

7 Obstetric practice

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7.1 Information for mothers about analgesia and anaesthesia during delivery

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Why do this quality improvement project?

The antenatal period is a potentially stressful time and patients are given a lot of information from different healthcare professionals (general practitioners, midwives, obstetricians, anaesthetists) and other organisations (eg National Childbirth Trust, local support groups). There is a large amount of information in the public domain (especially on the internet) with varying quality, no quality assurance and not all written by professionals or evidence based.

There are many different languages spoken across the UK therefore having English language leaflets only may not be sufficient in some areas. Empowering women to make informed decisions about analgesia and anaesthesia during their delivery is more achievable if good quality information is provided antenatally.

Best practice

- Antenatal classes led by professionals should be available to all pregnant women.
- Written information on analgesia and anaesthesia:
 - should be written and approved by the anaesthetic department
 - should be easy to understand with the use of visuals and bullet points.
- If the local department writes an information leaflet on analgesia and anaesthesia, mothers' representatives should be involved in the design and review by a

multiprofessional panel should occur. Emphasis should be put on how the information is presented to suit the needs of mothers (eg layout, balance between words and figures, language used).

- Information should be available to all patients from the early antenatal period.
- Information should be available in other languages for non-English speaking patients. Translations should be via professional approved translators and in a format that is in accordance with hospital policy. Local data on maternity demographics should be used to determine which languages are most commonly spoken in the local area.
- Information leaflets should be kept up to date, with set review dates.
- Trained interpreters should be used and should be easily available.
- Any explanation or information given should be documented in the patient's notes.
- Feedback should be obtained from patients about the information received and improvements made if needed.
- Depending on local resources, hospital departments can consider the use of technology to deliver information to patients (eg electronic leaflets, hospital web pages, smart phone apps, QR codes).
- Consider incorporating information into patient's handheld notes (paper or electronic) for easy access.

Suggested data to collect

Standards

Information made available to women in the early antenatal period about availability of neuraxial analgesia and anaesthetic services in their chosen location of delivery.

Every unit should provide, in early pregnancy, advice about pain relief and anaesthesia during labour and delivery. An anaesthetist should be involved in preparing this information and should approve the final version.

Information should be made available to non-English-speaking women in their native languages.

Measures

- Percentage of women in the early antenatal period receiving information about neuraxial analgesia and anaesthetic services in their chosen location of delivery.
- Availability of anaesthetist-approved information on pain relief and anaesthesia during labour and delivery.
- Percentage of women receiving this written information.
- Availability of translated information for non-English speaking women (at least the top three languages of the local demographic should be available).

Hospitals should ensure that the mother's need for information in other languages should be assessed and recorded during antenatal care so that interpreting services can be planned for.

- Patient's preferred language to be recorded in 100% patients.
- Percentage of non-English-speaking women receiving written information on analgesia and anaesthesia in their language.

Interpreting services should be made available for non-English-speaking women, with particular attention paid to how quickly such services can be mobilised and their availability out of hours. This can be part of the standards set by the maternity unit.

- Availability of an appropriate interpreter, with particular attention to availability out of hours.
- Percentage of non-English-speaking women where an interpreter is available during delivery.
- Percentage of interpretation as face to face or via telephone.

Quality improvement methodology

- Co-design or co-production of leaflets: working with local Maternity Voices Partnership or patient groups to produce leaflets together.
- Measurement of patient understanding in real time through the peripartum pathway (eg in patient diaries and real-time feedback).
- Act on feedback by changing information provided and measuring impact in rapid plan-do-study-act cycles in conjunction with mothers and their families.

Mapping

ACSA standards: 3.1.1.2, 3.2.2.3, 3.1.2.1

Curriculum competences: OB_BS_02, OB_IS_02, OB_HS_11, OB_HS_13

GPAS 2020: 2.1.3, 2.9.1, 2.9.2, 2.9.3, 2.9.4, 2.9.5, 2.9.6, 2.9.7, 2.3.2, 2.3.33, 3.9.1, 3.9.2, 4.9.2, 9.9.1, 9.9.2, 9.9.3, 9.9.4, 9.9.5, 9.9.6, 9.9.7, 9.9.8, 9.9.9, 9.9.12, 2.9.8, 5.9.2, 5.9.3, 2.9.12, 2.9.13

Further reading

Birthrights. Women's experiences (<http://www.birthrights.org.uk/category/womens-experiences>).

National Institute for Health and Care Excellence. Pain Relief in Labour. NICE Pathways. London: NICE; 2017 (<https://pathways.nice.org.uk/pathways/intrapartum-care/pain-relief-in-labour>).

National Maternity Review. Better Births: Improving Outcomes of Maternity Services in England: A Five Year Forward View for Maternity Care. London: NHS England; 2016 (<https://www.england.nhs.uk/publication/better-births-improving-outcomes-of-maternity-services-in-england-a-five-year-forward-view-for-maternity-care>).

Royal College of Anaesthetists. Guidelines for the Provision of Anaesthetic Services Chapter 9: Guidelines for the Provision of Anaesthesia Services for an Obstetric Population 2019. London: RCoA; 2019 (<https://www.rcoa.ac.uk/gpas/chapter-9>).

7.2 Anaesthetic care for women who are obese during pregnancy

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Why do this quality improvement project?

Around one in five pregnant women in the UK is obese. Obstetric anaesthetists have a key role in the care of this patient group as there is an increased requirement for anaesthesia during labour and birth due to the higher rate of operative deliveries.

Obstetric anaesthetists also have an important role within multidisciplinary teams to manage the associated health complications that obesity brings for both mother and baby.

In addition to the increased rates of caesarean section and postpartum haemorrhage, obesity is a risk factor for many anaesthesia-related complications and has been identified as a significant risk factor for anaesthesia-related maternal mortality. Identifying these women early in their pregnancies, suggesting weight management strategies and managing the risk factors that obesity brings will improve patient care and outcomes.

Background

Obesity in pregnancy is usually defined as a body mass index (BMI) of 30 kg/m² or more at the first antenatal consultation.

The 2014-16 Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries Across the UK review into maternal deaths reported that 37% of women who died were obese (BMI greater than 30 kg/m²) and 20% were overweight (BMI 25–29 kg/m²).¹

A study of UK Obstetric Surveillance System data showed that 25% of maternal cardiac arrests were related to anaesthesia and, of these, 75% of the women were obese.²

Anaesthesia-related issues in the obese include an increased rate of needing to resite an epidural, higher gastric volumes, difficulties with airway management, desaturation and postoperative atelectasis. The increased difficulties associated with the provision of general and regional anaesthesia in the obese can lead to an increased decision-to-delivery time in women who require a category 1 or 2 caesarean section.³

Best practice

The most recent Royal College of Obstetricians and Gynaecologists (RCOG) guideline, published in November 2018, covers recommended interventions for the care of women with obesity prior to conception, during and after pregnancy.³

Suggested data to collect

According to the RCOG guideline, data to collect for obstetric anaesthesia-related quality improvement projects are as follows:

- 100% patients should have booking height, weight and BMI recorded in the maternity handheld notes and electronic patient information system. All women should also be reweighed in the third trimester.
- An appropriately sized cuff should be used for blood pressure measurements taken at the booking visit and all subsequent antenatal consultations. The cuff size used should be documented in the medical records.
- 100% of women with a booking BMI of 30 kg/m² or greater should receive information about anaesthesia and analgesia.
- 100% of women with a booking BMI of 40 kg/m² or greater have an antenatal anaesthetic review by a senior obstetric anaesthetist and plan documented in the notes.
- The duty anaesthetist should be informed when women with a BMI of 40 kg/m² or greater are admitted to the labour ward.
- Anaesthesia for women with a booking BMI of 40 kg/m² or greater who have operative vaginal delivery or caesarean section should be provided by an anaesthetist at specialty trainee level 6 or above, or with equivalent experience in a non-training post.
- Maternity units have accessible multidisciplinary guidelines for care of pregnant women with a booking BMI of 35 kg/m² or greater.

Quality improvement methodology

- Multidisciplinary simulation of the anaesthesia and operative care of a morbidly obese patient should be undertaken at regular intervals. Is equipment easy to access and instructions for use clear (eg moving and handling equipment, blood pressure cuffs, long regional needles, ultrasound)?
- Draw a process map of the antenatal care of a woman with a high BMI. Are the guidelines clear and accessible at every point? Involve the multidisciplinary team to discuss and understand different perspectives. At which point is it pragmatic to make a plan for delivery and are the lines of communication and escalation clear?
- Is the information given to patients helpful in providing information and encouraging behaviour change to adopt a healthier diet and activity goals?
- Co-design information with patients and consult with other professionals with expertise (eg maternal medicine or bariatric teams).

Mapping

ACSA standards: 1.1.3.4, 1.7.1.1, 4.2.2.2

Curriculum competences: OB_HS_13

CPD matrix codes: 1E05, 2B01, 2B03, 3A09, 3B00

GPAS 2020: 3.3.4, 3.3.5, 3.3.6, 3.3.7, 9.2.48, 9.3.8, 9.3.9, 9.3.10

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2. Beckett VA et al. The CAPS Study: incidence, management and outcomes of cardiac arrest in pregnancy in the UK: a prospective, descriptive study. *BJOG* 2017;124:1374–1381.
3. Royal College of Obstetricians and Gynaecologists. Care of Women with Obesity in Pregnancy. Green-top Guideline No. 72. London: RCOG; 2018 (<https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg72>).

7.3 Response times for the provision of intrapartum analgesia and anaesthesia

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Why do this quality improvement project?

Improving timely accessibility to an anaesthetist and theatre services in the case of urgent caesarean section is important and likely to influence outcomes for the mother and/or baby.¹⁻³ This is particularly true in the case of category 1 caesareans, where there is an immediate threat to the life of the woman or the fetus, and category 2 caesareans, where there is maternal or fetal compromise that is not immediately life threatening.^{4,5}

In the case of labouring women requiring regional analgesia, minimising delays in providing a timely anaesthetic service will improve patients' experience and satisfaction with their care.

Background

Approximately 60% of women require intrapartum anaesthetic intervention, with around 25% delivering by caesarean section.⁶ While maternal mortality rates in the UK are low, improvements have plateaued in recent years (albeit on the background of a more complex patient population).¹ The 2016 MBRRACE-UK report noted that there was an increasing number of comments about staffing–workload balance issues, which had had an impact on women's deaths.¹ Guidance from several bodies is available to quantify levels of staffing and suggested standards to be met at a local level, whether it be anaesthetic services in caesarean section, emergencies such as maternal haemorrhage or the provision of labour analgesia.^{1,6,7} As stated in the latest Guidelines for the Provision of Anaesthesia Services for obstetric services from the RCoA, 'it is not possible to identify all women or babies who are at risk of rapid deterioration, but we need to be able to respond appropriately and safely in the event of an emergency'.⁶

Best practice

Caesarean section

The optimal decision to delivery interval in the presence of fetal distress remains controversial. The diagnosis of fetal distress in labour is imprecise. The widely quoted 30-minute decision to delivery interval lacks a firm evidence base and carries its own problems if used as a strict guideline for all individuals.⁴ However, the National Institute for Health and Care Excellence states that

30 minutes should be the audit standard for category 1 caesareans and 75 minutes the audit standard for category 2 caesareans.⁸

Maternal emergencies

Life-threatening maternal emergencies such as massive blood loss requires a rapid response to minimise maternal and fetal harm. Specifically, any woman with suspected placenta praevia or accreta should be reviewed antenatally by a consultant anaesthetist, with risks and treatment options discussed and a plan agreed including for emergency delivery.¹ A consultant anaesthetist should be present for elective delivery and, if delivery is unexpected and out of hours, consultant anaesthetic staff should be alerted and should attend as soon as possible.¹ All units are required to have escalation policies for periods of high activity, including a plan to obtain more and senior anaesthetic assistance.¹

Regional analgesia during labour

Obstetric units should be able to provide regional analgesia on request at all times and the response time should not normally exceed 30 minutes and must be within one hour, barring exceptional circumstances.⁶

Suggested data to collect

Caesarean section

Outcomes

- Percentage of category 1 caesarean sections with decision to delivery interval less than 30 minutes.
- Percentage of category 2 caesareans with decision to delivery interval less than 75 minutes.
- Percentage of women with placenta accreta with consultant anaesthetist present at delivery.
- Presence of escalation plan for periods of high activity, neonatal outcome measures (Apgar scores, cord gas results).

Process

- Time between obstetrician decision and anaesthetist being informed.
- Time to open theatre/obtain theatre staff.
- Time patient arrives in theatre.
- Time anaesthesia commenced.
- Anaesthetic technique used.
- Anaesthesia ready time.
- Surgical start time ('knife to skin'), time of delivery.
- Reasons for delay with any part of the above.

Balancing

- Accuracy and completeness of clinical documentation.
- Implications for anaesthetic services in the rest of the hospital.

Labour regional analgesia

Outcomes

- Percentage of time to delivery of neuraxial analgesia less than 30 minutes following request.
- Percentage of time to delivery of neuraxial analgesia 30-60 minutes following request.
- Percentage of time to delivery of neuraxial analgesia over 60 minutes following requests.
- Time to effective analgesia (see section 7.4).

Process

- Source of request.
- Time between request and anaesthetist being informed.
- Time of day requested.
- Anaesthetic staffing levels.
- Concurrent anaesthetic work including emergencies.
- Provision of escalation policy for periods of high demand.
- Availability of blood results in women with coagulopathies.
- Stage of labour.

Balancing

- Need to call in extra anaesthetic assistance.

Quality improvement methodology

Draw a process map of the time to accessing theatre in an emergency. Walk the complete process steps for the time from decision to anaesthesia or analgesia. Identify 'waste' (especially in communication processes) and interview staff and patients. Think about where staffing levels delay anaesthetic services and the scope for reorganising them. Is the department equipped for unexpected high-volume work? Undertake desktop tests of the system in different conditions: do staffing levels meet demands at all times (day, night, weekends, public holidays etc)?

Think about times when the system fails to meet demand. What is the impact of that failure and what can you add into your protocols to mitigate it? Are there clear lines of escalation that non-anaesthetic staff can follow to contact another tier or senior anaesthetist? (See section 11.8.) Identify change ideas.

Mapping

ACSA standards: 1.1.1.1, 1.5.2.5, 1.5.1.3, 1.7.2.1, 1.7.2.2, 1.7.2.5, 1.7.2.6, 1.7.2.7, 1.7.3.1, 2.5.1.1, 2.5.2.2, 4.1.0.4

Curriculum competences: OB_HS_13

CPD matrix codes: 2B01–03, 2B05

GPAS 2020: 3.4.6, 9.1.2, 9.1.3, 9.1.4, 9.1.5, 9.1.6, 9.1.14, 9.1.15, 9.1.16, 9.1.18, 9.1.19, 9.2.35, 9.5.9, 9.5.10, 9.5.12, 9.5.15, 9.5.27

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2. Draper ES et al, MBRRACE-UK. MBRRACE-UK Perinatal Mortality Surveillance Report: UK Perinatal Deaths for Births from January to December 2017. Leicester: Department of Health Sciences, University of Leicester; 2019 (<https://www.npeu.ox.ac.uk/mbrrace-uk/reports>).
3. Draper ES et al, MBRRACE-UK. MBRRACE-UK 2017 Perinatal Confidential Enquiry: Term, Singleton, Intrapartum Stillbirth and Intrapartum-Related Neonatal Death. Leicester: Department of Health Sciences, University of Leicester; 2017 (<https://www.npeu.ox.ac.uk/mbrrace-uk/reports/perinatal-mortality-and-morbidity-confidential-enquiries>).
4. Royal College of Obstetricians and Gynaecologists, Royal College of Anaesthetists. Classification of Urgency Of Caesarean Section: A Continuum Of Risk. Good Practice Guide 11. London: RCOG; 2010 (<https://www.rcog.org.uk/en/guidelines-research-services/guidelines/good-practice-11>).
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7. Obstetric Anaesthetists' Association and Association of Anaesthetists of Great Britain and Ireland. OAA/AAGBI Guidelines for Obstetric Anaesthetic Services 2013. 3rd ed. London: AAGBI and OAA; 2013 (<https://anaesthetists.org/Home/Resources-publications/Guidelines/Obstetric-anaesthetic-service>).
8. National Institute for Health and Care Excellence. Caesarean Section. Clinical Guideline CG132. London: NICE; 2011 (updated 2019) (<https://guidance.nice.org.uk/CG132>).

7.4 Regional analgesia during labour

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Why do this quality improvement project?

Regional blockade (epidural or combined spinal and epidural) provides the most effective analgesia for labour.¹ Regional analgesia for labour can be evaluated by considering procedural aspects, adverse effects and complications and the quality of analgesia assessed during labour or retrospectively.

A definition of a failed regional block for labour analgesia has been proposed, including:²

- lack of adequate pain relief by 45 minutes after start of placement
- inadvertent dural puncture
- resite or abandoning this form of analgesia during labour
- maternal dissatisfaction with analgesia at follow-up.

This definition has been used to evaluate training.³

Background

There is a higher failure rate of neuraxial analgesia in labour than in the non-obstetric population. Reasons include the use of low concentrations of local anaesthetics, anxiety and anatomical differences.⁴ Risk factors for failure include occipitoposterior presentation of the fetus, radicular pain during insertion, inadequate analgesia following the first dose and duration of analgesia above six hours or less than one hour.⁵

The need to resite an epidural, one of the components of the definition of failure, has been associated with longer time to perform the block, breakthrough pain, prolonged induction of labour, venous puncture, shivering and, unsurprisingly, caesarean section.⁶

The incidence of accidental dural puncture is 1.0-1.2% and resiting because of poor analgesia or unilateral block is 13.1%.^{7,8} A patient satisfaction score of 98% was found even when the epidural was resited more than once,⁸ although inadequate pain relief 45 minutes after starting to insert the epidural has been shown to correlate with dissatisfaction.⁹ Induction of labour, the need for anaesthetist-administered top-ups and raised body mass index (BMI) were also found to be associated with maternal dissatisfaction.¹⁰

Best practice

Standards for the provision of labour analgesia have been defined by the National Institute for Health and Care Excellence and the RCoA:¹¹⁻¹³

- more than 85% blocks successful.
- resites during labour less than 15%.
- accidental dural puncture rate less than 1%.^{7,8}
- satisfaction at follow-up greater than 98%.⁸
- adequate analgesia at 45 minutes after start of procedure over 88%.⁸

Suggested data to collect

- Descriptive data: anaesthetist identity and grade; date and time of procedure; procedure (combined spinal-epidural or epidural); position; and patient details: BMI; parity; cervical dilatation; presentation; induction of labour.
- Adequacy of analgesia at 45 minutes (assessed by asking whether the woman is satisfied with her pain relief).
- Accidental dural puncture.
- Insertion abandoned or sited by another anaesthetist.

At follow-up:

- Block resited in labour.
- Patient satisfaction (excellent, satisfactory, unsatisfactory, no benefit at all).
- Low-pressure headache (typical of post-dural puncture headache) or other complications (see section 7.10).

Quality improvement methodology

Draw a process map of the time taken to achieve satisfactory analgesia. An indicative high level process map is shown in Figure 7.4.1. What steps in the pathway can be made shorter or simpler? For example, what would be the impact of earlier provision of information when the patient is contemplating an epidural or help when preparing the patient and epidural trolley for insertion?

Examine your maternity follow-up data for common features of poor satisfaction or epidural resites. This could include using statistical process control charts for any special cause variation or Pareto charts. Target any improvement ideas at the most common causes of failure.

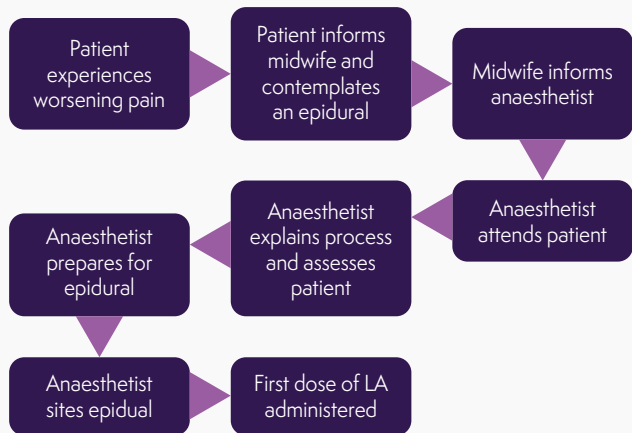


Figure 7.4.1: An indicative high level process map of the time taken to achieve satisfactory analgesia.

Mapping

ACSA standards: 1.7.2.1, 1.7.2.2, 1.7.2.7

Curriculum competences: OB_HS_13

GPAS 2020: 9.5.4, 9.5.5, 9.5.10, 9.5.11, 9.5.12, 9.5.14, 9.7.3, 11.2.1, 11.2.3

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7.5 Airway and intubation problems during obstetric general anaesthesia

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Why do this quality improvement project?

Airway problems during obstetric general anaesthesia are more common than in the non-obstetric population and remain an important cause of morbidity and mortality.¹ National guidelines from the Obstetric Anaesthetists' Association (OAA) and Difficult Airway Society (DAS) on the management of difficult and failed intubation in obstetrics have been published.² Adherence to these guidelines should lead to improvements in airway management and better outcomes for both mothers and babies.

Background

In the obstetric population, general anaesthesia is often provided in emergent scenarios or as a second option when neuraxial anaesthesia has failed.³ It has been estimated that the incidence of failed intubation in obstetrics is approximately 1 : 390.¹ Difficulty with airway management arises from the physiological changes of pregnancy, the urgency of delivery and relative inexperience of staff.² Increasing rates of obesity add to concerns regarding airway management. If not managed appropriately, airway difficulties can lead to significant

complications including aspiration of stomach contents, accidental awareness, hypoxic cerebral injury and cardiac arrest.⁴

In 2015, joint OAA/DAS guidelines were published on the management of difficult and failed intubation in obstetrics.² These guidelines covered planning a safe technique, managing failed intubation and the 'can't intubate, can't oxygenate' scenario. In addition, the guidelines addressed whether surgery should proceed or the mother be awakened and how to manage these two options. There were also sections on debriefing, follow-up and teaching.

Best practice

- OAA/DAS guidelines for the management of difficult and failed tracheal intubation, 2015.²
- Royal College of Anaesthetists guidelines for the provision of anaesthetic services for an obstetric population, 2019.⁵
- Royal College of Anaesthetists Anaesthesia Clinical Services Accreditation.
- Royal College of Obstetricians and Gynaecologists. Each Baby Counts, 2018.⁶

Suggested data to collect

Standards

All cases of general anaesthesia in obstetrics should be reviewed.

All pregnant women who receive general anaesthesia should undergo preoperative assessment.

Necessary equipment for difficult airway management should be immediately available for all obstetric general anaesthesia cases.

Measures

- The total number and proportion of general anaesthetics, the degree of urgency, the experience of staff involved in their care and the time of the procedure should be collected. The proportion in whom difficulty or failure with intubation occurred should be calculated.
- Percentage of women for whom there was documented preassessment; percentage of women for whom there was a documented airway assessment; percentage of women for whom an airway plan was documented; percentage of women with known airway issues who were assessed during pregnancy.
- Availability of various sizes of laryngoscope, including those with short handles and different blades; availability of bougie; video laryngoscope; fibre optic bronchoscope; second-generation supraglottic airway devices (eg Proseal laryngeal mask airway, i-gel); equipment for front of neck access; and capnography.

The management of all cases of failed intubation should be systematically reviewed.

- Case note review should consider anaesthetic plan, use of antacid prophylaxis, patient positioning, pre-oxygenation, performance of World Health Organization (WHO) surgical safety checklist with documentation of airway plan, delivery of appropriate doses of anaesthetic drugs, use of cricoid pressure, laryngoscopic view, selection of appropriately sized tracheal tube, adherence to OAA/DAS guidelines, escalation of care and availability of senior anaesthetic assistance, whether patient was awakened or surgery continued, outcomes for mother and baby, documentation of events, debriefing of staff involved and patient follow-up.

Serious incident reviews involving cases of difficult or failed intubation should have anaesthetic representation.

- Number of serious incident reviews involving general anaesthesia in which an anaesthetist was invited to participate.

In cases of difficult or failed intubation, information regarding events should be recorded in the case notes and given to the patient and her general practitioner.

- Percentage of cases in which adequate documentation is recorded in the case notes and information is given to the patient and her general practitioner.

Quality improvement methodology

Risk assessment

- Review anaesthetic records for cases of general anaesthesia and look for details of airway assessment and plan.
- Is there a specific part of the anaesthetic chart for airway assessment and planning?
- Does the chart request specific details on anaesthetic grade and supervision, anaesthetic assistants, checking of equipment, administration of antacid prophylaxis and performance of WHO checklist?
- Is there an easy to access a clear guide or checklist for managing anticipated and unanticipated difficult airways in maternity, which highlights the importance of human factors?

Risk management

- Review anaesthetic record for airway management.
- Is there documentation of positioning, pre-oxygenation, drug administration, time to laryngoscopy, equipment used, view of larynx, ease of intubation (if performed), use of extra equipment, call for help, declaration of failed intubation and subsequent airway management?
- In cases of failed intubation, did surgery continue under general anaesthesia using an alternative airway device?

- Were there any maternal complications?
- Was neonatal outcome recorded?

Case review

- Were all members of the anaesthetic team supported after the case and was time made to discuss the case and learn lessons from events?
- Check the case notes to see whether the patient was seen after surgery to discuss events and given appropriate debriefing and support. Was she given information that would help with future anaesthetics?
- Was the patient's general practitioner informed?
- In the event of an investigation, was an anaesthetist invited to participate?

Simulation

- The management of difficult and failed intubation in obstetrics should be a topic in obstetric 'skills and drills' or other multidisciplinary simulation teaching.
- Teams should walk through the steps needed to access guidelines and collect equipment.
- Is information and equipment readily available?
- Are lines of escalation clearly signposted and functional?

Mapping

ACSA standards: 1.1.1.1, 1.1.3.4, 2.1.1.1, 2.5.2.1, 2.5.2.2, 2.5.3.1, 2.5.3.2, 2.5.1.3, 4.2.1.1, 4.2.1.2, 4.2.2.1, 4.2.2.2, 2.5.6.2, 4.3.2.1, 2.1.2.2

Curriculum competences:

Core: OB_BK_10, OB_BS_07

Higher: OB_HS_08, OB_HS_13

CPD matrix codes: 1C01, 1C02, 2B02

GPAS 2020: 3.2.14, 3.2.18, 3.2.20, 3.4.2, 3.3.6, 3.5.18, 5.2.27, 9.2.11, 9.2.31, 9.3.10, 9.4.6, 9.4.7, 9.5.21, 9.7.6

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7.6 Caesarean section anaesthesia: technique and failure rate

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Dr S Mike Kinsella, University Hospitals Bristol and Weston

Why do this quality improvement project?

Emergency anaesthesia for caesarean section may have to be achieved very rapidly and carries significant risks.

Background

Most women opt for regional anaesthesia when both are possible, although very occasionally some women prefer general anaesthesia. There is evidence that regional anaesthesia is safer in the emergency (Category 1-3) setting. For some patients, regional anaesthesia may be contraindicated; general anaesthesia is mainly used for emergency caesarean section when there is a perceived lack of time to establish regional anaesthesia. Whatever the urgency of caesarean section, when regional anaesthesia is attempted, the management of intraoperative pain is crucial and may necessitate the conversion to general anaesthesia. Conversion to general anaesthesia may also be necessitated by other anaesthetic or surgical indications. Understanding the reasons for use of general anaesthesia, including cases of conversion, can be used to direct quality improvement projects.

Audit Standard

The main functions for anaesthesia for caesarean section are the safety of the mother and baby, the prevention of intraoperative pain, and overall patient experience. The table below shows rates that would be expected in the average unit, which may be used for benchmarking; N.B. figures will vary depending on the case mix.^{1,2,3}

Caesarean section	Category (%)		
	4	2-3	1
Carried out with regional anaesthesia	> 95	> 85	> 50
Regional to general anaesthesia conversion	< 1	< 5	< 15

Note that these targets are for audit purposes and should not be used to guide the treatment of individual cases.

Other suggested outcomes that should be monitored include:

- time from decision to delivery interval for category 1 caesarean sections⁴
- rate of pain during caesarean sections carried out with regional anaesthesia for different urgency categories^{5,6,7}
- neonatal outcome data such as Apgar score and umbilical pH.

Suggested data to collect

Caesarean section numbers, including urgency, using the four-point scale.⁸ NHS Digital provides data for the number of elective and emergency sections carried out with regional anaesthesia.⁹ Currently, these figures cannot be relied on because of inaccurate returns at the hospital level. While they may become a useful resource in the future, we suggest that units use their own baseline figures.

- Type of anaesthesia: general anaesthesia; all regional anaesthesia; epidural top-up; spinal; combined spinal-epidural; other, according to urgency of the caesarean section.
- Regional anaesthesia failure: conversion to general anaesthesia for a case where regional anaesthesia has been started (a needle was inserted into the back or a drug given down an epidural catheter for the purpose of surgery).

Quality improvement methodology

A comparison of baseline data with the audit standards above will help to identify issues that should be the focus of quality improvement projects.

Through exploring problem areas and issues with obstetric and midwifery staff, a driver diagram can be created to help define areas and projects for improvement (eg anaesthetic staff numbers and availability; antenatal anaesthetic consultation; cooperation by obstetric staff with the use of regional anaesthesia for category 2 and 1 caesarean section; identification of poorly functioning labour epidurals; assessment of regional block before surgery).

Draw a process map and/or simulate a category 1 caesarean section carried out under regional anaesthesia. Is there a clear guideline to follow, compatible with human factors? Could the process be made quicker or safer with better design?

Mapping

ACSA standards: 1.5.1.3, 1.7.2.5, 1.7.3.1, 1.5.0.3, 4.1.2.1, 2.6.5.1, 1.7.2.1, 1.7.2.2

Curriculum competences: OB_AK_02, OB_AK_04

CPD matrix codes: 2B01, 02, 03, 04, 05

GPAS 2020: 1.5.14, 3.2.14, 3.2.18, 3.2.20, 3.4.2, 3.3.6, 3.5.18, 5.2.27, 5.5.19, 9.1.2, 9.1.6, 9.1.14, 9.1.15, 9.1.16, 9.1.18, 9.2.11, 9.2.31, 9.2.35, 9.3.10, 9.4.6, 9.4.7, 9.5.4, 9.5.5, 9.5.11, 9.5.18, 9.5.21, 9.5.27, 9.7.3, 9.7.61.

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7.7 Pain relief after caesarean section

Dr Sarah Armstrong

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Why do this quality improvement project?

It is suggested that the global caesarean section rate has doubled since 2000 and it is estimated that worldwide almost 30 million caesarean sections are performed annually.¹ Postoperative pain therefore affects millions of women each year. Strategies to reduce post-caesarean pain will improve patient experience, maternal wellbeing and allow mothers to care for their newborn babies effectively.

Background

Adequate pain relief after caesarean section is important to reduce morbidity, improve patient experience and facilitate maternal bonding with the neonate. New mothers with severe acute pain have a significantly increased risk of developing chronic pain syndromes and postpartum depression.² The provision of adequate analgesia must be balanced against maternal adverse effects and the risk of drug transference to the neonate through breastfeeding.

Analgesia after caesarean section may be provided through a variety of methods and routes. Simple analgesia with paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) may be supplemented with opioids as needed. Opioids may be given intrathecally, epidurally, intravenously or orally. Although effective, opioids also have significant adverse effects including pruritus, nausea, vomiting, sedation and, rarely, respiratory depression.³

Best practice

There is little definitive evidence available to define appropriate achievable parameters in best practice for the provision of post-caesarean analgesia. Maternal satisfaction is not necessarily compromised by imperfect analgesia, and visual analogue and verbal rating scores to measure pain are not uniformly used.

The National Institute for Health and Care Excellence guidance for caesarean section recommends:⁴

- Pregnant women having a caesarean should be given information on different types of post-caesarean analgesia so that analgesia best suited to their needs can be offered.
- Women should be offered diamorphine (0.3-0.4 mg intrathecally or 2.5-5 mg epidurally) if regional anaesthesia is chosen.

- If there are no contraindications, paracetamol and NSAIDs should be added postoperatively.
- Women receiving or who have received opioids should have a minimum hourly observation of respiratory rate, sedation and pain scores, and should be prescribed an antiemetic and a laxative.
- Documented hourly observations of respiratory rate, sedation and pain scores in those who have received opioids should continue for 12 hours for intrathecal diamorphine and for 24 hours for intrathecal morphine. Those receiving epidural opioids or patient-controlled analgesia (PCA) with opioids should be monitored throughout treatment and for at least two hours after discontinuation of treatment.
- Women receiving opioids should be prescribed an antiemetic and a laxative regularly.

Guidelines for the Provision of Anaesthetic Services recommend:⁵

- PCA equipment should be available for postoperative pain relief.
- Staff operating the equipment should be trained in its use and how to look after women using it.

Suggested data to collect

- What information is given to women preoperatively about pain relief options?
- What is patient satisfaction with pain management on day 1 postoperatively?
- What percentage of women are given opioids via the intrathecal or epidural route during or after caesarean section?
- What percentage of women undergoing caesarean section under general anaesthesia receive alternative methods of pain relief (eg transverse abdominis plane blocks), local infiltration or PCA opioids?
- What percentage of women receive regular paracetamol and NSAIDs post-caesarean?
- Are women monitored appropriately and for the correct length of time postoperatively?
- What access to PCA equipment is there for women post-caesarean and are staff in the postnatal areas appropriately trained to use and monitor the equipment?
- How frequently do adverse effects occur and what are they?

Quality improvement methodology

- Process mapping – look at the whole patient journey from decision to caesarean section through to the first postoperative day, looking at the methods of analgesia given, their efficacy and quality improvement opportunities. What steps do not work as intended? What steps are part of the process on paper but do not happen on the ward? What are the barriers and opportunities for improvement? Discuss with other key team members.
- Create an affinity or fishbone diagram for each area of concern. What are the barriers to women receiving effective analgesia after caesarean section? For example, why don't women receive a regular pain assessment? Factors to consider could be patient, clinician, organisational and other factors.
- Benchmark performance. Drive quality improvement by defining a clear aim, providing clear messaging and easy to follow guidelines. For example: 'All women undergoing caesarean section should receive regular NSAIDs postoperatively unless there is a clear contraindication'.
- Involve patients in developing any change ideas. Could patients take a more active role in their own pain relief, with clearer information to reassure and encourage them?

Mapping

ACSA standards: 1.4.4.2, 1.7.1.1, 1.2.2.1, 1.4.5.1, 2.1.1.13

Curriculum competences: OB_BS_10, OB_HS_07

CPD matrix codes: 2B02, 2B03

GPAS 2020: 2.9.3, 2.9.4, 2.9.5, 4.2.18, 9.2.48, 9.2.12, 9.2.15, 9.2.16, 9.9.1, 9.9.3, 9.5.5, 9.2.48, 11.2.1, 11.9.1

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7.8 Monitoring of obstetric patients in recovery and receiving enhanced maternity care

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Why do this quality improvement project?

Adequate monitoring of postoperative and unwell obstetric patients is a key component of safe patient care. It helps facilitate early identification of deterioration and complications, and so appropriate management can be instituted, and harm can be avoided.

Background

Increasing maternal age, comorbidities and the incidence of obesity have all contributed to growing numbers of women who become unwell around the time of childbirth in recent years.¹ Obstetric units must have appropriate recovery and support facilities to enable safe monitoring and management of these patients, as well as those who need to be recovered from operative procedures. A key component of this is having adequate numbers of staff who have appropriate training and experience in these environments. Failure to identify the deteriorating or unwell patient is a common feature of cases of maternal death and serious morbidity. This has been highlighted in the most recent MBRRACE report, where failure to identify postpartum haemorrhage in recovery contributed to significant morbidity in these patients.

Best practice

There are a number of national publications that provide guidance on best practice in recovery and care of the sick obstetric patient.²⁻⁵ 'Care of the critically ill woman in childbirth: enhanced maternal care,' was published in 2018 and makes recommendations relevant for the care of a pregnant or recently pregnant, acutely unwell woman.⁶ The document acknowledges that while women who become acutely ill during pregnancy, labour and the postnatal period should have immediate access to the same standard of support as other patients, there are different models to deliver this care.

'Care of the critically ill woman in childbirth; enhanced maternal care' provides guidelines for standards of monitoring for women receiving enhanced maternity care. The RCoA 'Guidelines for the provision of anaesthesia services for an obstetric population 2019' also highlight the standards that should be adhered to regarding recovery monitoring and care. The common themes among these guidelines are

- Adequate numbers of staff who have had appropriate training. Minimum staff to patient ratios of 2:1, and 1:1 for those recovering from general anaesthesia. Staff trained in the recovery of patients and with Intermediate life support training within the last 1 year.
- Monitoring of appropriate parameters and documentation on early warning charts. Early warning system modified for obstetrics should be used in the care of all women presenting to acute care services who are pregnant or within 42 days of having given birth. Observations should be documented every 15 minutes for the first hour and then at 30-minute intervals for the following two hours unless otherwise stipulated.
- Adequate handover of patients with handover supported by tools such as 'situation, background, assessment, recommendation' (SBAR) and SAFE.^{7,8}
- There should be local policies for the escalation of the deteriorating patient and for discharge from recovery.

Suggested data to collect

Prospective or retrospective data collection over at least a one-month period of the following factors.

Staffing

- The percentage of patients who are looked after by recovery staff on a 2:1 or where appropriate a 1:1 basis. Review rotas to ascertain the numbers of staff on each shift with up to date immediate life support training and those who have had general recovery training.

Monitoring

- The proportion of patients who have complete documentation of locally agreed recovery documentation/early warning score charts.
- The proportion of patients who have documentation about obstetric specific parameters including resolution of sensorimotor blockade after neuraxial anaesthesia, blood loss from wound, vagina or drain and urinary output, while in the recovery area.

Handover

- The percentage of patients who have documentation of handover on arrival in recovery.
- The use of handover tools such as SBAR or SAFE.

Policies

- The existence and accessibility of policies and protocols for discharge from recovery and escalation in the case of a deteriorating patient.
- The proportion of staff who can identify how to access these policies.

Data collection

- Serious incidents involving patients in recovery or receiving enhanced maternity care recorded and reviewed on a monthly basis, with learning points disseminated to all staff involved in the care of these women.
- Data collection covers patients admitted in normal working and 'out of hours' periods.

Quality improvement methods

- If guidelines are not being followed, go 'back to the floor' to look for reasons why. Are staff well trained and have adequate time? Are they familiar with the guidelines and their importance? Are the guidelines clear and easy to action? Consider using a behaviour change framework such as applied behaviour change or COM-B (capability, opportunity, motivation and behaviour) to look at the barriers for staff following the correct policy.
- Draw a process map of the detection and escalation of a deteriorating patient in recovery. Is all equipment easy to access? Are lines of communication clear and roles and responsibilities well defined?

- Use multidisciplinary simulation to train staff in the practical and logistic issues around patient transfer and managing a deteriorating patient.
- What is the patient view of their stay in recovery and enhanced maternity care? Patient interviews and co design can improve processes, especially where care transfers exist: patients are the only group who see the whole process from end to end.

Mapping

ACSA standards: 1.3.1.7, 1.3.1.5, 1.4.1.1, 1.4.2.1, 1.4.2.2, 1.4.2.3, 1.4.2.4, 1.4.4.1, 1.5.1.3, 1.5.4.3, 1.7.2.4, 2.1.1.5

Curriculum competences: OB_BK_16, OB_BS_11, OB_BS_12, OB_BK_17, OB_IS_11, OB_HS_06

CPD matrix codes: 2A04, 2B02, 2B03, 2B05, 2B06, 3B00

GPAS 2020: 4.1.1, 4.2.2, 4.2.5, 4.2.11, 4.2.17, 4.4.3, 4.4.4, 9.1.27, 9.1.28, 9.3.2, 11.4.2

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7.9 Timely anaesthetic involvement in the care of high-risk and critically ill women

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Why do this quality improvement project?

Care of women with complex medical or obstetric needs and those who are critically ill require the care of a multidisciplinary team, of which the obstetric anaesthetist is an essential member. Complex patients may include women with relevant medical conditions, such as cardiac, respiratory, neurological or haematological disorders, raised body mass index (BMI), significant mental health issues, hypertension, sepsis or those at risk of major haemorrhage.

Background

Maternal deaths from non-obstetric causes have been higher than those from direct complications of pregnancy for many decades. In 2018, an increase in indirect deaths was reported. The single most common cause of death was cardiac disease and two-thirds of women who die have significant comorbidities.¹

Reports from the Confidential Enquiry into Maternal Deaths have repeatedly highlighted the need for multidisciplinary involvement in the care of high-risk and critically ill women. Guidelines from the National Institute for Health and Care Excellence published in 2019 recommend the timely antenatal involvement of anaesthetists in planning care for women with medical conditions and those with obstetric complications, as well as for women with a high BMI.²

The joint guideline on enhanced maternity care of critically ill women makes recommendations specifying the disciplines that should be involved, regardless of location. The skillset of those caring for critically ill women is described.³

Best practice

- All units should have antenatal and intrapartum guidelines for the management of high-risk pregnancies, including those in women with raised BMI, and for transfer to intensive care.
- All women with significant medical or obstetric conditions should be seen by a senior obstetric anaesthetist antenatally to have their care planned by a multidisciplinary team.
- All women with high-risk pregnancies or at risk of deterioration should be seen by a senior obstetric anaesthetist and an obstetrician on delivery suite.

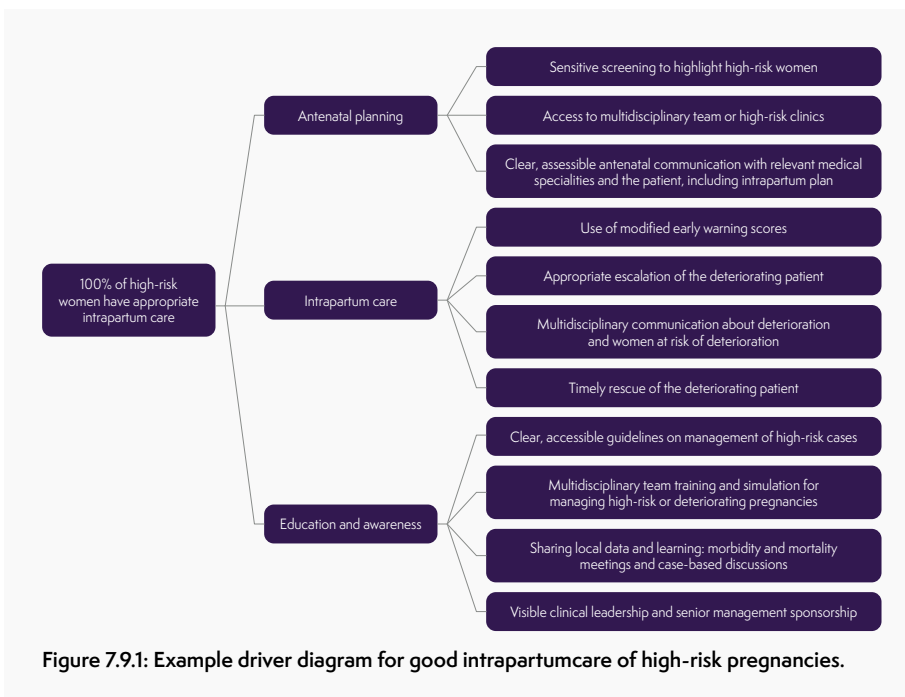
- All women with a raised BMI (over 40 kg/m²) should be seen by an anaesthetist antenatally.
- Critically ill women should:
 - receive the level of care required, regardless of location
 - be cared for by nurses and midwives with the required training and experience
 - have early consultant anaesthetic involvement in their care and liaison with intensive care.

Suggested data to collect

- Percentage of at-risk pregnancies with a management plan drawn up antenatally with anaesthetic input.
- Percentage of women with significant pregnancy-induced hypertension in labour with regional analgesia (if not contraindicated).
- Percentage of women with significant hypertension seen by an anaesthetist within one hour of arriving on the delivery suite.
- For units that provide level 2 care, evidence that there is at least one midwife per shift with the required training and competencies.
- Percentage of women with a BMI over 40 kg/m² seen by an anaesthetist antenatally with a care plan.
- Percentage of women with sepsis requiring fluid resuscitation seen by an anaesthetist within one hour of the diagnosis.
- Percentage of cases of haemorrhage of more than 1.5 litres where the anaesthetist was involved.

Quality improvement methodology

- Draw a process map of the detection and initial management of the deteriorating patient and simulate or walk through the pathway. Is the information on what to do and who to contact clear and accessible?
- Consider co-designing multidisciplinary team processes with patients and relatives. How do patients experience the antenatal planning of a high-risk pregnancy?
- Draw a driver diagram for good intrapartum care of high-risk pregnancies (a sample driver diagram is shown in Figure 7.9.1).



Mapping

ACSA standards: 1.1.1.1, 1.2.1.3, 1.3.1.7, 1.4.3.2, 1.7.1.1, 1.7.2.3, 1.7.2.4, 1.7.2.6

GPAS 2020: 5.2.12, 7.3.13, 9.1.5, 9.2.39, 9.2.40, 9.3.1, 9.3.2, 9.3.3, 9.3.4, 9.3.5, 9.3.6, 9.3.7, 9.5.31, 9.7.2

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7.10 Postnatal obstetric anaesthetic adverse effects and complications

Dr Helen Brambley, Dr Robin Russell
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Why do this quality improvement project?

Obstetric anaesthesia forms a large part of the anaesthetic workload in most hospitals. While most cases pass uneventfully this is not universal, and it is important to have robust mechanisms for follow-up and recognition and management of potential complications of both neuraxial and general anaesthesia. In some cases, complications may be severe and may not manifest until after the woman has gone home.

Background

Anaesthetists are involved in the care of approximately 60% of women during labour and delivery, and obstetric cases account for 45% of all neuraxial blocks performed.¹ Significant postnatal complications of neuraxial procedures include:

- Postdural puncture headache (PDPH) following either accidental dural puncture with an epidural needle or spinal anaesthesia. Rates of accidental dural puncture with an epidural needle are estimated to be 0.19–3.6%,^{2,3} with approximately 60% of these women developing PDPH.³ Estimated rates of PDPH following spinal anaesthesia using narrow-gauge atraumatic needles are 0.14–1.5%.³ Various treatments for PDPH, including an epidural blood patch, may be required.⁴
- Neurological complications can be divided into neuropraxia (1 : 3,000 temporary to 1 : 15,000 permanent);¹ space-occupying lesions including epidural abscess (0.2–3.7 : 100,000) or haematoma,⁵ which may lead to compressive symptoms; infection such as meningitis (1.5 : 10,000);¹ and chemical damage from inappropriate drug administration. Despite their severity, many units do not have guidelines for the management of postnatal neurological complications.⁶

- Although rates of general anaesthesia in obstetrics are declining, the 2014 Fifth National Audit Project (NAP5) on accidental awareness under general anaesthesia highlighted obstetrics as an area of particularly high risk for awareness (1 : 670 cases of caesarean section vs 1 : 19,000 overall or 1 : 8,000 cases where neuromuscular blockade was used).⁷ The rate of failed intubation is also higher for obstetric patients than in the general population, at 1 : 390 for all obstetric general anaesthetic cases and 1 : 443 for caesarean section,⁸ and should be monitored (see section 7.5). There are other recognised adverse effects associated with general anaesthesia such as shivering, sore throat, nausea and vomiting, muscle pains, damage to lips and teeth, aspiration of stomach contents and allergic reactions.⁹

Best practice

- Management of immediate complications of neuraxial and general anaesthesia should follow local guidelines.¹⁰
- All women receiving an obstetric anaesthetic intervention should be followed-up, and written information should be given on when and how to seek help if complications arise.¹¹
- Management of PDPH and neurological complications should follow national and local guidelines.^{4,10}

Suggested data to collect

Standards	Measures
All women who receive neuraxial blocks and general anaesthesia during labour and delivery should be reviewed.	<ul style="list-style-type: none"> ■ Percentage of women receiving neuraxial and general anaesthesia who are reviewed by a member of the anaesthetic team on the first day mobilising after delivery.
Women who receive neuraxial analgesia or anaesthesia should be given written information about when and how to seek help if complications arise.	<ul style="list-style-type: none"> ■ Percentage of women who received written information on complications.
Woman with postnatal headache suggestive of PDPH must be reviewed urgently, in a time frame in line with local guidelines.	<ul style="list-style-type: none"> ■ Number of women who were not reviewed by an anaesthetist within 24 hours of developing PDPH. This is an Obstetric Anaesthetists' Association standard, so reasons for failure to review should be captured.
Women with PDPH should be reviewed daily until hospital discharge or until symptoms resolve in line with Obstetric Anaesthetists' Association standards.	<ul style="list-style-type: none"> ■ Percentage of women followed-up daily until symptoms resolve or until hospital discharge. Reasons for failure to follow-up should be collected.
Women in whom the dura is punctured with an epidural needle or who suffer from PDPH must receive suitable follow-up information.	<ul style="list-style-type: none"> ■ Percentage of women receiving information on 'red-flag' symptoms and who to contact should they occur.
Women reporting neurological symptoms following neuraxial block must be reviewed urgently by an anaesthetist.	<ul style="list-style-type: none"> ■ Percentage of women reporting neurological symptoms who are reviewed by a member of the anaesthetic team urgently – in a time frame in line with local guidelines.
Adverse effects resulting from general anaesthesia should be recorded.	<ul style="list-style-type: none"> ■ Rates of difficult and failed intubation, accidental awareness, shivering, sore throat, nausea and vomiting, muscle pains, damage to lips and teeth, aspiration of stomach contents and allergic reactions should be recorded.
Whenever a complication of neuraxial or general anaesthesia is detected the woman's general practitioner and community midwife should be notified.	<ul style="list-style-type: none"> ■ Percentage of cases where the woman's general practitioner and community midwife have been informed of anaesthetic-related issues.

7.10 Postnatal obstetric anaesthetic adverse effects and complications

Dr Helen Brambley, Dr Robin Russell
John Radcliffe Hospital, Oxford

Quality improvement methodology

- Draw a process map for follow-up of women receiving anaesthetic intervention and escalation in the event of a complication. Are criteria for escalation clear and accessible to all postnatal staff and patients? Are there any prompts that can be used to ensure this is not overlooked (eg checklist in anaesthetic charts)? Under what circumstances are women not reviewed and how can this be improved (eg telephone follow-up or starting follow-up visits earlier in the day)?
- Design patient information sheets about complications of neuraxial blocks with patients to ensure that they are clear and accessible.
- Incidence of PDPH: the unit should have a robust mechanism for recording all neuraxial procedures and the incidence of accidental dural puncture and PDPH. Is the incidence of PDPH reviewed on a regular basis? Are reasons for failure and potential areas for improvement discussed and acted upon?
- Management of PDPH and neurological complications: does the unit have guidelines on the management of PDPH and neurological complications that are clear and easily accessible? Are there clear criteria for escalation that have been agreed with other specialties (eg radiology and neurology)? Consider a checklist or other prompts to ensure that all necessary steps are taken in a timely fashion.

- Analyse cases of PDPH and neurological injury for common features and learning. Present cases to anaesthetic and obstetric teams to share learning and discuss potential improvements. Were any cases handled particularly well and what are the learning points from these cases?
- Management of complications following general anaesthesia: are there clear guidelines for following-up women after general anaesthesia? If accidental awareness is reported, is there a mechanism for appropriate follow-up? Are midwifery and community midwifery staff clear about how to report anaesthesia-related concerns raised by women (awareness may not be reported until after anaesthetic follow-up or after discharge). Map out a potential case with community colleagues and test feedback mechanisms.

Mapping

ACSA standards: 3.1.2.1, 1.7.1.2, 1.1.1.7, 1.7.2.6, 1.4.4.2,

Curriculum competences: OB_BK_12, OB_BK_15, OB_IK_07, OB_IS_05, OB_IS_08, OB_AK_04

CPD matrix codes: 2802, 2803, 2804

GPAS 2020: 9.5.4, 9.5.5, 9.7.3, 9.7.6

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Obstetric practice

7.11 New beginnings: A Case study using patient experience-based co-design to improve services

Dr Emma Evans, Dr Carolyn Johnston, Dr Andrew Tan
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St. George's Hospital started its 'New beginnings' project with the aim of improving women's experiences of giving birth in the operating theatre. They used the established Experience Based Co-Design method, supported by the Point of Care Foundation, a charity working in this methodology.¹ This tool takes improvers through a defined set of steps designed to capture both patients' and staff experience of care.

Following several observation events to understand the environment and guide the interviews, the groups were interviewed on camera. Once these films and interviews had been reviewed by the project team and thematically analysed, short edited films were screened to the staff and patients separately, then as a combined group to discuss their findings and agree areas for improvement. By involving an emotional mapping exercise, the project team were able to understand where the most important areas were for patients and staff.

Dr Andrew Tan, from the staff project team said, 'Using this method was a fantastic way to get staff talking about what really happens day to day and what their experience of care actually is. By looking at their frustrations it was easy to realise they were much the same as patients' experiences and frustrations at their care.'

The participants jointly decided on a number of themes for improvement: personalising the process of having a baby in theatre by addressing small touches (like using parents' names, dignity, birth plans), improving the information available to women before they come to the operating theatre about birth and the environment itself. Many other smaller changes have been made, such as improving the physical environment in theatres, reducing routine fasting times and improving skin-to-skin contact rates on the operating table. Dr Emma Evans from the project team said, 'Perhaps the most important change is that staff are now talking about women's experience. An operative birth is still a birth, and the whole team are working together to make that magical.'

Mapping

ACSA standards: 3.1.1.1, 3.1.1.2, 3.1.2.1, 4.2.1.2, 4.2.2.2

GPAS 2020: 9.5.3, 5.5.65, 9.7.2, 9.9.13

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Obstetric practice

