

Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women

Unique Identifier:	OBS/GYNAE/GUID/017				
Version Number:	9.1				
Type of Update / Status:	Ratified with Moderate Changes				
Divisional and Department:	Women's Health Services, Families Division				
Author / Originator and Job Title:	Sister S Woodhall, Team Leader ward D Miss S Goh, Consultant Obstetrician and Gynaecologist Dr Reem Nasur, Consultant Obstetrician and Gynaecologist Janet Danson-Smith, Patient Experience Coordinator Holly Martinez, Team Leader Delivery Suite Dr R Cross, Consultant Anaesthetist Mr Johnson Amu, Consultant Obstetrician and Gynaecologist				
Replaces:	OBS/GYNAE/GUID/017, Version 9, Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women				
Description of amendments:	Amendment at section 4.2.3 and Appendix 2 to telephone pre-op consultation				
Approved by:	Dr Eric Mutema, Consultant				
Approved Date:	V9.1 01/04/2021				
Issue Date:	01/04/2021				
Review Date from Date of Approval:	1 Year <input type="checkbox"/>	2 Years <input type="checkbox"/>	3 Years <input checked="" type="checkbox"/> 26/11/2023	4 Years <input type="checkbox"/>	5 Years <input type="checkbox"/>

Version Control Sheet

This must be completed and form part of the document appendices each time the document is updated and approved

Date dd/mm/yy	Version	Author	Reason for changes
26/11/20	9	Sister S Woodhall, Team Leader ward D Miss S Goh, Consultant Obstetrician and Gynaecologist	General review and update to Appendix 7
01/04/21	9.1	Dr Reem Nasur, Consultant Obstetrician and Gynaecologist	Amendment at section 4.2.3 and Appendix 2 to telephone pre-op

Version Control Sheet			
		Janet Danson-Smith, Patient Experience Coordinator Holly Martinez, Team Leader Delivery Suite Dr R Cross, Consultant Anaesthetist Mr Johnson Amu, Consultant Obstetrician and Gynaecologist	consultation

Consultation / Acknowledgements with Stakeholders		
Name	Designation	Date Response Received
Richard Cross	Consultant Anaesthetist	
Allan Monks	Consultant Anaesthetist	
Chris Dunkley	Consultant Anaesthetist	
Lisa Roberts	Maternity Theatre Sister	
Lisa Fitzgerald	Maternity Matron	
Mr Agha	Consultant Obstetrician	
Mr Amu	Consultant Obstetrician	V9.1 01/04/2021
Mr Arthur	Consultant Obstetrician	
Miss Chetan	Consultant Obstetrician	
Miss Goh	Consultant Obstetrician	
Miss Haslett	Consultant Obstetrician	09/11/2020
Mr Mutema	Consultant Obstetrician	
Miss Omer	Consultant Obstetrician	
Holly Martinez	Delivery Suite Team Leader	
Kath Thomas	AN Services Manager	V9.1 01/04/2021
Julie Drayson	Community Midwifery Team Leader	
Steph Woodhall	Team Leader Ward D	10/11/2020
Alison Powell	PD Midwife	
Dr Sharran Grey	Haematology Consultant Clinical Scientist	30/11/2020
Helen Sampson	Senior Medicines Information Pharmacist	17/12/2020

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
<i>Do you have the up to date version? See the intranet for the latest version</i>		

CONTENTS

Version Control Sheet.....	1
Consultation / Acknowledgements with Stakeholders.....	2
1 Introduction / Purpose.....	4
2 General Principles / Target Audience	4
3 Definitions and Abbreviations.....	4
4 Guideline.....	4
4.1 Introduction	4
4.2 Elective Caesarean Section.....	5
4.2.1 Complex surgical or high risk obstetric Caesarean section	5
4.2.2 Referral to centre offering advanced surgical techniques.....	5
4.2.3 Pre-operative assessment	5
4.2.4 Maternal request for Elective Caesarean Section	6
4.3 Emergency Caesarean Section.....	7
4.3.1 Classification of urgency including agreed timescale.....	7
4.3.2 Documenting the reason for performing Grade 1 and Grade 2 Caesarean Sections by the person making the decision	7
4.3.3 Inclusion of the Consultant on Call when making the decision to perform a Caesarean Section	7
4.3.4 Documenting any reasons for delay in undertaking the Caesarean Section...	7
4.3.5 Antenatal Steroids	7
4.4 Blood Ordering.....	8
4.5 Anaesthesia	8
4.6 Fetal Monitoring	8
4.7 Prophylactic Antibiotics	9
4.8 Delivery of Placenta.....	9
4.8.1 Tranexamic Acid	9
4.8.2 Placenta investigations.....	9
4.8.3 Paired Cord Blood Samples.....	9
4.9 Thromboprophylaxis.....	10
4.10 Care of the Mother in the First 24 Hours Following Delivery	10
4.10.1 Recovery	10
4.10.2 Frequency of observations on the ward–	10
4.10.3 Additional observations	10
4.11 General Postoperative Care	11
4.12 Discussion Re Implication for Future Pregnancies	11
5 References and Associated Documents	12
Appendix 1: Elective Section List.....	14
Appendix 2: Pre-Op Assessment	16
Appendix 3: Guidelines For Care For The Following 24 Hours, Including Frequency Of Observations.....	18
Appendix 4: Patient Controlled Analgesia (PCA) Monitoring Chart.....	19
Appendix 5: Intrathecal / Epidural Morphine / Diamorphine Monitoring Chart.....	19
Appendix 6: Equality Impact Assessment Form	20

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

1 Introduction / Purpose

To optimise the care of women who undergo caesarean section.

2 General Principles / Target Audience

This guideline applies to Midwives, Nurses, Student Midwives, Health Care Assistants and Medical staff working within Blackpool Teaching Hospitals NHS Foundation Trust.

3 Definitions and Abbreviations

BMI	Body Mass Index
BTL	Bilateral tubal ligation
IOL	Induction of Labour
IV	Intravenous
LLP	Low Lying Placenta
MOEWS	Modified Obstetric Early Warning Score
MRSA	Methicillin Resistant Staphylococcal Aureous
NHS	National Health Service
OSATS	Objective structured assessment of technical skill
PACU	Post Anaesthetic Care Unit
PAS	Placenta Accreta Spectrum
PCA	Patient Controlled Analgesia
VBAC	Vaginal Birth After Caesarean

4 Guideline

4.1 Introduction

Where caesarean section is indicated for the following reasons the consultant should attend in person:

- Major placenta praevia.
- Placenta accreta spectrum (1) (Transabdominal and Transvaginal Scanning for Low Lying Placentas, RAD/US/PROT/008).
- Massive abruption

Where the caesarean is for the following reasons, the consultant should attend in person or should be immediately available if the trainee on duty has not been assessed and signed off by OSATS (Objective structured assessment of technical skill) as competent, where these are available:

- Body Mass Index (BMI) more than 40 at booking
- Intrauterine fetal death.
- At full dilatation (or greater than 8cm if prolonged labour)
- For transverse lie

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
Do you have the up to date version? See the intranet for the latest version		

- Less than 32 weeks gestation
- 2 or more previous caesarean sections.

4.2 Elective Caesarean Section

Refer to Appendix 1.

4.2.1 Complex surgical or high risk obstetric Caesarean section

Patients should be informed that advanced surgical treatment such as vascular (**Ligation of uterine or internal iliac artery**) and/or radiological (**interventional radiology-embolisation**) support are not available on site. Also refer to PAS guideline.

4.2.2 Referral to centre offering advanced surgical techniques

Woman with a history of previous Caesarean section, associated with abnormal or adherent placenta are at increased risk of major obstetric haemorrhage. Refer to PAS guideline.

Women who decline blood / blood products are at increased risk of the effect of major obstetric haemorrhage.

They should be offered antenatal referral and planned delivery in centres within the region where elective and emergency advanced surgical treatments (vascular and/or interventional radiology) are readily available e.g. St Mary's Hospital Manchester. (Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women, OBS/GYNAE/GUID/017) (2; 3)

- It is the responsibility of the consultant obstetrician to document agreed management plan in the woman's health record.
- If the woman declines referral to another unit after adequate counselling, measures should be put in place in anticipation of her delivery in the unit.

4.2.3 Pre-operative assessment

In most circumstances the woman will have a telephone pre op consultation the week before their planned procedure and the Pre-Op Assessment form completed and filed in the patients hospital record.

See Appendix 2 for pre-op checklist.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

4.2.4 Maternal request for Elective Caesarean Section

When a woman requests a caesarean section explore, discuss and record the specific reasons for the request.

- If a woman requests a caesarean section when there is no other indication, discuss the overall risks and benefits of caesarean section compared with vaginal birth and record that this discussion has taken place Include a discussion with other members of the obstetric team (including the obstetrician, midwife and anaesthetist) if necessary to explore the reasons for the request, and ensure the woman has accurate information.
- When a woman requests a caesarean section because she has anxiety about childbirth, offer referral to a healthcare professional with expertise in providing perinatal mental health support to help her address her anxiety in a supportive manner.
- Ensure the healthcare professional providing perinatal mental health support has access to the planned place of birth during the antenatal period in order to provide care.
- For women requesting a caesarean section, if after discussion and offer of support (including perinatal mental health support for women with anxiety about childbirth), a vaginal birth is still not an acceptable option, offer a planned caesarean section.
- An obstetrician unwilling to perform a caesarean section should refer the woman to an obstetrician who will carry out the caesarean section.

For Perinatal Mental Health Blackpool self-referral form see Supporting Minds Team access link: <https://www.bfwh.nhs.uk/our-services/community-services/supporting-minds/>

For Perinatal Mental Health Fylde and Wyre self-referral form see Minds Matter access through Tel: 01253 955943 or: <https://www.lancashirecare.nhs.uk/Mindsmatter>

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
<i>Do you have the up to date version? See the intranet for the latest version</i>		

4.3 Emergency Caesarean Section

4.3.1 Classification of urgency including agreed timescale

It is imperative that the Obstetrician performing the operation documents the urgency of the caesarean section. Each urgent / emergency caesarean section must be classified appropriately and documented in the birth record as follows:

Grade 1	Immediate threat to life of woman or fetus	Delivery should be achieved < 30 minutes
Grade 2	Maternal or fetal compromise which is not immediately life threatening	Delivery should be achieved within 75 minutes
Grade 3	No maternal or fetal compromise but needs early delivery	N/A
Grade 4	Delivery timed to suit woman or service needs	N/A

4.3.2 Documenting the reason for performing Grade 1 and Grade 2 Caesarean Sections by the person making the decision

As a minimum the Obstetrician making the decision to perform a Grade 1 or Grade 2 caesarean section must document the reason for the caesarean section in the woman's birth record.

4.3.3 Inclusion of the Consultant on Call when making the decision to perform a Caesarean Section

The decision for caesarean section must be taken after full discussion with the Consultant on call, unless doing so would cause delay and would therefore be life threatening to the woman or fetus. This discussion must be documented in the birth record by the Obstetrician making the decision.

4.3.4 Documenting any reasons for delay in undertaking the Caesarean Section

If there is a delay in performing the caesarean section and delivery is not achieved within the required time frame as outlined in section 4.3.1, the reason for the delay must be documented in the woman's birth record by the Obstetrician performing the caesarean section.

4.3.5 Antenatal Steroids

All women undergoing Caesarean Section (Grade 3 and 4) prior to 39/40 gestation should be offered antenatal steroids at least 24 hours prior to caesarean section.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

4.4 Blood Ordering

For Elective / Emergency caesarean section cases, unless the pregnancy has been complicated, blood must be taken for group and save. Those patients who require cross-matching are detailed below.

Condition	Number of Units of Blood to be ordered
Placenta praevia	2 units
Placenta Accreta Spectrum	4 units
Previous antepartum haemorrhage or postpartum haemorrhage	2 units
Multiple pregnancy	2 units
Clotting disorders	Doctor decision
A haemoglobin less than 10 g/dcl	2 units
3 or more previous caesarean section	2 units
Presence of a uterine fibroid with a diameter \geq 10cm – even though the indication for the Caesarean section is not the fibroid	2 units

Blood will normally be available within 20 minutes of the blood arriving in the blood transfusion laboratory if the patient meets the criteria for electronic cross matching. This decision will be made by Blood Bank.

4.5 Anaesthesia

Regional anaesthesia is the preferred method, but in some situations a General Anaesthetic may be appropriate for caesarean section.

4.6 Fetal Monitoring

The midwife should auscultate the fetal heart for women having a grade 3 or 4

- Following administration of regional anaesthetic prior to commencement of surgery and document in the birth record.
- Prior to skin preparation and induction of anaesthetic and document in the birth record.

For Grade 1 and grade 2 emergency caesarean sections, continuous fetal monitoring must be continued up to skin preparation prior to surgery.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

4.7 Prophylactic Antibiotics

Antibiotics to be given pre-incision.

- Give 1.5g Cefuroxime.
- If allergic to Penicillin, give Clindamycin (600mg Intravenous (IV) single dose) pre-incision AND Gentamicin (3mg/kg) after cord clamping.
- Add in **metronidazole** if long labour pre-incision (all 2nd stage, failed instrumental)

The above must be documented in the Anaesthetic record by the anaesthetist.

4.8 Delivery of Placenta

- A slow intravenous injection of 5 International Units of Oxytocin (Syntocinon) is given by the Anaesthetist following the birth of the infant.
- Following the delivery of the placenta an oxytocin (Syntocinon) infusion may be required, this will be decided according to patient need by the Obstetrician.
- The infusion is commenced by the Anaesthetist and will be as follows:
- 40 International Units of Oxytocin (Syntocinon) is diluted in 500mls of 0.9% Sodium Chloride running at 125mls per hour.

4.8.1 Tranexamic Acid

All women should receive **prophylactic tranexamic acid** 1g IV after cord clamping and delivery of the placenta unless medically contraindicated.

This should not delay the use of oxytocin.

4.8.2 Placenta investigations

As a minimum, all placentas from stillbirths, fetal growth restriction (FGR – below 10th centile with abnormal fetal growth curve during pregnancy), immaturity (less than 32+0 completed weeks gestation), and cases of severe fetal distress requiring admission to a neonatal intensive care unit (NICU), maternal pyrexia ($>38^{\circ}\text{C}$) and late miscarriages (20+0 to 23+6 completed weeks gestation) should be referred for full pathological examination including histology.

4.8.3 Paired Cord Blood Samples

The midwife must ensure that paired cord blood samples are taken for all emergency caesarean sections and the result recorded in the birth record.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

4.9 Thromboprophylaxis

- If there is insufficient time prior to emergency surgery to fit compression stockings, they should be fitted in recovery; and Flowtrons used during surgery.
- Following surgery all women who have had a caesarean section must have the Postnatal VTE risk assessment form completed and thromboprophylaxis prescribed.

4.10 Care of the Mother in the First 24 Hours Following Delivery

4.10.1 Recovery

Refer to Appendix 6 Post Anaesthetic Care Unit (PACU) Discharge Criteria, including Maternity (CORP/GUID/026 (4)).

One to one care is provided in the recovery area until the woman has airway control, cardio-respiratory stability and can communicate.

4.10.2 Frequency of observations on the ward–

The midwife will ensure:

- Half Hourly Modified Obstetric Early Warning Score (MOEWS), pain and sedation score for 2 hours, then hourly for 4 hours, then 4 hourly if stable. See appendix 3
- Record the observations on the MOEWS chart
- See bladder care guideline - <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-077.docx> (5)

4.10.3 Additional observations

4.10.3.1 Patient Controlled Analgesia (PCA)

Record all observations on the PCA Monitoring Chart (Appendix 4).

- Monitor all observations at least hourly for the first 4 hours and then 4 hourly if stable. Increase frequency of observations if any score 2 or greater: Take action if 2 or greater.
- Record hourly PCA tries / good and the PCA total.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
<i>Do you have the up to date version? See the intranet for the latest version</i>		

4.10.3.2 If intrathecal diamorphine administered

Record all observations on the Intrathecal Morphine / Diamorphine Monitoring Chart (Appendix 3) (6).

- OBSERVATIONS: Monitor all observations at least hourly for first 4 hours, 2 hourly for a further 8 hours, and then 4 hourly if stable. Increase the frequency of observations if any score recorded as 2 or greater.
- Take action if 2 or greater (see Appendix 5).

4.11 General Postoperative Care

Care plan for post emergency caesarean section / post elective section can be found in the theatre notes.

- If the woman is breast-feeding, provide additional support.
- Women who are feeling well and have no complications can eat or drink when they feel hungry or thirsty
- After regional anaesthesia remove the epidural catheter/spinal needle immediately unless contraindicated.
- Offer non-steroidal anti-inflammatory analgesics to reduce the need for opioid analgesics
- Remove the wound dressing as per post-operative plan.
- Women who are recovering well are afebrile and do not have complications following caesarean sections should be offered early discharge (after 24 hours) from hospital and follow up at home.

4.12 Discussion Re Implication for Future Pregnancies

A discussion regarding suitability for Vaginal Birth After Caesarean (VBAC) will be performed by a member of the medical team prior to discharge from hospital. Women (see transfer to midwifery care proforma – Appendix 4 of the Handover of Care (Multidisciplinary Communication between The Maternity Team on Delivery Suite and within the hospital)

<http://fcsp.xfyldcoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-PROC-011.docx>
(7)

This will be documented in the woman's health record. The woman will also receive written documentation if she has required an emergency Caesarean section (see Appendix 5).

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

5 References and Associated Documents

1. **BTHFT - Protocol.** Ultrasound: Transabdominal and Transvaginal Scanning for Low Lying Placentas. [Online] 09 05 2019. [Cited: 26 11 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/RAD-US-PROT-008.docx>. RAD/US/PROT/008.
2. **BTHFT - Guideline.** Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women. [Online] 19 10 2018. [Cited: 09 04 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-017.docx>. OBS/GYNAE/GUID/017.
3. —. Post-Partum Haemorrhage. [Online] 24 04 2018. [Cited: 13 03 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-113.docx>. OBS/GYNAE/GUID/113.
4. **BTHFT - Procedure.** Post Anaesthetic Care Unit (PACU) Discharge Criteria, including Maternity. [Online] 18 04 2019. [Cited: 07 05 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-GUID-026.docx>.
5. **BTHFT - Guideline.** Bladder Care in Labour and Post-partum, including Urinary Retention and Haematuria. [Online] 30 08 2016. [Cited: 20 02 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-077.docx>. OBS/GYNAE/GUID/077.
6. **BTHFT - Form.** Intrathecal / Epidural Morphine Diamorphine Monitoring Chart. [Online] 27 12 2013. [Cited: 07 05 2020.] http://fcsp.xfyldecoast.nhs.uk/H/HealthRecordsLibrary/Documents/14_23062%20VS2027%20Inthrecal.pdf.
7. **BTHFT - Procedure.** Handover Of Care (Multidisciplinary Communication Between The Maternity Team On Delivery Suite and within the hospital). [Online] 14 08 2020. [Cited: 30 11 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-PROC-011.docx>. OBS/GYNAE/PROC/011.
8. —. Consent to Examination or Treatment. [Online] 01 06 2018. [Cited: 08 01 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-PROC-102.docx>.
9. —. Management of Staphylococcus Aureus (SA) - Meticillin-Resistant (MRSA) and Meticillin-Sensitive (MSSA). [Online] 01 02 2020. [Cited: 04 03 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-PROC-408.docx>.
10. —. Framework for the Safe Delivery of a Blood Transfusion Service. [Online] 13 09 2018. [Cited: 03 04 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-PROC-449.docx>.
11. —. Protocol for the Provision of Blood and Blood Products during Adult Haemorrhage, Massive Transfusion and Management of Active Bleeding. [Online] 12 12 2018. [Cited: 07 05 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/CORP-PROT-081.docx>.
12. —. Refusal of Blood and Blood Products in Pregnancy (Including Jehovah's Witness). [Online] 28 11 2017. [Cited: 05 02 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-035.docx>.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Do you have the up to date version? See the intranet for the latest version		

13. —. Anaesthetic Referral Process for Obstetric Patients. [Online] 26 04 2016. [Cited: 05 02 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-074.docx>.
 14. —. Venous Thromboembolism - Antenatal, Intrapartum and Postnatal Risk Assessments and Prophylaxis. [Online] 20 06 2019. [Cited: 05 02 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Documents/OBS-GYNAE-GUID-103.docx>.
 15. **BTHFT - Leaflet.** Preparing for your Elective Caesarean. [Online] 22 09 2015. [Cited: 07 05 2020.] <http://fcsp.xfyldecoast.nhs.uk/trustdocuments/Information%20Leaflets/PL197.pdf>.
 16. **BTHFT - Form.** Patient Controlled Analgesia Monitoring Chart. [Online] 27 06 2017. [Cited: 07 05 2020.] http://fcsp.xfyldecoast.nhs.uk/H/HealthRecordsLibrary/Documents/62028_BLAC_VS2026_PROOF3.pdf.
 17. **NICE.** Caesarean section - Clinical guideline [CG132]. [Online] Last updated: 04 September 2019. [Cited: 30 04 2020.] <https://www.nice.org.uk/guidance/cg132>.
 18. —. Caesarean section - Quality standard [QS32]. [Online] Published date: 11 June 2013. [Cited: 07 05 2020.] <https://www.nice.org.uk/guidance/qs32>.
 19. —. Intrapartum care for healthy women and babies - Clinical guideline [CG190] . [Online] Last updated: February 2017. [Cited: 20 02 2020.] <https://www.nice.org.uk/guidance/cg190>.
 20. **SIGN.** Prevention and management of venous thromboembolism. [Online] 2011. [Cited: 07 05 2020.] <https://www.sign.ac.uk/sign-122-prevention-and-management-of-venous-thromboembolism>.
 21. **BTHFT - Internet.** Supporting Minds. [Online] [Cited: 07 05 2020.] <https://www.bfwh.nhs.uk/our-services/supporting-minds/>.
 22. **Lancashire & South Cumbria NHS Foundation Trust.** Minds Matter. [Online] [Cited: 07 05 2020.] <https://www.lscft.nhs.uk/Mindsmatter>.
 23. **Lancashire and South Cumbria NHS Foundation Trust.** MindsMatter. [Online] [Cited: 30 11 2020.] <https://www.lscft.nhs.uk/Mindsmatter>.
- MBRRACE-UK - November 2019. Saving Lives, Improving Mothers' Care Lessons learned to inform maternity care from the UK and Ireland Confidential Enquiries into Maternal Deaths and Morbidity 2015-17.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

Appendix 1: Elective Section List

The Elective Section List- Grade 4 caesarean sections which have been planned and women have attended pre-op.

Elective sections days- MONDAY- WEDNESDAY- FRIDAY

Plan to perform 3 elective sections per day using a rag rated system

Staffing

- Consultant Anaesthetist 3 sessions per week 08:00-13:00 *
- Consultant Obstetrician 3 sessions per week 08:00-13:00*
- 2x midwives both 0.6wte (one from establishment & one*)
- 2 x ODP both 0.6wte (one from establishment & one*)
- HCA 0.6wte

Timings of the Day

- 07:00- women1/2/3 arrive onto Delivery Suite to be admitted by 2 midwives, HCA and prepared for theatre.
- Complete antenatal VTE risk assessment
- Complete consent form
- Omeprazole oral 20mg before caesarean prescribed and given
- Take blood for FBC, G+S or Crossmatch (see section 3.4)
- 08:00- Consultant Obstetrician and Consultant Anaesthetist to review all 3 women- notes in rooms, packs made up, scanner in room if needed, blood results printed.
- 08:30- Team Brief- present
 1. Consultant Anaesthetist
 2. Consultant Obstetrician
 3. Scrub Nurse
 4. ODP
 5. HCA
 6. 2 Midwives
- 08:45- Woman in theatre, sign-in WHO form.
- TIMINGS NOW APPROXIMATE DUE TO LENGTH OF SURGERY
 - 10:00- Woman1 out of theatre and recovered in delivery room 7 (this room will be left free on Monday/Weds/Fri- this will free up recovery and ease of space for an emergency case in the back up theatre.) during this time theatre is cleaned and prepped for second section.
 - 10:30- Woman2 in theatre with Midwife2, whilst midwife1 is in room 7 recovering and doing paperwork for the birth.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

Appendix 1: Elective Section List

- Sign in and WHO form.
 - 11:00- Woman1 onto Ward D by midwife1, then make sure woman3 is ready.
 - 11:30- Woman2 is recovered in room 7 by midwife2.
 - 11:45- Woman3 in theatre with midwife1- sign in and WHO.
 - 13:00- Woman3 out of theatre and theatre session ends.

Issues to take into consideration-

If an emergency takes place on delivery suite- back up theatre will be used and the on call obstetric team will perform.

The patient/woman who required emergency caesarean section will be recovered in the recovery area.

Emergency tasks will NOT be performed by the elective team.

If there are not three (3) elective (grade 4) caesarean sections it can be discussed on the day by the team whether grade 3 (ie failed IOL) can be performed on the elective list.

If the theatre session runs over 13:00 an incident must be submitted for audit.

Delivery suite manager will assist in the initial weeks for the timings of the surgery.

A dedicated team will be sourced.

Basic	Intermediate	Complex (2 spaces?)
Maternal request Breech/malpresentation Previous Traumatic Delivery Previous shoulder dystocia Primary herpes 3 rd trimester 1 previous CS	2 previous CS Previous fibroid surgery Known fibroids Multiple birth BMI 40+ Additional procedures i.e., BTL	3+ previous CS Low lying placenta Previous major abdominal surgery BMI 50+

*CNST Funded

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

Appendix 2: Pre-Op Assessment

PRE -OP ASSESSMENT FORM



Blackpool Teaching Hospitals

NHS Foundation Trust

FILE IN SECTION 4

Abbreviations used in this document to be listed here with the full description:

BMI Body Mass index
C/S Caesarean Section

**Write patient details or affix
Identification label**

Hospital Number:
Name:
Address:

Postcode:
Date of Birth:
NHS Number:

Reason for C/S

Booking Weight.....kg Height..... cm

BMI.....

Gravida.....

Parity.....

Gestation.....

Presentation.....

Consultant:

Placenta..... Fetal

Movements.....

Anaesthetic Review YES/NO

Consented Procedure:

Allergies:

Medical/ Surgical History

Document Library ID: ?

Appendix 2: Pre-Op Assessment

Obstetric History	
Family History including any family history of problems with anaesthetics?	
Medications (regular and in pregnancy)	
Refer patient to trust intranet to read information leaflet "Preparing for your caesarean section" (see section 7)	
Refer patient to trust intranet to read information leaflet "Anaesthetic options"	
Refer patient to trust intranet to read information leaflet "Receiving a blood transfusion"	

Does the patient (or if applicable: parent/guardian/carer) understand who their health record information may be shared with to support their care? Yes / No

Signature:

Print Name:

Designation:

Date and Time (use 24hour Clock):

Document Library ID: ?

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
<i>Do you have the up to date version? See the intranet for the latest version</i>		

Appendix 3: Guidelines For Care For The Following 24 Hours, Including Frequency Of Observations

Recovery

One to one care is provided by the Anaesthetic and Recovery Team in the recovery area until the woman has airway control, cardio-respiratory stability and can communicate. The midwife is in attendance in Recovery to support the woman and baby.

Frequency of observations for the first 24hours (after the recovery period) following Caesarean section– the midwife will ensure:

- Modified Obstetric Early Warning Score (MOEWS), pain and sedation score are recorded
 - half hourly for 2 hours
 - hourly if stable for 4 hours
 - then 4 hourly for 24 hours.
- Record the observations on the MOEWS chart

Additional observations - Patient Controlled Analgesia (PCA)

- Continue observations as described above 4.6.2.
- Record hourly PCA delivered/demanded
- Record PCA total 4 hourly.
- Record the observations on the MOEWS chart

Additional observations - If intrathecal diamorphine administered

- Modified Obstetric Early Warning Score (MOEWS), pain and sedation score are recorded hourly for 12 hours and document on MOEWS chart.

Additional observations - If intrathecal morphine

- Modified Obstetric Early Warning Score (MOEWS), pain and sedation score hourly for 24 hours and document on MOEWS chart.

Frequency of observations for the first 24hours (after the recovery period) following Regional or General Anaesthesia excluding Caesarean section – the midwife will ensure:

- Modified Obstetric Early Warning Score (MOEWS), pain and sedation score are recorded on transfer to the ward, as a minimum, unless the management plan advises otherwise.
- Record the observations on the MOEWS chart

Guidelines for Care

- Provide support to help women start breast feeding as soon as possible.
- Give prescribed medication as the woman requires.
- Encourage mobilisation as soon as the woman's condition allows.
- Follow post-operative care plan and liaise with multi-disciplinary team members as appropriate.

Thromboprophylaxis

- Complete the Postnatal Thromboprophylaxis Risk Assessment form.
- Administer prescribed thrombo –prophylaxis.

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
<i>Do you have the up to date version? See the intranet for the latest version</i>		

Appendix 4: Patient Controlled Analgesia (PCA) Monitoring Chart

FORM TO BE PRINTED ON PINK PAPER

http://fcsp.xfyldecoast.nhs.uk/H/HealthRecordsLibrary/Documents/62028_BLAC_VS2026_PROOF3.pdf

Appendix 5: Intrathecal / Epidural Morphine / Diamorphine Monitoring Chart

FORM TO BE PRINTED ON GREEN PAPER

http://fcsp.xfyldecoast.nhs.uk/H/HealthRecordsLibrary/Documents/14_23062%20VS2027%20Inthrecal.pdf

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
<i>Do you have the up to date version? See the intranet for the latest version</i>		

Appendix 6: Equality Impact Assessment Form					
Department	Departmental Wide	Service or Policy	Guideline	Date Completed:	November 2017
GROUPS TO BE CONSIDERED Deprived communities, homeless, substance misusers, people who have a disability, learning disability, older people, children and families, young people, Lesbian Gay Bi-sexual or Transgender, minority ethnic communities, Gypsy/Roma/Travellers, women/men, parents, carers, staff, wider community, offenders.					
EQUALITY PROTECTED CHARACTERISTICS TO BE CONSIDERED Age, gender, disability, race, sexual orientation, gender identity (or reassignment), religion and belief, carers, Human Rights and social economic / deprivation.					
QUESTION	RESPONSE		IMPACT		
	Issue	Action	Positive	Negative	
What is the service, leaflet or policy development? What are its aims, who are the target audience?	The Procedural Document is to ensure that all members of staff have clear guidance on processes to be followed. The target audience is all staff across the Organisation who undertakes this process.	Raise awareness of the Organisations format and processes involved in relation to the procedural document.	Yes – Clear processes identified		
Does the service, leaflet or policy/ development impact on community safety	Not applicable to community safety or crime	N/A	N/A		
<ul style="list-style-type: none"> • Crime • Community cohesion 					
Is there any evidence that groups who should benefit do not? i.e. equal opportunity monitoring of service users and/or staff. If none/insufficient local or national data available consider what information you need.	No	N/A	N/A		
Does the service, leaflet or development/ policy have a negative impact on any geographical or sub group of the population?	No	N/A	N/A		
How does the service, leaflet or policy/ development promote equality and diversity?	Ensures a cohesive approach across the Organisation in relation to the procedural document.	All policies and procedural documents include an EA to identify any positive or negative impacts.			
Does the service, leaflet or policy/ development explicitly include a commitment to equality and diversity and meeting needs? How does it demonstrate its impact?	The Procedure includes a completed EA which provides the opportunity to highlight any potential for a negative / adverse impact.				
Does the Organisation or service workforce reflect the local population? Do we employ people from disadvantaged groups	Our workforce is reflective of the local population.				
Will the service, leaflet or policy/ development	N/A				
<ul style="list-style-type: none"> i. Improve economic social conditions in deprived areas ii. Use brown field sites iii. Improve public spaces including creation of green spaces? 					
Does the service, leaflet or policy/ development promote equity of lifelong learning?	N/A				
Does the service, leaflet or policy/ development encourage healthy lifestyles and reduce risks to health?	N/A				
Does the service, leaflet or policy/ development impact on transport? What are the implications of this?	N/A				
Does the service, leaflet or policy/development impact on housing, housing needs, homelessness, or a person's ability to remain at home?	N/A				
Are there any groups for whom this policy/ service/leaflet would have an impact? Is it an adverse/negative impact? Does it or could it (or is the perception that it could exclude disadvantaged or marginalised groups?	None identified				

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017
Revision No: 9.1	Next Review Date: 26/11/2023	Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Do you have the up to date version? See the intranet for the latest version		

Appendix 6: Equality Impact Assessment Form				
Does the policy/development promote access to services and facilities for any group in particular?	No			
Does the service, leaflet or policy/development impact on the environment	No			
<ul style="list-style-type: none"> During development At implementation? 				
ACTION:				
Please identify if you are now required to carry out a Full Equality Analysis		Yes	No	(Please delete as appropriate)
Name of Author:	Mr Amu	Date Signed:		November 2017
Signature of Author:				
Name of Lead Person:		Date Signed:		
Signature of Lead Person:				
Name of Manager:	Mr Mutema	Date Signed:		November 2017
Signature of Manager				

Blackpool Teaching Hospitals NHS Foundation Trust		ID No. OBS/GYNAE/GUID/017 Title: Caesarean Section - Pre Operative, Intrapartum and Postpartum Management of Pregnant Women
Revision No: 9.1	Next Review Date: 26/11/2023	
<i>Do you have the up to date version? See the intranet for the latest version</i>		