective CS documentation tool). It is essential that the procedure is recorded and discharge letter is completed.

It is particularly important that all of the following are documented:

- Indication - should include ALL relevant factors leading to decision for caesarean section.
- The reasons for any delay in performing the procedure
- Clinical findings prior to CS and those found at the time of section
- Any intra-operative complications such as any extension of uterine incision, bladder or bowel trauma; and haemorrhage
- Post operative instructions especially management of haemorrhage or timing of catheter removal
- Prophylactic antibiotics given
- Thrombo-embolic disease assessment and need for LMWH – prescribe it if required
- Paired cord pH results for all non-elective CS (clearly document reason if not done)
- Suitability or otherwise for VBAC (if first C/S) – decisions that the woman is NOT suitable for VBAC may only be made after discussion with a consultant.
- If non-absorbable sutures or staples are used for wound closure, the postoperative plan and discharge letter should contain clear guidance on removal.
- If patient is suitable for midwifery-led discharge.

5. Auditable Standards

Standards to be audited	Lead for the audit	Frequency, audit Tool and Methodology	Reporting arrangements	Acting on recommendations and Lead (s)	Change in practice and lessons to be shared Dissemination of results/action plans.
Standards for elective caesarean section: 1. Indication, categorisation and timing of emergency caesarean sections. 2. Gestation at which elective caesarean sections are performed- should be at or after 39 weeks unless an earlier delivery is indicated due to maternal/ fetal reasons. 3. Consultant involvement in decision for caesarean (elective and emergency) 4. All patients should receive antibiotic and thrombo-embolic prophylaxis. 5. Decision to delivery time intervals for Category 1 – 30 minutes and Category 2- 75 minutes. 6. LSCS rate (elective and emergency)	Will be nominated by the maternity audit leads (Consultant or Midwife) as in the Forward Audit Plan.	This will be performed as per the forward audit plan. Data will be collected using an audit proforma (designed by the auditors and approved by the maternity audit leads. The auditors will analyse the data and develop recommendations and action plans from the audit results.	The audit results, recommendations and action plans will be presented either at an audit meeting, a Clinical Governance day or at a Risk and Audit meeting.	The O & G Risk and Governance Committee will approve recommendations and action plans to be implemented within a specific time frame. The auditors will implement and monitor action plans with support from the clinical leads, senior midwives and pertinent groups. There will be sixmonthly update of action plans. The O & G Risk and Governance Committee will oversee the implementation and monitoring of the action plans.	The audit results and approved action plans will be disseminated by the maternity audit team to all relevant staff groups, pertinent meetings and through the Delivery Suite newsletter, Audit and Guidelines newsletter, the Senior Staff meetings, the Delivery Suite Forum and by email. The Trust Audit and Clinical Effectiveness Group will be updated regularly by the maternity audit team.

6. REFERENCES

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7. A

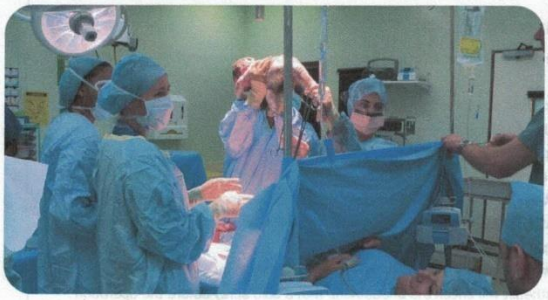
Patient label:	Consultant:
	EDD: Date of C/S:
Gestation at C/S:	BMI: Nimbus mattress needed: Y / N Ordered: Y / N
Primary indication: Estimated length: 60-90 / 90-120 / >120	Tubal Ligation: Y/N Theatre Time: ☐ Morning list ☐ Afternoon List
X Match: Y / N No of units: Historical or Current Blood Group Antibodies Y / N Special Blood requirements: Irradiated products Y / N Previous Transfusion Y / N Cell Salvage: Y / N Booked: Y / N Jehovah Witness: Y / N	Language: Interpreter booked: Y / N / NA Ref No:
Obstetrics	**Anaesthetics**
Previous Abdominal Surgery: Y / N	Pre op Anaesthetic review needed: Y / N Referral: Y / N
Previous PPH: Y / N Previous Transfusion: Y / N	Low platelets: Y / N Low HB: Y / N
Current or previous diagnosed DVT/PE: Y / N	Previous spinal surgery: Y / N
Currently on Tinzaparin: Y / N	Previous admission to HDU/ITU Previous anaesthetic difficulties: Y/N
Low Lying Placenta: Y / N Suspected Acreta / Percreta: Y / N	Diabetes YES/No Type 1/Type 2/GDM diet controlled/metformin/insulin Chronic Respiratory problems: Y / N Cardiac problems: Y / N
Special Comments:	Special Comments:

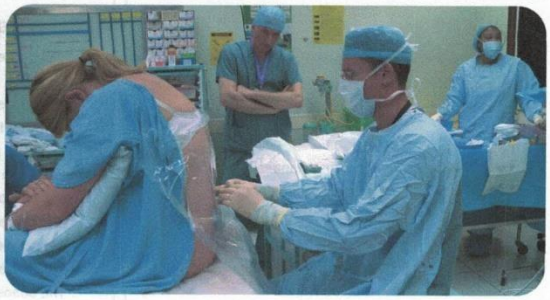
LabourPains.com

Reliable information from doctors, midwives & mothers on pain relief & anaesthesia choices for your baby's birth

Labour Pains - Caesarean section information sheet

The aim of this leaflet is to let you know what to expect if/when you undergo a caesarean section.





When might I need a caesarean section and what should I expect?

Elective (planned)

This is when your caesarean section is planned in advance.

Preparation:

Ahead of your caesarean section:

- You will see a midwife, obstetrician and anaesthetist to go through what to expect
- You will also have routine observations done and blood tests to check you are not anaemic and confirm your blood group in case you need a blood transfusion during or after your operation
- You will be given some tablets to reduce the acid in your stomach and prevent sickness
- You will be given information about when to stop eating and drinking in preparation for the caesarean section

In some maternity units, women undergoing elective caesarean section will be in something called an Enhanced Recovery Programme which is a modern approach to help people recover more quickly after having surgery.

On the day:

When you check into the maternity unit, you will be prepared for the operating theatre:

- You will be given name bands and special stockings to reduce the risk of blood clot formation in your legs
- We will perform routine observations
- We will check you have a valid consent form
- We will check you have had your pre-medication tablets and when you last ate and drank anything
- You and your birth partner will be given theatre clothes

Any questions you have regarding your caesarean section will be answered at this stage.

Emergency (unplanned)

This is when your obstetrician recommends a Caesarean section, usually when you are already in labour. If it is very urgent (usually because there is a sudden problem with your baby), then some of the preparations we would normally do may be changed or even left out.

Who will be in the operating theatre?

There are a lot of people who work in the operating theatre:

- You will see a midwife, obstetrician and anaesthetist to go through what to expect
- You will also have routine observations done and blood tests to check you are not anaemic and confirm your blood group in case you need a blood transfusion during or after your operation
- You will be given some tablets to reduce the acid in your stomach and prevent sickness
- You will be given information about when to stop eating and drinking in preparation for the caesarean section

Depending on the type of anaesthetic you receive, your birth partner may or may not be able to join you in the operating theatre (see below).

What happens when I arrive in theatre?

A member of staff will check you in to theatre. If you don't already have one, a cannula will be inserted on the hand or arm so that the anaesthetist can give you fluids and medicine. The theatre team will attach some routine monitoring devices on your body, arm and finger - these do not hurt. Then the theatre team will also do at team introduction and run through a routine safety checklist recommended by WHO (World Health Organisation) prior to start.

The Anaesthetic: types of anaesthetic

There are two main types of anaesthetic: you will either be awake (regional anaesthetic) or asleep (general anaesthetic).

Regional anaesthetic

What is it?

Most mothers choose to be awake for delivery, which is usually safer for you and your baby and allows you and your birth partner to experience the birth together.

Spinal:

- This is the most commonly used anaesthetic. It involves an injection of local anaesthetic and strong
- painkillers into the back using a very fine needle. The medicine goes into the fluid that contains your nerves which normally give sensation to your tummy and legs.

CSE (Combined spinal epidural):

- This is when a spinal is combined with an epidural.

'Epidural top-up':

- Sometimes you may require a caesarean section during your labour and you may already have an epidural in.
- If the epidural has been working well, the anaesthetist will inject medicine into your epidural.

What to expect?

- You will be asked to either sit, slouching over a pillow or lie on your side, curling your back.
- The anaesthetist will spray your back with a cold sterilising solution and inject a local anaesthetic into your lower back to numb your skin.
- From this point onwards, you should just feel pressure or pushing on your back.
- When the anaesthetic is being injected, you may feel tingling going down one leg, it is usually nothing to worry about but you should tell the anaesthetist if this happens.
- The procedure will take a few minutes but if it is difficult to find the right position for the needle, it may take longer.
- Your bottom and legs will begin to feel warm and heavy or may start to tingle.
- The anaesthetist will check the anaesthetic with a cold spray before the operation begins.
- Sometimes your blood pressure can fall with the injection and this can make you feel sick. Please mention this as it can be treated very easily with medicines.

General anaesthetic

What is it?

You will be asleep while the obstetrician carries out the Caesarean section. It may be needed for emergency caesarean when the baby needs to be delivered very urgently, or if regional anaesthetic isn't suitable for you (due to blood clotting disorders or abnormalities in your back), if you experience pain during your surgery or if you prefer to be asleep.

What to expect?

Most of the preparations are similar to those for a regional anaesthetic. You will lie down on the operating table which is tilted to the left. You will be asked to drink an antacid medicine and a tight fitting oxygen mask will be placed over your face. The anaesthetist will inject the medicine into your cannula. Just before you go to sleep, you will feel a slight pressure on your neck.

What happens during the operation and how long will it take?

If you are awake for your operation: You may feel pulling and pressure but you should not feel any pain. Some women have described it as feeling like 'someone doing the washing up inside my tummy'. The anaesthetist will talk to you during the operation and give you more pain relief if needed. Sometimes a general anaesthetic is required. Delivery of the baby can take only minutes but it will take longer if you have had previous operations. The baby will be dried and examined by the midwife and/or a paediatrician. If all is well, we encourage skin to skin and will help you do this. After the birth, the obstetrician will remove the placenta and close the wound. This can take about another 30 minutes or more to complete.

After the caesarean section and pain relief

You may be given a suppository to relieve pain when the anaesthetic wears off. If you have had a regional anaesthetic, the medicines you received in your spinal or CSE or epidural top-up will last for a few hours. If you have had a general anaesthetic, you may be given some local anaesthetics to numb some nerves in your tummy. When the operation is finished you and your baby will be moved on a bed to the recovery area for routine monitoring for approximately 30minutes. You will be encouraged to take your first drink at this point if you are not feeling sick. The midwife can also give you tablets such as paracetamol, and an anti-inflammatory such as ibuprofen.

You can get more information on different types of anaesthetics, their benefits and risks from: **www.labourpains.com**. Please also see our 'Birthing Partner Information for Caesarean section' leaflet.

What is MRSA?

We all carry germs (such as bacteria) on our skin and in our noses. This means that we are **'carriers'** and it doesn't normally cause any problems. One of the common bacteria that about a quarter of people carry from time to time is called **Staphylococcus aureus**, often called 'staph' for short.

Occasionally, 'staph' on the skin cause **minor infections** such as boils and infection of cuts. These can be easily treated with antibiotics. Sometimes however, 'staph' cause more serious infections, such as wound infections after surgery.

Over the last 50 years 'staph' bacteria have become **resistant to a number of antibiotics**, including penicillin and meticillin. This resistance means that the antibiotic will not kill the bacteria. These resistant forms of 'staph' bacteria are known **M**eticillin-**R**esistant **S**taphylococcus **A**ureus, or **MRSA**.

Although **MRSA** has become resistant to some of the antibiotics that are used to treat 'staph' infections, there are still a number of other antibiotics that can be used successfully.

MRSA does not normally harm healthy people, including pregnant women, children and babies. It is mainly passed on by human contact e.g. skin of hands or via equipment, clothing or possessions that have not been cleaned properly.

What is an MRSA screen?

An MRSA screen is a quick and painless procedure. Swabs are taken wiping the skin and the inside of the nose with a cotton wool bud, which is then sent to the laboratory for examination. In addition we will swab any wound or broken areas on the body, e.g. leg ulcers or eczema. A member of staff will normally perform this procedure for you and it will only take a few minutes.

The swabs are sent to the Microbiology laboratory to be processed, and it will be between 48 and 72 hours before the results are known.

Will I be screened for MRSA during my pregnancy?

We only screen people that are at higher risk of having MRSA. You will need a screen for MRSA during week 34-36 of pregnancy if you meet any of the following criteria:

- You are booked for a Caesarean Section
- You have been transferred from another hospital
- You have had MRSA in the past

How will I know if I have MRSA?

Your midwife or GP/Obstetric doctor will inform you if your result is positive.

What are the implications for my pregnancy and baby?

If you are pregnant and fit and healthy, there are not additional risks from MRSA and there would be no need for any special precautions at home.

Breast feeding is safe for you and your baby, however in common with the usual advice given to breastfeeding mothers if you notice certain symptoms you should contact your GP, midwife or health Visitor for advice. These include:

- **Painful breasts**
- **Red patches or a sense of lumpiness around the breasts.**
- **Flu like symptoms including a temperature.**

These symptoms indicate you may have mastitis but this may or may not be MRSA. It is important that you tell your healthcare professional that you have had MRSA so that they can treat you appropriately.

If I am a carrier of MRSA, how will my MRSA be treated?

MRSA carriage can be treated using antiseptic body wash, shampoo and nasal cream with the aim of reducing the MRSA carried on the body.

NH
Bedfordshire Hospit
NHS Foundation

Consent Form 1

Patient Agreement to Investigation or Treatment

Patient details (or pre-printed label)

NHS Organisation..... Patients first names.....

Patient's surname/family name ..... Responsible health professional.....

Date of Birth..... Job title .....

NHS number *(or other identifier)* ..... Special requirements.....

☐ Male Female ☐ *(eg other language/other communication method)*

Name of proposed procedure or course of treatment (include brief explanation

medical term not clear).....

.....

.....

Statement of health professional (to be filled in by health professional with appropriate knowledge of proposed procedure, as specified in consent policy)

I have explained the procedure to the patient. In particular, I have explained:

The intended benefits.....

.....

CAESAREAN SECTION: SERIOUS OR FREQUENTLY OCCURRING RISKS: Maternal: Haemorrhage, 5:1000, Bladder injury, 1:1000, Bowel injury , Infection, 6:100(common), Thromboembolic disease, 4–16:10 000 (rare), Persistent wound and abdominal discomfort in the first few months after surgery 9:100 (common), Risk of repeat CS when vaginal delivery attempted in subsequent pregnancies, 1:4 (very common), Re-admission to hospital, 5:100. **Fetal:** lacerations, 1-2:100 (common). **Future pregnancies:** Risk of uterine rupture, 2-7:1000, placenta praevia and placenta accreta, 4 – 8:1000 and ante-partum stillbirth,1-4:1000. **Serious Risks:** Emergency hysterectomy, 7-8:1000 (uncommon), Need for further surgery at a later date, including curettage, 5:1000. Admission to intensive care unit, 9:1000. Death, approximately 1:12 000 (very rare).

Any extra procedures which may become necessary during the procedure

☐ blood transfusion .....

☐ other procedure (please specify).....

.....

I have also discussed what the procedure is likely to involve, the benefits and risks of any available alternative treatments (including no treatment) and any particular concerns of this patient

☐ The following leaflet/tape has been provided .....

This procedure will involve:

☐ general and/or regional anaesthesia ☐ local anaesthesia ☐ sedation

Signed.....Date .....

Name (PRINT).....Job title.....

Contact details (if patient wishes to discuss options later).....

Statement of Interpreter (where appropriate)

I have interpreted the information above to the patient to the best of my ability and in a way in which I believe s/he can understand.

Signed.....Date .....

Name (PRINT).....Job title.....

Copy accepted by patient: yes / no (please ring)

YELLOW COPY: CASE NOTES WHITE COPY: PATIENT

PC~001068~Consent Form

Statement of patient

Patient Identifier/label

Please read this form carefully. If your treatment has been planned in advance, you should already have your own copy, which describes the benefits and risks of the proposed treatment. If not, you will be offered a copy now. If you have any further questions, do ask - we are here to help you. You have the right to change your mind at any time, including after you have signed this form.

I agree to the procedure or course of treatment described on this form.

I understand that you cannot give me a guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.

I understand that I will have the opportunity to discuss the details of anaesthesia, with an anaesthetist before the procedure, unless the urgency of my situation prevents this. (This only applies to patients having general or regional anaesthesia.)

I understand that any procedure in addition to those described on this form will only be carried out if it is necessary to save my life or to prevent serious harm to my health.

I have been told about additional procedures which may become necessary during my treatment. I have listed below any procedures which I do not wish to be carried out without further discussion.

.....

.....

.....

Patient's signature.....Date.....

Name (PRINT).....

A witness should sign below in the patient is unable to sign but has indicated his or her consent. Young people/children may also like a parent to sign here (see notes).

Signed.....Date .....

Name (PRINT) .....

Confirmation of consent (to be completed by a health professional when the patient is admitted for the procedure, if the patient has signed the form in advance).

On behalf of the team treating the patient, I have confirmed with the patient that s/he has no further questions and wishes the procedure to go ahead.

Signed.....Date .....

Name (PRINT).....Job title.....

Important notes: (tick If applicable)

☐ See also advance directive/living will (e.g. Jehovah's Witness form)

☐ Patient has withdrawn consent (ask patient to sign/date here).....

Luton and Dunstable University Hospital WHO SURGICAL SAFETY CHECKLIST Version : 2/2016

LUTON & DUNSTABLE UNIVERSITY HOSPITAL
CLINICAL EXCELLENCE, QUALITY & SAFETY

For Maternity use during caesarean section list **On completion please place in patients notes**

PRE-OPERATIVE BRIEFING

- ☐ Patient: Name, DOB, Hospital number
- ☐ Confirm all team members have introduced themselves by name and role
- ☐ Obstetrician review of case
- ☐ Anaesthetic review of case
- ☐ Scrub review : include sterility, availability of sets,

Check the following

- ◊Haemoglobin & Platelets Yes /No
- ◊Group Save available Yes / No
- ◊Is crossed matched Blood required Yes / No
- ◊Number of Cross Matched units available
- ◊Position of Placenta confirmed
- ◊ASA Grade :

☐ **Is There a Risk of MOH**

- ◊ Low
- ◊ Moderate RETAINED SWABS YES/NO
- ◊ High

- ◊Is Syntocinon infusion Required Yes / No
- ◊Difficult airway predicted Yes / No
- ◊Is a Neonatologist required Yes /No
- ◊Is a NICU bed required Yes /No

COVID STATUS— Low—Med— high

Anaesthetist Name & Signature :

Anaesthetic Practitioner Name & Signature :

Date : Theatre :

TIME OUT (STOP CHECK)

Before surgical intervention

Confirm the following

☐ **Consent form completed & Present :**

- ◊Patient ID
- ◊Identity
- ◊Procedure

☐ Neonatal Resuscitaire has been checked Yes / No

☐ Pressure areas checked Yes / No

☐ Is appropriate monitoring in place?

☐ Anaesthesia safety check complete?

- ◊ Patient : Known Allergies ? Yes / No
- ◊Diathermy applied Yes / NA
- ◊ Patient Warming Yes / No

☐ Has DVT prophylaxis (Check risk stratification)

☐ Prophylactic antibiotics been given Yes / NA

Surgeon Says :

"Before we proceed, does anyone have any concerns ?"

Lead Surgeon Name :

Surgeon Signature :

Patient Label

SIGN OUT

Before any Team member leaves the Theatre

PAUSE FOR GAUZE

- ☐ Is the instruments, swabs, needle counts correct Yes / NO
- ☐ Procedure recorded correctly in Register & Computer Yes / NO
- ☐ Any pack or Bakri Balloon in Situ & does patient require Red Wrist band Yes / N/A
- ☐ Is the baby Labelled? Yes / No
- ☐ Is there a specimen & is it labelled & correct fixative ?
- ☐ VTE risk assessment form completed? Yes / No
  - ◊ VTE Score?.....
- ☐ Pressure areas re-checked Yes / NO
- ☐ Estimated blood loss?.....

Circulating Practitioner Name & Signature :

Debrief

Whole surgical team discusses :

Equipment problems that need to be addressed?

Key concerns for patient recovery and management?

What could have been done to make this case safer or more efficient?

Scrub Handover to Recovery

- ☐ WHO document completed & confirmed in Register
- ☐ Scrub Practitioner handover to Recovery completed

Scrub Practitioner Name & signature

☐ Informed Recovery of Retained Packs / Balloon Yes / NA

Recovery Practitioner Name & signature :

Luton & Dunstable WHO Checklist for Category 1 Caesarean Sections Obstetric/Anaesthetic/Maternity Theatre Team: Version 1 BG/MH 1/2020

SIGN IN (Led by Obstetrician on arrival in Theatre)

SITUATION

- ☐ State Indication for Category 1 CS
- ☐ Cat 1 Bleep gone out Y/N?

RECOMMENDATION

- ☐ Immediate delivery or ☐ Step down
- ☐ Regional or ☐ General Anaesthetic (team discussion)

Hamilton Half-way Check (Post-delivery of Baby)

- ☐ Antibiotics given
- ☐ Patient warming
- ☐ Oxytocin infusion
- ☐ Group + Save sent?

BACKGROUND

- ☐ State Patient's Name & Gestational Age
- ☐ Position of placenta
- ☐ Medical conditions
- ☐ Time of last meal/drink
- ☐ On anticoagulants (e.g. Tinzaparin)
- ☐ Allergies (Document here!)

OTHER Considerations

- ☐ Catheter inserted
- ☐ Flowtrons applied
- ☐ Diathermy pad applied (Correctly)

ANY CONCERNS/SPEAK UP NOW (document here)!

Name of Obstetrician Leading SBAR:

Signature:

ASSESSMENT

- ☐ State Fetal & Maternal heart rate
- ☐ HB and Platelet count (if available)

Patient Label

Sign Out:	Surgeon (Operating)	Anaesthetist	ODP/RN	Scrub Practitioner
Name:	_____	_____	_____	_____
Signature:	_____	_____	_____	_____

Categorisation for Delivery

Time of decision for delivery					
Expected delivery mode (circle)	Trial		CS		
Category of delivery mode	1	2	1	2	3
Time of transfer to theatre					
DDI					
Signature		**Date**		**Time**	
Review at 30mins if delay (circle)	Yes		No		
Reason for delay					
Second Theatre required (circle)	Yes		No		
DDI					
Signature		**Date**		**Time**	

Categorisation for Delivery

Time of decision for delivery					
Expected delivery mode (circle)	Trial		CS		
Category of delivery mode	1	2	1	2	3
Time of transfer to theatre					
DDI					
Signature		**Date**		**Time**	
Review at 30mins if delay (circle)	Yes		No		
Reason for delay					
Second Theatre required (circle)	Yes		No		
DDI					
Signature		**Date**		**Time**	

Categorisation for Delivery

Time of decision for delivery					
Expected delivery mode (circle)	Trial		CS		
Category of delivery mode	1	2	1	2	3
Time of transfer to theatre					
DDI					
Signature		**Date**		**Time**	
Review at 30mins if delay (circle)	Yes		No		
Reason for delay					
Second Theatre required (circle)	Yes		No		
DDI					
Signature		**Date**		**Time**	

Categorisation for Delivery

Time of decision for delivery					
Expected delivery mode (circle)	Trial		CS		
Category of delivery mode	1	2	1	2	3
Time of transfer to theatre					
DDI					
Signature		**Date**		**Time**	
Review at 30mins if delay (circle)	Yes		No		
Reason for delay					
Second Theatre required (circle)	Yes		No		
DDI					
Signature		**Date**		**Time**	

Elective Caesarean Section Documentation Tool

Addressograph

Date: **Time:**

Indication for Caesarean Section: Primary (please document):

Secondary (please document):

Pre-op Feta Heart Auscultation: Yes / No

Bladder catheterized: Yes / No. In & out / Indwelling

Surgeon's Name: *(please circle below appropriate grade of staff)*
ST1 ST2 ST3 ST4 ST5 ST6 ST7 Clinical fellow Consultant

Assistant's Name: *(please circle below appropriate grade of staff)*
ST1 ST2 ST3 ST4 ST5 ST6 ST7 Clinical fellow Consultant

Was an Obstetric Consultant involved in decision making? Yes / No **Name:**

Name of Consultant responsible for Elective Caesarean list:

Anaesthetist and grade:

Anaesthesia: CSE / Spinal / Epidural / GA

Effectiveness: Excellent / Good / Not effective If **GA: Reason(s)**

Neonatologist required: Yes / No **Neonatologists name and grade:**

Time in Theatre: _____ **Anaesthesia Time:** Start: _____ Finish_____

Start Time: _____ **Time Baby delivered**: _____ **Placenta**_____ **Time Finished**_____

Presentation: cephalic / breech /others **Skin Incision**: Transverse supra-pubic / Midline

Liquor: Clear / blood stained / meconium / no liquor

Uterine Incision: Transverse Lower Segment / Classical / Other

Delivery of baby: Manual / Wrigley's Forceps / Breech extraction

Position of occiput at delivery: Left ☐ Right ☐ ☐ **(if cephalic)**

Delivery of placenta: CCT / Manual Complete? Yes / No

Cavity swabbed: Yes / No **Ovaries / Tubes:** Normal / Abnormal

Cavity empty: Yes / No **Para-colics swabbed:** Yes / No

Uterine Closure: 1 layer / 2 layers Vicryl / other suture

Peritoneal Closure: Pelvic Yes / No Vicryl / other suture
Abdominal Yes / No Vicryl / other suture

LSCS documentation tool V7June 2015

Sheath Closure: Vicryl / other suture
Fat Closure: Yes / No
Skin Closure: Prolene / Vicryl / monocryl / other

Vagina emptied? Yes / No **EBL:** _____ **Code Red:** Yes / No. **Drain?** Yes / No

Syntocinon infusion given? Yes / No / Not indicated **Prophylactic antibiotic given?** Yes / No

Next pregnancy: Is VBAC advised? Yes / No / With Caution

	Pre-procedure			Post-procedure		
	Amount	1st sig	2nd sig	Amount	1st sig	2nd sig
Number of swabs counted						
Additional swabs used						
Number of instruments counted						
Number of needles counted						

Swab Alert	1st sig	2nd sig	Date of Removal
Swab left insitu (document amount)			
Red wrist band applied (per item)			
Bakri Balloon insitu			
Red wrist band applied (per item)			

Additional Comments:

Post-op instructions:

Midwifery led Discharge following EL-LSCS				
	Following Criteria met?	**Yes**	**No**	**N/A**
Signature, Name and designation of the operator _____ _____ _____	No Antenatal risk factors			[redacted]
	No intraoperative risk factors / complications			
	No Anaesthetic complications			
	Estimated blood Loss upto 800mls			
	No Post-operative risk factors / complications			
	Catheter to be removed 12 hrs post-op / on mobilizing			
	VTE score completed			[redacted]
	Clexane prescribed (if required)			
	Discharge letter completed			[redacted]
	Analgesia prescribed			
	Procedure explained to patient and plan of future pregnancies discussed as applicable			
	Suitable for midwifery led discharge			[redacted]
	Suture (if applicable) to be removed day..... post op			

LSCS documentation tool V7June 2015

Non-Elective Caesarean Section Documentation Tool

Caesarean Section Documentation Tool

Date: **Time:**

Indication for Caesarean Section: Primary:

Secondary:

Grade at time of decision:

Category 1 ☐ **(Emergency)** - Immediate threat to the life of mother or fetus – as soon as possible
Category 2 ☐ **(Urgent)** – Fetal / Maternal compromise which is not immediately life threatening - within 75 mins
Category 3 ☐ **(Scheduled) -** No maternal / fetal compromise but needs early delivery - within 24hours
Category 4 ☐ **(Elective)** – Delivery timed to suit woman and / or staff

CTG: Normal Suspicious Pathological

Consent: Verbal / Written

Examination: Abdominal palpation: (including 5th palpable)

VE in theatre: YES / NO **Presentation:** _____

Cervical dilatation _____ cm **Fetal position:** _____ **Station:** _____

Caput: None / + / ++ /+++ **Moulding:** Non / + / ++ / +++

Liquor: Clear / blood stained / meconium / no liquor

Bladder catheterized: Yes / No. In & out / Indwelling

Surgeon's Name: *(please circle below appropriate grade of staff)*
ST1 ST2 ST3 ST4 ST5 ST6 ST7 Clinical fellow Consultant

Assistant's Name: *(please circle below appropriate grade of staff)*
ST1 ST2 ST3 ST4 ST5 ST6 ST7 Clinical fellow Consultant

Was an Obstetric Consultant involved in the decision? Yes / No

Was the Consultant present on delivery suite? Yes / No

Consultant's Name:

Anaesthetists and grade:

Time anaesthetist informed: **Anaesthesia:** CSE / Spinal / Epidural / GA

Effectiveness: Excellent / Good / Not effective If **GA: Reason(s)**

Neonatologist required: Yes / No **Neonatologists name and grade:**

Decision Time: _____**Time in Theatre**: _____**Anaesthesia Time:** Start: _____Finish_____

Start Time: _____ **Time Baby delivered**: _____ **Placenta**_____ **Time Finished**_____

Presentation: cephalic / breech /others

Skin Incision: Transverse supra-pubic / Midline

Uterine Incision: Transverse Lower Segment / Classical / Other

Delivery of baby: Manual / Wrigley's Forceps / Breech extraction

Position of occiput at delivery: Left  Right  ☐ **(if cephalic)**

Delivery of placenta: CCT / Manual Complete? Yes / No

Cavity swabbed: Yes / No **Ovaries / Tubes:** Normal / Abnormal

Cavity empty: Yes / No **Para-colics swabbed:** Yes / No

Uterine Closure: 1 layer / 2 layers Vicryl / polysorb / other suture

Peritoneal Closure: Pelvic Yes / No Vicryl / polysorb / other suture
Abdominal Yes / No Vicryl / polysorb / other suture

Sheath Closure: Vicryl / polysorb / other suture
Fat Closure: Yes / No
Skin Closure: Prolene / Vicryl / monocryl / other

Vagina emptied? Yes / No **EBL:** _____ **Code Red:** Yes / No. **Drain?** Yes / No

Syntocinon infusion given? Yes / No / Not indicated **Prophylactic antibiotic given?** Yes / No

Clexane prescribed? Yes / No / Not indicated

Swabs, needles and Instrument counts

Pre-procedure	Amount	1st signature	2nd signature

INVASIVE DEVICE:	Pre- Procedure	Post-Procedure
No of sharps		
Number of swabs		
Tampons		
Number of Red string		
Number of Instruments		
Signature 1 Date/Time		
Signature 2 Date/Time		

	Amount	1st signature	2nd signature

SWAB ALERT

		1st signature	2nd signature
Swab left insitu (document amount)			
Date of removal			
Red wrist band applied (per item)			
Bakri Balloon insitu			
Date of removal			
Red wrist band applied (per item)			

Additional comments please document over page

Comments / Intra-operative complication(s)

Condition of baby: **APGAR:** _____ at 0 mins; _____ at 5 mins; _____ at 10 mins

Cord blood gases: Arterial; pH _____ BE _____

Venous; pH _____ BE _____

Post-Op Instruction (tick as required) and recorded in the clinical notes when completed:

- **Complete VTE risk assessment**
- **Early mobilisation, Hydration (IV &/or oral)** **Anti Embolism Stockings**
- **Enoxaparin for 7 days postnatal**
- **FBC day 1 or 2, catheter out when mobilising.** **Removal of suture day 5 if indicated**
- **Next pregnancy: Is VBAC advised? YES / NO / With Caution**

Print Name (& Grade)_____ **Signature** _____