Guideline for Immediate Post-operative care of patients following Obstetric Surgery

A Clinical Guideline recommended for use in:

In:	Theatre
By:	All Theatre Personnel
For:	Obstetric Patients
Division responsible for document:	Division 3
Key words:	Post-operative care, obstetric
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Supported by:	Clinical Leader
Assessed and approved by the:	Clinical Guidelines Assessment Panel (CGAP)
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Ratified by or reported as approved to:	Clinical Standards Group and Clinical Safety and Effectiveness Sub-board
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To be reviewed by:	Author
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Version No:	4
Description of changes:	Addition of recovering covid and infectious patients and patients who have had intrauterine infant death. Changes to thromboprophylaxis Discharging patients to Blakeney Addition to role of MCA
Compliance links:	None
If Yes – does the strategy/policy deviate from the recommendations of NICE? If so, why?	N/A

This guideline has been approved by the Trust's Clinical Guidelines Assessment Panel as an aid to the diagnosis and management of relevant patients and clinical circumstances. Not every patient or situation fits neatly into a standard guideline scenario and the guideline must be interpreted and applied in practice in the light of prevailing clinical circumstances, the diagnostic and treatment options available and the professional judgement, knowledge and expertise of relevant clinicians. It is advised that the rationale for any departure from relevant guidance should be documented in the patient's case notes.

The Trust's guidelines are made publicly available as part of the collective endeavour to continuously improve the quality of healthcare through sharing medical experience and knowledge. The Trust accepts no responsibility for any misunderstanding or misapplication of this document.

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Rationale for the recommendations:

Safe and effective monitoring and care is essential during the vulnerable post-operative period to ensure early action in the event of clinical complications.

Broad recommendations:

This guideline, which provides additional guidance in relation to the requirements of obstetric recovery, should be used to guide care following obstetric surgery and should be used in conjunction the Guideline for the Management of: Recovery of Patients Following Anaesthesia. (Trust Docs: 8632)

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1. Recovery

The Recovery Practitioner's responsibility is to the mother. The midwife is responsible for the care of the baby at all times A midwife or Maternity Healthcare Assistant (MCA) should be present in recovery if the baby is present. If a midwife leaves recovery during this period then the recovery practitioner must be informed of their whereabouts and how to contact them.

1.1 Patients requiring recovery / Criteria for transfer to recovery:

- Any patient going to theatre for a caesarean section or assisted delivery under regional anaesthesia.
- Patients who have a manual removal of placenta, repair of perineum , ARM or EUA may return directly to Delivery Suite providing they are stable and that the requirements of the Obstetric Recovery Flow Chart (Appendix 1: Obstetric Recovery Flow Chart 3.12.2019) have been met. The decision for the patient to return to Delivery Suite rests solely with the Anaesthetist.
- Blood patch patients do not require recovery.
- Any patient having a General Anaesthetic for any procedure.

1.2 Transfer to main recovery:

- If the recovery room is fully occupied and an additional patient requires recovery, the patient will be recovered in Main recovery (Team 4). Patients should not be recovered in rooms on Delivery Suite as essential monitoring equipment is not always available.
- When a clinical clean is taking place in Obstetric recovery, patients should be recovered in Main recovery.
- Patients in Main recovery must be accompanied by a Midwife or MCA at all times. Fathers or birth partners may accompany the mother and baby. However due to short staff at nights, this decision is at the discretion of the recovery staff taking into account any critically ill patients in the recovery room.
- Please take into consideration other gynaecological patients within the recovery area and recover separately whenever possible.
- Appropriate bleep numbers for the Neonatal team are displayed in recovery.

1.3 Patients requiring recovery on delivery floor

Sometimes patients may need to be transferred to their room on delivery floor straight from theatre for their recovery. We have adequate monitors now to support this process. This should be agreed between the recovery coordinator and the anaesthetist.

Patients who may fulfil this requirement are:

- Patients who are covid positive or with other infections that require isolation.
- Current PPE guidelines in place at the time should be followed.

- Other patients that may need to be recovered in their room are those that have had an intrauterine death.

1.4 Recovery following general anaesthesia

- A minimum of two recovery staff, with at least one being registered , should be present with the obstetric patient who has had a GA. If this staffing isn't achievable, then the anaesthetist should stay until the patient is ready for discharge from recovery. (RCoA 2019)
- **It is not safe practice or appropriate for the baby to travel in the bed with the mother, when transferring a patient after a general anaesthetic.**
- When the patient is capable of maintaining her own airway, the vital signs are stable and she is clean, dry, orientated and comfortable, then baby may be placed securely in bed with the mother.
- If the mother has received a general anaesthetic, fathers or birth partners may be invited to join the mother once she is conscious and comfortable. This is at the discretion of the recovery practitioner.

1.5 Role of the Maternity Care Assistant in recovery (MCA)

- Support the patient with infant feeding, ideally the baby should be fed within one hour of birth.
- Once the recovery practitioner has performed the first set of maternal observations feeding of the baby should be the next priority.
- On discharge from recovery, the MCA should be present to escort the patient and baby back to Blakeney ward with the recovery practitioner.

1.6 Observations whilst in recovery

The observations required whilst in recovery are detailed with the Trust Guideline for the Management of: Recovery of Patients Following Anaesthesia (available via the Trust Docs system).

Observations will be recorded on the Obstetric Perioperative Record (Appendix 2.) Only the colour Obstetric recovery care plan should be used.

MEOWS should be calculated on arrival to recovery and then at least every other set of observations recorded on the recovery observation chart. It should also be calculated on discharge. The midwife and anaesthetist should be informed of any triggers.

1.7 Post Partum Haemorrhage

- **Be aware of the danger of sudden blood loss.**
- Check vaginal blood loss at regular intervals.
- Document on care plan when PV loss has been checked in the notes section of the care plan.

- A small amount is acceptable.
- **If there is a postpartum haemorrhage, inform the midwife, anaesthetist and obstetrician immediately. The emergency alarm or a 2222 call may need to be initiated.**

1.8 Fluids in recovery

- Establish and document all fluid regimes, i.e. oxytocin.
- Ensure oxytocin is running via an intravenous infusion pump at the correct rate - 166 mL/hr for 2 hours (30Units in 500mL 0.9% sodium chloride).
- If the patient is pre-eclamptic they may be on restricted fluids. Total hourly fluids (intravenous and oral) should equal 85mL/hr. A more concentrated oxytocin infusion may be used.
- Do not give the patient water in recovery in case of re-admittance to theatre. When the patient is ready for discharge they may have water or an ice cube to suck.

1.9 Thromboprophylaxis

- The Obstetric Thromboprophylaxis Risk Assessment (TRA) is now used as an indicator as to whether the patient requires LMWH. (This tool is available on Trust docs ID 18766).
- The TRA score is sometimes asked for by the Midwives on Blakeney ward and this can be found in the notes if needed. Alternatively, the midwife in theatre should be able to inform us.
- Further guidance and information on anticoagulation in pregnancy can be found in the Prophylactic Anticoagulation in Pregnancy guideline Trust doc: 878.
- Low Molecular Weight Heparin (LMWH) prescribed as necessary according to the flowchart (Appendix 3).
- The standard dose for prophylaxis is 5000 Units dalteparin per day for patients with a booking weight between 50Kg and 90Kg.
- Patients who weigh 90kg or more will require an increase in dose to 7500Units dalteparin per day.
- Patients who weigh less than 50kg should be prescribed 2500 Units dalteparin per day.
- For all patients having elective or emergency caesarean delivery (both under regional and general anaesthesia) the first post-operative dose of LMWH should be prescribed to be given 4 hours after the end of surgery/removal of epidural catheter (if applicable). Subsequent doses should be prescribed as close to (but not more than) 24 hours after this dose. The timings of these subsequent doses should coincide with drug rounds on Blakeney Ward (i.e. 06:00, 12:00, 18:00 or 22:00).

- In certain situations like peri-operative haemorrhage the decision may be made by the anaesthetist or surgeon to defer the prophylactic dalteparin and anti- inflammatory medication pending blood results or post-surgical/anaesthetic review. Record these instructions along with the time that the first stat dose of dalteparin is due on the care plan and include this in the handover to the receiving midwife.

1.10 Discharge Criteria from recovery.

- The Discharge criteria (Appendix 4: Obstetric Recovery Discharge Criteria revised 25.07.2018) must be completed and signed before discharging the patient. All sections must be completed and any deviation from criteria documented and reported to the appropriate individual if required.
- The name of the anaesthetist that the patient was received from must be recorded on the front of the care plan. Midwife must sign the back of the care plan on handover of the patient.
- **All epidurals should normally be removed in theatre.** If the epidural has not been removed then the anaesthetist should be called to remove it. No patient is to be discharged to Blakeney ward with an epidural in situ. Occasionally they may be discharged to delivery floor with the epidural still in situ, this should be documented on the obstetric recovery care plan and handed over to the midwife. Instructions for removal of epidural by the midwife should be documented by the anaesthetist. These should include instructions on timing of dalteparin doses to be given
- A Modified Early Obstetric Warning Score (MEOWS) should be calculated from the last set of observations and recorded on the care plan. Midwife should be informed on handover of scoring and any triggers.
- For discharge of elective patients, contact the Blakeney ward co-ordinator to inform that the patient is ready for discharge. The recovery practitioner escorts patient and baby to Blakeney ward with an MCA.
- The last patient on the elective list may be accompanied by theatre midwife to Blakeney ward.
- NO recovery practitioner should take a patient to Blakeney ward without an MCA or midwife present if the baby is travelling with the patient.
- For elective patients, the midwife responsible for the patient's care in theatre will handover the mother and baby and make all identification checks. If the theatre midwife is unavailable, identification checks of the mother may be done by the recovery practitioner. The receiving midwife must check and take responsibility for the baby's identification against the mother's identity.
- For emergency patients, it is the midwife's responsibility to accompany and handover the patient to the receiving midwife on Blakeney ward.
- **In times of emergency or high demand on Delivery Floor, the recovery practitioner may escort the mother and baby to the ward with a midwifery care assistant (MCA).**

- **No patient should be discharged without a qualified recovery nurse or midwife escorting them back to Delivery Floor or Blakeney ward.**

2. Monitoring Compliance

The monitoring of compliance with the guideline will be as indicated in the Guideline for the Management of: Recovery of Patients Following Anaesthesia (available via the Trust Docs system).

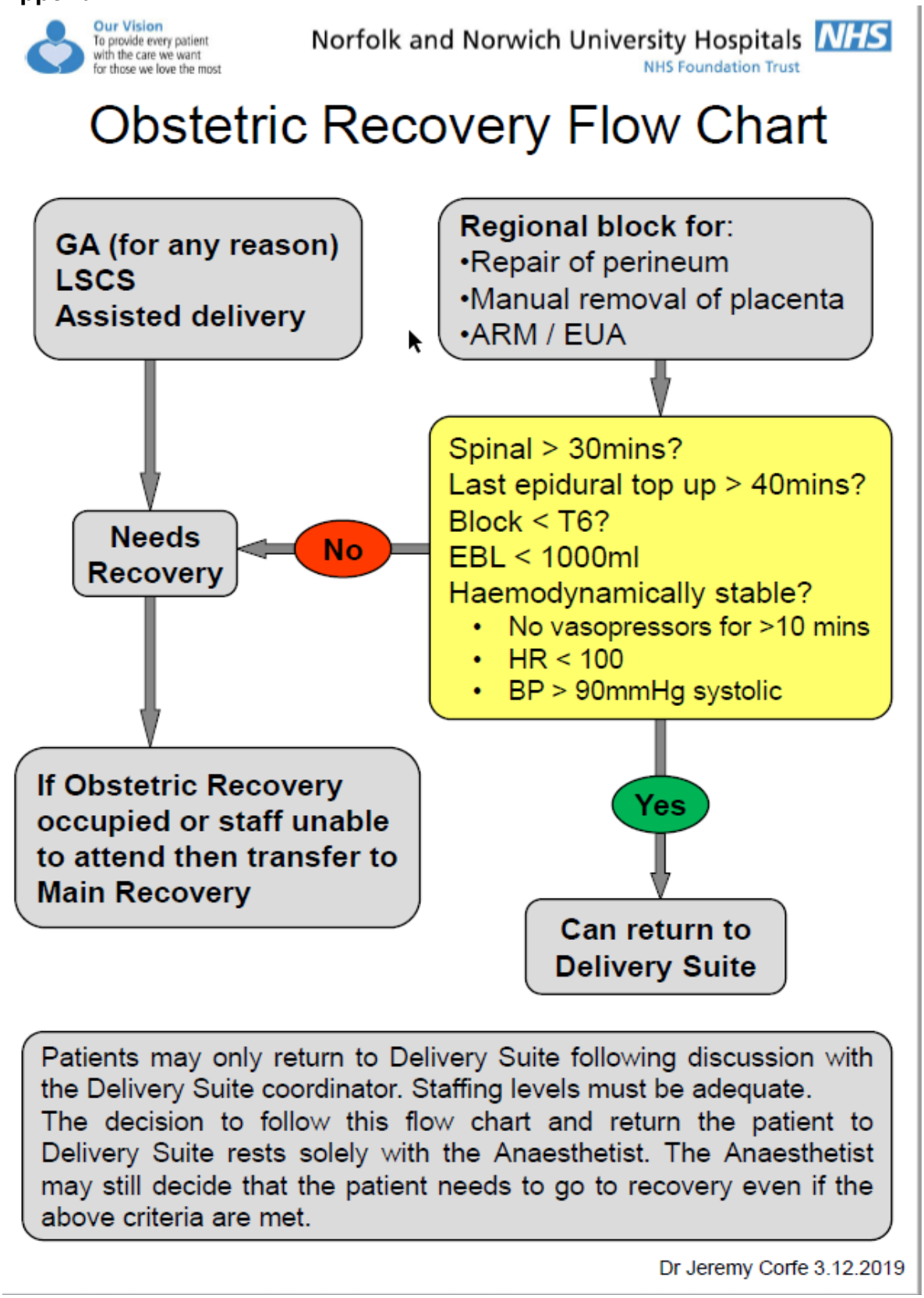
Summary of development and consultation process undertaken before registration and dissemination

During its development it has been circulated for comment to: Clinical Leaders – In Patient Theatres, Obstetric Clinical Leads.

3. Distribution list/ dissemination method

Through Theatre Policy Group.
General Manager, Surgical Support Services
Trust Intranet

Appendix 1: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Obstetric Recovery Flow Chart
GA (for any reason)
LSCS
Assisted delivery
Regional block for:
•Repair of perineum
•Manual removal of placenta
•ARM / EUA
Spinal > 30mins?
Last epidural top up > 40mins?
Block < T6?
EBL < 1000ml
Haemodynamically stable?
• No vasopressors for >10 mins
• HR < 100
• BP > 90mmHg systolic
No
Needs Recovery
Yes
If Obstetric Recovery occupied or staff unable to attend then transfer to Main Recovery
Can return to Delivery Suite
Patients may only return to Delivery Suite following discussion with the Delivery Suite coordinator. Staffing levels must be adequate.
The decision to follow this flow chart and return the patient to Delivery Suite rests solely with the Anaesthetist. The Anaesthetist may still decide that the patient needs to go to recovery even if the above criteria are met.
Dr Jeremy Corfe 3.12.2019

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Appendix 2 - Obstetric Recovery Discharge Criteria

Assessment	Criteria	Triggers
Airway	Self-maintained	Airway Support required
Breathing	SaO_2 ≥95% on air If O_2 needed seek anaesthetic review RR 11-20/min	SaO_2 ≤94% on air RR ≤10, ≥21/min Breathing difficulties
Circulation	Systolic 90-139mmHg Diastolic 46-89mmHg Pulse ≤49, ≥101/min Arterial Line removed (confirm with Anaesthetist before arterial line removal)	Systolic ≤89, ≥140mmHg Diastolic ≤46, ≥90mmHg
Disability	Sedation Score ≤ 1 Blood glucose 6-10mmols/L or within agreed patient parameters	Patient unconscious Sedation score ≥1
Temperature	≥ 36°C - ≤37.4°C	
Fluid Management	Fluid chart maintained Drain output within acceptable limits Urine output ≥30mLs/hr Oxytocin charted on fluid charts	High drain outputs Urine output ≤30mLs/hr.
Wound	Minimal bleeding from wound Acceptable PV loss	Moderate bleeding/ stained dressing PV loss- moderate/clots
Pain	Patient comfortable Pain score ≤1 Analgesia prescribed on EPMA	Pain score ≥ 1 No pain relief prescribed
Nausea & Vomiting	Nausea & vomiting controlled Anti-emetics prescribed	Uncontrolled nausea & vomiting No anti-emetics prescribed
Epidural/Block Level	Epidural removed Normal power & sensation in upper limbs	Epidural in situ- acceptable if patient is staying on delivery suite/ccc
Pressure Areas	Pressure areas intact	
Patient Property	Patient property documented	
LMWH	Prescribed as per protocol	Not prescribed
Modified Early Obstetric Warning Score (MEOWS)	Calculated before discharge with last set of observations. Documented on care plan	Not calculated or documented on care plan.

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- Patients should stay in recovery for a minimum of 20minutes
- The discharge section of the care plan must be completed and signed by both recovery practitioner and midwife
- The MEOWS must be recorded and handed over to the midwife.

Appendix 3:

For most women having antenatal thromboprophylaxis, the dose required depends on booking weight. However, the prescribing physician may consider that the current weight should be used. No special blood tests or monitoring are required.

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Prescription of Low Molecular Weight Heparin Following Caesarean Section

- All Caesarean patients (Elective and Emergency) must have a weight-appropriate stat dose of Dalteparin (see below) prescribed for 4 hours after the end of surgery.
- Subsequent prescription of Dalteparin is based on booking weight (however at the discretion of the prescribing doctor, current weight can be used):
  - less than 50 kg - 2500U once daily
  - 50 to 90 kg - 5000U once daily
  - 91 to 130kg - 7500U once daily
  - 131 to 170kg - 10000U once daily
  - Greater than 170kg - 75U/kg/day
- Regular post natal Dalteparin should be prescribed so that the next dose is given no more than 24 hours after the stat dose.
- Timings of post natal Dalteparin should be as per the prescription chart to coincide with drug rounds:
  - i.e. 6:00, 12:00, 18:00, 22:00.
- If you prescribe Dalteparin it is your responsibility to complete the Thromboprophylaxis Risk Assessment (TRA) on the front of the prescription chart.
- Low Molecular Weight Heparin must not be given within 4 hours of removal of an epidural or insertion of a spinal
- Because of unfamiliarity with the management and timing of removal of epidurals on Blakeney ward, Obstetric patients requiring postoperative epidural analgesia should remain on Delivery Suite.

Dr J Francis
8.1.2016