

BMI \geq 60 and pregnant people of higher weight > 130kg Delivery Suite Management Standard Operating Procedure

V1.0

April 2025

Table of Contents

1. Introduction	3
2. Purpose of this Standard Operating Procedure	3
3. Ownership and Responsibilities	4
3.3. Role of the Managers	4
3.4. Role of Individual Staff	4
4. Standards and Practice	4
4.1. Pre-delivery Planning	4
4.2. Logistical Considerations on Delivery Suite (DS)	5
4.3. General Management Principles on Delivery Suite	6
4.4. Obstetric Considerations	7
4.5. Anaesthetic Considerations for Labour Analgesia	8
4.6. Anaesthetic Considerations for Caesarean Section Delivery (CS)	9
4.7. General Anaesthesia (GA) for Caesarean Section Delivery (CS)	11
4.8. Postpartum Considerations	12
5. Dissemination and Implementation	13
6. Monitoring compliance and effectiveness	13
7. Updating and Review	15
8. Equality and Diversity	15
Appendix 1. Governance Information	16
Appendix 2. Equality Impact Assessment	18
Appendix 3. Increased risks associated with obesity	21

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

1. Introduction

- 1.1. This document sets out procedure for the peripartum management of pregnant people with BMI ≥ 60 or a weight ≥ 130 kg, as this group of people are extremely high risk for anaesthetic and obstetric complications.
- 1.2. It is informed by national consensus experiences and opinion from the Obstetric Anaesthetists' Association forum.
- 1.3. Obesity (BMI ≥ 30) of any kind confers increased risk to the pregnant person and foetus in the peripartum period for multiple reasons: see Appendix 3.
 - Obesity is a systemic disease associated with multiple medical comorbidities that increase risk (Table 1).
 - Obesity is associated with increased incidence of maternal and neonatal complications, including prolonged labour and increased risk of requiring emergency Caesarean Section delivery (CS) (Table 2).
 - There is increased risk of neuraxial failure and longer neuraxial procedure times.
 - There is increased risk associated with general anaesthesia (GA) (Table 3).
 - There is increased risk of postpartum complications, including venous thromboembolism (VTE).
 - Obesity has been identified as a risk factor in anaesthesia-related deaths in the Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK (MBRRACE-UK) reports.

These risks are exaggerated in pregnant people with identified morbid obesity and high body weights.

2. Purpose of this Standard Operating Procedure

- 2.1. To provide the procedure for the Multi-Disciplinary Team (MDT) on the safest peripartum management of pregnant people with a BMI ≥ 60 or a weight ≥ 130 kg to minimise the risk of adverse events in the high-risk population group.
- 2.2. The MDT comprises midwifery staff, obstetricians and anaesthetists who provide peripartum care to pregnant people.
- 2.3. For simplicity of language the standard operating procedure (SOP) uses the term women throughout, but this should be taken to also include people who do not identify as women but who are pregnant, in labour and in the postnatal period. When discussing with a person who does not identify as a woman, please ask them their preferred pronouns and then ensure this is clearly documented in their notes to inform all health care professionals.

3. Ownership and Responsibilities

- 3.1. This SOP relates to all members of the multidisciplinary team involved in the care of pregnant or postpartum women with a BMI ≥ 60 kg/m² or a weight ≥ 130 kg.
- 3.2. The Obstetric Anaesthetic Lead is responsible for ensuring the SOP remains up to date and relevant.

3.3. Role of the Managers

Line managers are responsible for:

- Line managers are responsible for ensuring this procedure is followed.
- Ensuring staff have access to and receive the appropriate training.

3.4. Role of Individual Staff

All staff members are responsible for:

- Ensuring they are familiar with this policy and all other policies linked to [Increased Body Mass Index \(BMI\) in Pregnancy, Labour and Post Delivery Clinical Guideline](#).

4. Standards and Practice

4.1. Pre-delivery Planning

- 4.1.1. When BMI ≥ 60 or booking weight ≥ 130 kg arrange a formal consultation with a senior obstetric anaesthetist from 26 weeks gestation to enable discussions and implementation of weight-management options in pregnancy.
- 4.1.2. The anaesthesia plan for delivery should be clearly documented and available in the electronic record.
- 4.1.3. This consultation should include:
 - 4.1.3.1. A thorough medical history and screening for co-morbidities, with further investigation and optimisation if needed. Specific considerations include:
 - Features of Obstructive Sleep Apnoea (OSA) or its sequelae and referral for sleep studies or respiratory opinion, if appropriate.

- Features of cardiovascular disease including hypertension, ischaemic heart disease, cardiomyopathy and right-sided heart failure (secondary to extreme weight / OSA). History including dyspnoea, chest pain, palpitations, orthopnoea, paroxysmal nocturnal dyspnoea (PND) and identification of exercise tolerance and cardiovascular system (CVS)-respiratory fitness. Low threshold for electrocardiogram (ECG) and echocardiogram (ECHO). If abnormalities are identified, then refer to the joint obstetric cardiology clinic.
- 4.1.3.2. Airway assessment.
 - 4.1.3.3. Examination of the spine to identify women in whom neuraxial techniques may be additionally challenging - including ultrasound identification of the midline and the depth of the epidural space (for records)
 - 4.1.3.4. Explanation of indications for arterial line insertion, to enable accurate blood pressure measurement and sampling, and central venous/deep vein access if peripheral venous access proves challenging
 - 4.1.3.5. Patient education / counselling: women should be informed regarding their higher risk of emergency Caesarean Section delivery and potential challenges in providing emergency anaesthetic care.
 - 4.1.3.6. For vaginal birth, epidural placement must be discussed with the women as well as the importance of placement early in labour with the rationale for this
 - 4.1.3.7. Consideration re: planning for High dependency unit (HDU) or Intensive care unit (ITU) care in the postpartum period through ITU Consultant Maternity Link for Intensive Care.
 - 4.1.3.8. Explanation and reassurance that modifications in care are being taken to maximise the safety for the woman and baby, for high-risk labour and delivery.

4.2. **Logistical Considerations on Delivery Suite (DS)**

- 4.2.1. Care is to be provided on Delivery Suite due to anticipated difficulty with monitoring and increased input required from MDT staff.
- 4.2.2. Women should be cared for in an enhanced care delivery room (Rooms 7, 10 or 11).
- 4.2.3. On admission to DS, theatre team to check that appropriate theatre equipment is available:
 - air transfer mattress.
 - longer length retractors and instruments.

- traxi panniculus retractor.
 - Alexis O – ring retractor.
 - Berchtold operating table side extensions and 2 x arm boards.
- 4.2.4. On admission to DS, anaesthetist to check that specialist anaesthetic equipment is available:
- C-MAC® video laryngoscope with a full selection of laryngoscope blades.
 - Difficult airway equipment including flexible bronchoscope.
 - Oxford HELP (Head Elevating Laryngoscopy Pillow) ramping pillow.
 - Anaesthetic ultrasound machine.
 - Extralong spinal and Tuohy epidural needles.
 - Extra-large non-invasive blood pressure (NIBP) cuff.
 - Arterial lines, wide-bore midlines and central venous lines.
- 4.2.5. The Berchtold operating table (in Theatre 2) should be used in the event of an operative delivery. Maximum patient weight tolerance = 567kg in normal orientation, 227kg in reverse orientation.
- 4.2.6. On admission to DS, preparation of Berchtold table with 2 side extensions and 1 arm board, kept in Theatre 2 and transferred to Theatre 1 if needed for operative delivery.
- 4.2.7. Width of the Berchtold table with side extensions attached should be checked against the patient width to ensure appropriate fit. If not sufficient width, then operative or assisted may require delivery on the delivery room bed.
- 4.2.8. Bariatric equipment including an air transfer mattress should be used to transfer the woman between the bed and operating table. The hover mattress should be placed under the woman during labour, to facilitate rapid transfer in a time-critical delivery.

4.3. General Management Principles on Delivery Suite

- 4.3.1. If the woman is having a planned induction of labour (IOL) on DS, adequate provision, in advance, should be made for appropriate Obstetrician, Obstetric Anaesthetist and Midwifery staff cover from the period from IOL to delivery. From an anaesthetic perspective, consider allocating a dedicated senior Obstetric Anaesthetic to be available out-of-hours.

- 4.3.2. Anaesthetic care should be Consultant-led. In-hours, care should be provided by an Obstetric Anaesthetic Consultant. Out-of-hours, there should be attendance of the Anaesthetic Consultant on-call or the additional dedicated Obstetric Anaesthetic Consultant for operative delivery of any kind and attendance for lumbar epidural insertion.
- 4.3.3. Obstetric care should be Consultant-led with immediate attendance of the Obstetric Consultant in event of CS.
- 4.3.4. On admission to DS, obstetric anaesthetist is to be informed.
- 4.3.5. Anaesthetist to complete a CAVE (Co-morbidities, Airway, Venous access, Epidural) assessment and review notes from the Anaesthetic Antenatal Assessment Clinic on the electronic record.
- 4.3.6. Secure 2 points of intravenous (IV) access, ideally with at least one large-bore midline that is sutured in place. [The largest bore midlines that are kept in Vascular Access department are 18G (4Fr).].
- 4.3.7. If reliable peripheral IV access cannot be achieved, central venous access must be considered.
- 4.3.8. Consider measuring NIBP at the forearm instead of the upper arm, as the conical shape of the upper arm in these patients can reduce the accuracy of NIBP measurements (forearm measurements tend to exceed upper arm measurements by ~ 10mmHg).
- 4.3.9. If accurate NIBP measurements cannot be achieved, arterial line insertion and invasive arterial blood pressure monitoring must be considered.
- 4.3.10. Arterial line monitoring is indicated for operative delivery and for patients with cardiac co-morbidity/disease or severe hypertensive disorders.
- 4.3.11. Patients must be fasted from the start of labour, with clear fluids only and administration of antacid prophylaxis. The rationale for this should be explained.

4.4. Obstetric Considerations

- 4.4.1. Mode of delivery conversations will take place antenatally taking in additional risk factors including fetal size and patient wishes, including her plans for future pregnancies. Women should be made aware of the increased time from decision to delivery if there is fetal distress. However, there needs to be caution around a policy of routine recommendation for elective caesarean due to the significant risks of repeat caesarean including operative difficulties from adhesions and abnormally invasive placentation.

- 4.4.2. A clear plan should be documented in the electronic record.
- 4.4.3. An induction of labour should be booked for early in the day and not routinely be booked on a Friday, Saturday or Sunday.
- 4.4.4. If an elective caesarean is booked ensure that the operating surgeon and anaesthetist are aware and that no further caesareans are booked that day.
- 4.4.5. If a vaginal delivery is planned with epidural analgesia, once fully dilated there should be a 2-hour passive stage with 1 hour of pushing.

4.5. Anaesthetic Considerations for Labour Analgesia

- 4.5.1. A well-functioning epidural catheter is the desired option for labour analgesia in this population group. Providing effective analgesia with low risk of adverse effects for both women and babies and allows labour analgesia to be readily converted to surgical anaesthesia, if need for operative delivery (assisted delivery or CS).
- 4.5.2. Early epidural catheter placement is strongly recommended for reasons:
 - Epidural catheter placement is challenging and may be more successful when the woman is able to engage with the procedure.
 - There is higher risk of epidural catheter failure, hence early placement gives time to ensure that a well-functioning epidural catheter is present which can be used to provide surgical anaesthesia. This decreases the risk of requiring GA, as a “rapid single-shot” spinal anaesthetic is often not a viable option for emergency CS in these patients (see Section 4.6).
- 4.5.3. In case of an IOL, epidural placement should be discussed as early as possible
- 4.5.4. Due to the technical challenges associated with placement, epidural catheter insertion should be Senior Obstetric Anaesthetist or Anaesthetic Consultant-led in-hours and out-of-hours
- 4.5.5. Likelihood of successful epidural catheter can be increased by considering:
 - Patient position: women should be placed in the sitting, flexed position to allow better appreciation of the midline and to reduce distance from the skin to the epidural space.
 - ‘Heading higher’ in the lumbar spaces.
 - Use of ultrasound to identify the midline and estimate depth to the epidural space.

- The length of Tuohy needle: a standard 80mm Tuohy needle may not be sufficient to reach the epidural space and a longer 120mm or 150mm needle may be required. Depending on USS-measured depth, it is generally recommended to use a standard 80mm-length Tuohy needle first as longer needles may be more challenging to control and increase risk of complications.
 - Options are for performing either a combined spinal and epidural (CSE) or epidural. The confirmation of cerebrospinal fluid (CSF) return via the needle-through-needle technique of a CSE provides extra confirmation that the epidural space has been located.
- 4.5.6. All women must be routinely reassessed following epidural catheter placement, and the attending anaesthetist informed if the epidural catheter is not providing adequate labour analgesia, to allow early detection of a poorly functioning epidural catheter and timely replacement, if needed.
- 4.5.7. For patients in this group with clinical features suggesting difficult airway management, elective placement of an intrathecal catheter (ITC) can be considered to provide labour analgesia that can be readily converted to surgical anaesthesia. The 40-50% risk of post dural puncture headache (PDPH) must be balanced against the risk of a difficult airway on a case-by-case basis and the woman actively involved in shared decision-making.
- 4.5.8. For women in whom epidural catheter placement is contraindicated or not possible, inhaled Entonox, transcutaneous electrical nerve stimulation (TENS) and intramuscular (IM) pethidine can be used.
- 4.5.9. Due to the increased risk of respiratory depression and airway obstruction in these patients, Remifentanil patient-controlled analgesia (PCA) should only be commenced after discussion with the Consultant Obstetric Anaesthetist or if previously documented in the Anaesthetic Antenatal Assessment Clinic. Use of a Remifentanil PCA mandates continuous pulse oximetry monitoring and a constant one-to-one midwifery presence. Supplementary oxygen should be administered. If these prerequisites cannot be guaranteed, then Remifentanil PCA should not be used. See guideline PCA.

4.6. Anaesthetic Considerations for Caesarean Section Delivery (CS)

- 4.6.1. Consensus opinion emphasises the increased length of time for a 'rapid' CS delivery, either with a neuraxial technique or a GA, due to inherent challenges in many aspects of the perioperative management of these patients. [This has led to maternity units recommending elective CS for these patients in order to avoid the scenario of a prolonged Category 1 and 2 CS delivery].

- 4.6.2. A single-shot spinal also may have limited use in these women for both elective and emergency CS, as extra time is needed for patient positioning and surgery. If the spinal block starts to regress before surgery has finished then GA conversion, with all its inherent risks, may be required.
- 4.6.3. A continuous neuraxial technique is therefore preferred for both elective and emergency CS.
- 4.6.4. In the absence of a well-functioning epidural catheter a CSE is recommended. CSE combines the dense and rapid-onset block provided by a spinal with the flexibility to extend the duration of the block with the epidural component. A CSE technique is also likely to be technically easier, faster and may carry a higher chance of success than a single-shot spinal, as the Tuohy needle is often easier to advance and is used as an 'introducer' for the spinal needle in a needle-through-needle technique.
- 4.6.5. There is conflicting evidence as to whether this patient group requires a reduced dose of intrathecal hyperbaric bupivacaine to provide spinal anaesthesia for CS (*). If a single-shot spinal technique is used, consideration is advised for a minor reduction in dose of hyperbaric 0.5% bupivacaine, e.g. from 2.5mL to 2.2mL, with attention to immediate block height and use of positioning to reduce cranial spread. If a CSE is performed a reduced dose of intrathecal local anaesthetic can be extended by epidural space volume expansion. This reduces the risk of a high spinal block necessitating GA.
- 4.6.6. For women with coexisting cardiac disease, reduction of haemodynamic instability can be managed a significant dose-reduction in intrathecal hyperbaric 0.5% bupivacaine, followed by gradual extension of the block with additional boluses of local anaesthetic via the epidural catheter until adequate surgical anaesthesia is achieved (a-low dose CSE).
- 4.6.7. For women undergoing CS without a functioning epidural catheter and with clinical features suggesting difficult airway management, intrathecal catheter placement should be considered.
- 4.6.8. Whenever retraction of the panniculus occurs to facilitate CS e.g. through use of the traxi Panniculus Retractor, close monitoring is needed as this can be associated with exaggerated aortocaval compression and consequent maternal hypotension. [One case of fetal loss associated with panniculus retraction has been reported].
- 4.6.9. If the traxi Panniculus Retractor is used it can remain in place for 24 hours and may reduce the risk of post-operative wound infection. Beware: traxi drape can also lead to respiratory compromise when pulling the pannus up and compression to the upper abdomen / lower chest.

4.7. General Anaesthesia (GA) for Caesarean Section Delivery (CS)

- 4.7.1. There are considerable risks associated with GA in this patient group, including rapid and precipitous desaturation on apnoea, increased risk of difficult airway management and increased risk of aspiration on induction and emergence (see Table 3).
- 4.7.2. GA is avoided, if possible, but is sometimes necessary when maternal or fetal condition is critical or when a neuraxial technique is not feasible, has failed, or is contraindicated.
- 4.7.3. The importance of patient positioning, effective pre-oxygenation and presence of adequate, experienced personnel and difficult airway equipment is paramount.
- 4.7.4. At least 2 anaesthetists should be present for GA, one of whom is considered a senior provider. If a decision for GA is made out-of-hours, the on-call Anaesthetic Consultant or dedicated Obstetric Consultant Anaesthetist and the Senior Anaesthetic Trainee must be informed and asked to attend immediately.
- 4.7.5. All must be familiar with the Obstetric Anaesthesia Association (OAA) and Difficult Airway Society (DAS) 'Guidelines for the Management of Difficult and Failed Tracheal Intubation in Obstetrics'. The difficult airway equipment must be immediately ready in case of failed intubation.
- 4.7.6. An assessment of the woman's airway must be made before inducing GA and difficult airway management should be anticipated.
- 4.7.7. The woman should be positioned in the ramped position, using the Oxford HELP ramp, for induction. This will improve the functional residual capacity (FRC) and safe apnoea time, improve the view at laryngoscopy and may reduce the risk of gastro-oesophageal reflux.
- 4.7.8. Adequate preoxygenation must be performed by either at least 3 mins of tidal volume breathing or 8 deep breaths in 1 minute with 100% oxygen aiming for end tidal oxygen (O₂) concentration $\geq 90\%$. Apply continuous positive airway pressure (CPAP) using an anaesthetic face mask and the adjustable pressure limiting (APL) valve to increase the effectiveness of preoxygenation.
- 4.7.9. Use either high flow nasal oxygen (HFNO) or nasal prongs delivering oxygen at up to 15 L/min for apnoeic oxygenation during induction of anaesthesia.
- 4.7.10. Recommended video laryngoscopy as first-line technique for intubation.
- 4.7.11. Follow guidelines developed by the Obstetric Anaesthesia Association (OAA) and the Difficult Airway Society (DAS).
- 4.7.12. Use lean weight to calculate initial doses of IV induction agents.

- 4.7.13. Use total body weight to calculate dose of suxamethonium (due to increased circulating plasma esterases).
- 4.7.14. Attention to airway management during emergence from GA, as associated with a high risk of aspiration, hypoventilation, airway obstruction and hypoxia in this patient group.
- 4.7.15. Prior to tracheal extubation, the woman must be awake and obeying commands, with reversal of neuromuscular blockade demonstrated by a quantitative train-of-four (TOF) ratio $\geq 90\%$.
- 4.7.16. Consider decompression of the stomach with an orogastric or nasogastric tube prior to extubation.
- 4.7.17. Extubate in the head-up chest-up position to allow control of the airway and improve respiratory mechanics. Consider use of a "bite block" for extubation.
- 4.7.18. If the woman has confirmed or suspected OSA, it is recommended to commence CPAP immediately after tracheal extubation to avoid airway obstruction and hypoxia.
- 4.7.19. These patients should be transported out of theatre in the head-elevated position and maintained in this position during the recovery and early post-operative period.

4.8. Postpartum Considerations

- 4.8.1. Postpartum care must focus on minimising the risk of developing complications.
- 4.8.2. A combination of appropriate post-delivery enhanced level care and monitoring, adequate analgesia, early ambulation and venous thromboprophylaxis are required for a safe and effective recovery.
- 4.8.3. The post-delivery destination for the woman should be individualised and must consider the presence of other co-morbidities, peripartum complications, the mode of delivery and the need for invasive monitoring or post-operative respiratory support, including CPAP.
- 4.8.4. Patients identified as requiring a higher level of postoperative monitoring or support may require admission to HDU / ITU. For example, a parturient who has known or suspected OSA and who has received a GA for CS, may require post-operative CPAP and management in an HDU setting.
- 4.8.5. All women who have had a CS and/or who have received intrathecal opioids must remain on the DS for a minimum of 24 hours (unless admission to HDU / ITU is required) for enhanced monitoring and care, before step-down to the postnatal ward.

- 4.8.6. Women who have received neuraxial opioids should receive a minimum of respiratory rate (RR) and sedation assessments hourly for the first 6 hours and 2-hourly for 12 – 24 hours, with continuous pulse oximeter monitoring in the initial post-operative period.
- 4.8.7. Effective multimodal post-delivery analgesia is essential as this will improve respiratory mechanics and improve mobilisation, thus decreasing the risk of respiratory complications and venous thromboembolism (VTE). The gold standard following CS is a long-acting neuraxial opioid in this patient group. Current evidence suggests that even with the presence of morbid obesity (BMI ≥ 40 kg/m²), the incidence of respiratory depression remains low. Additional respiratory monitoring for 24 hours on DS is however recommended (see above).
- 4.8.8. For women undergoing CS without neuraxial long-acting opioid e.g. following GA, IV opioid patient-controlled analgesia (PCA) should be used on DS with increased frequency of respiratory monitoring. Regional anaesthesia techniques should be considered including transversus abdominis plan (TAP) or quadratus lumborum (QL) blocks and/or wound infiltration catheter sited during surgery.
- 4.8.9. All women should receive paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) unless contraindicated, to decrease duration of opioid consumption.
- 4.8.10. To reduce the risk of developing VTE, these women should receive appropriately sized intermittent pneumatic compression devices (Flowtrons).
- 4.8.11. Chemical thromboprophylaxis to be prescribed according to the Royal Cornwall Hospital Treliske protocol for post-partum thromboprophylaxis and woman to be encouraged to mobilise early.

5. Dissemination and Implementation

This document will be disseminated to all relevant Midwifery and Obstetric Staff including the theatre teams and will be stored in the Maternity SOP folder in TR11 shared folder and also made available on the documents library.

6. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	<ul style="list-style-type: none"> Was the BMI documented in the handheld notes? Was the BMI available on the electronic health record? In patients with BMI ≥ 60 or weight > 130kgs was an antenatal consultation with an obstetric anaesthetist undertaken and record of anaesthetic management plan for labour and delivery documented on electronic record?

Information Category	Detail of process and methodology for monitoring compliance
	<ul style="list-style-type: none"> Was an Obstetric Multi-Disciplinary Team plan recorded on the electronic record for management of labour and specified processes for delivery in maternity theatre? Was specified equipment always available, on Delivery Suite and in Maternity Theatre, for management of labour and delivery? If the woman had a BMI of ≥ 60, was it documented that she was informed of the risks of possible intrapartum complications and significant likelihood of assisted delivery and unplanned caesarean section? <p><i>Were operative vaginal births and caesarean sections in women with BMI ≥ 60 or weight > 130kgs at booking, attended by a consultant obstetrician and consultant anaesthetist?</i></p>
Lead	Obstetric Anaesthetic Lead.
Tool	<p>Review of handheld and electronic patient notes – use of Excel to analyse data.</p> <p>Review of Maternity Theatres equipment for care of patients with weight > 130kg/BMI ≥ 60.</p>
Frequency	<p>Yearly.</p> <p>Reporting with Increased Body Mass Index (BMI) in Pregnancy, Labour and Post Delivery Clinical Guideline.</p>
Reporting arrangements	<p>A formal report of the results will be received annually at the Patient Safety Meeting, Clinical Audit Review Team forum and Delivery Suite and Theatres Group.</p> <p>During the process of the audit if compliance is below 80% or other deficiencies identified, this will be highlighted at the next maternity Patient Safety Meeting and Clinical Audit Review Team meeting and an action plan agreed.</p>
Acting on recommendations and Lead(s)	<p>Any deficiencies identified on the annual report will be discussed at the Patient Safety Meeting, Clinical Audit Review Team forum and the Delivery Suite and Theatres Group meeting. An action plan developed.</p> <p>Action leads will be identified and a time frame for the action to be completed.</p> <p>The action plan will be monitored by the Patient Safety Meeting group, Clinical Audit Review Team forum and the Delivery Suite and Theatres Group until all actions complete.</p>

Information Category	Detail of process and methodology for monitoring compliance
Change in practice and lessons to be shared	<p>Required changes to practice will be identified and actioned within an agreed timeframe.</p> <p>A lead member of the forum will be identified to take each change forward where appropriate.</p> <p>The results of the audits will be distributed to all staff through the Patient Safety newsletter/Clinical Audit Review Team/Delivery Suite and Theatres Group as per the action plan.</p>

7. Updating and Review

This document will be reviewed every three years or earlier if indicated.

8. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the [Equality Diversity And Inclusion Policy](#) or the [Equality and Diversity website](#).

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	BMI \geq 60 and pregnant people of higher weight > 130kg Delivery Suite Management Standard Operating Procedure V1.0.
This document replaces (exact title of previous version):	New Document
Date Issued / Approved:	April 2025.
Date Valid From:	April 2025.
Date Valid To:	April 2028.
Author / Owner:	Sally Nash, Consultant Anaesthetist
Contact details:	01872 252684
Brief summary of contents:	Management of Pregnant People of higher weight (> 130kg) or BMI \geq 60 on Delivery Suite.
Suggested Keywords:	Morbid obesity in pregnancy BMI \geq 60, weight > 130kgs.
Target Audience:	RCHT: Yes CFT: No CIOB ICB: No
Executive Director responsible for Policy:	Chief Medical Officer.
Approval route for consultation and ratification:	Maternity Guidelines Group.
Manager confirming approval processes:	Caroline Chappell.
Name of Governance Lead confirming consultation and ratification:	Tamara Thirlby.
Links to key external standards:	CNST

Information Category	Detailed Information
Related Documents:	RCOG: Care of Women with Obesity in Pregnancy (Green-top Guideline No. 72), November 2018 RCOA: Guidelines for the Provision of Anaesthesia Services for an Obstetric Population 2024, Chapter 9.
Training Need Identified:	No
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Midwifery and Obstetrics

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
April 2025	V1.0	Initial issue	Sally Nash, Consultant Anaesthetist

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust [The Policy on Policies \(Development and Management of Knowledge Procedural and Web Documents Policy\)](#). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team
rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	BMI \geq 60 and pregnant people of higher weight > 130kg Delivery Suite Management Standard Operating Procedure V1.0.
Department and Service Area:	Obstetrics and Gynaecology
Is this a new or existing document?	New
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Catherine Wills, Maternity Guidelines Midwife
Contact details:	01872 255019

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	To give guidance to all multi-disciplinary staff working within maternity (on Delivery Suite) on managing a pregnant person with a body mass index \geq 60, or weight > 130kgs, in the peripartum period.
2. Policy Objectives	Evidence based care for pregnant people with increased BMI \geq 60 and/or weight > 130kgs and MDT planning of peripartum care.
3. Policy Intended Outcomes	Good outcome for pregnant people with raised BMI \geq 60 and/or weight > 130kgs in pregnancy.
4. How will you measure each outcome?	See audit compliance.
5. Who is intended to benefit from the policy?	Maternity, obstetric, anaesthetic and theatre workforce, and all pregnant people with significantly raised BMI, and/or weight > 130kgs.

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	<ul style="list-style-type: none"> Workforce: Yes Patients/ visitors: No Local groups/ system partners: No External organisations: No Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	Please record specific names of individuals/ groups: Maternity Guidelines
6c. What was the outcome of the consultation?	Guideline Agreed
6d. Have you used any of the following to assist your assessment?	National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys: No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	

Protected Characteristic	(Yes or No)	Rationale
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Catherine Wills, Maternity Guidelines Midwife.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
[Section 2. Full Equality Analysis](#)

Appendix 3. Increased risks associated with obesity

Table 1. Co-morbidities associated with obesity

Type 2 diabetes.	Venous thromboembolism.
Obstructive sleep apnoea.	Asthma.
Cardiovascular disease including: <ul style="list-style-type: none"> • Hypertension. • Coronary artery disease. • Congestive heart failure, in particular right-sided heart failure. • Cerebrovascular disease. 	Gallbladder disease.
	Chronic back pain.
	Impaired immune function.

Table 2. Obstetric and neonatal complications associated with obesity

Maternal Complication.	Neonatal Complication.
Gestational diabetes.	Macrosomia.
Gestational hypertension and pre-eclampsia.	Small for gestational age.
Induction of labour.	Large for gestational age.
Prolonged labour.	Prematurity.
Instrumental delivery.	Stillbirth.
Failed instrumental delivery.	Foetal distress.
Emergency Caesarean delivery.	Meconium aspiration.
Postpartum haemorrhage.	Shoulder dystocia.
Wound infection.	Neural tube defects.
Infection and sepsis.	Neonatal ITU admission.
Venous thromboembolism.	Neonatal death.

Table 3. Adverse factors increasing the risk of general anaesthesia in the obese patient

Adverse Factors for General Anaesthesia
Increased risk of difficult and failed intubation.
Increased risk of difficult and failed mask ventilation and oxygenation.
Exaggerated reduction in FRC and increase in rate of oxygen consumption leading to a marked decrease in the safe apnoea time.
Increased risk of obstructive sleep apnoea with increased risk of post-operative airway obstruction and hypoxia.
Increased incidence of hiatus hernia and larger gastric volume, increasing risk of aspiration beyond that associated with pregnancy alone.
Exaggerated aortocaval compression.
Increased likelihood of difficult IV access.