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Related Trust Policies (to be read in conjunction with)	(Refer to the main body of the text) 04071 Standard Infection Prevention 04072 Hand Hygiene 06036 Guideline for Maternity Record Keeping including Documentation in Handheld Records 22590 Maternity Theatres 04225 Examination of the newborn 04264 Guideline for the management of emergency lower segment caesarean section (LSCS) 09007 Guideline for the management of bladder care in pregnancy

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1.0	Graham Parkin		November 2006
2.0	Alison Hutchinson		December 2009
2.1		Clarification to point 4.3	December 2009
3.0	Natalie Taheny		October 2012
4.0	Sarah Moon		9 November 2015
4.05draft	Zina Alic	Full Review	24th October 2018

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1.0 Purpose

1.1 This document is to provide guidance regarding the initial care of the mother when transferring to the Obstetric Recovery area and that guidance pertaining to that of the newborn should be sought from the guideline entitled 'Examination of the newborn'; register number 04225.

1.2 Following any spinal, epidural or general anaesthetic procedure conducted in obstetric theatres, it is the Theatre Recovery nurse's role to observe the patient for any signs of complications, to ensure that the patient remains pain free and once the patient is in a stable condition to provide a comprehensive handover to the midwife.

2.0 Equality and Diversity

2.1 Mid Essex Hospital Services NHS Trust is committed to the provision of a service that is fair, accessible and meets the needs of all individuals.

3.0 Equipment

3.1 It is essential that the following equipment is always in place, working and ready for immediate use (in line with Association of Anaesthetists of Great Britain and Ireland (AAGBI) and the Royal college of Anaesthetists' guidance:

- Oxygen supply
- Mapelson C-and Hudson mask not connected but available in each cubicle
- Suction equipment -with tubing and sucker (i.e. Yanker or Argyle) connected
- Pulse oximeter - with finger probe connected
- Blood pressure monitoring with a selection of cuff sizes available
- A tympanic thermometer
- Intravenous stand
- ECG monitoring available
- Blood sugar machine available

4.0 Analgesia

4.1 The majority of caesarean sections are done under a **spinal** anaesthetic, thus enabling the mother to be fully conscious. In all but a few cases, the postoperative period is pain free.

4.2 On the occasions where a **general** anaesthetic is used largely for reasons of safety, the patient is always extubated whilst still in theatre (either on the theatre bed or after

transfer to the bed), in close proximity to the anaesthetic machine. However, facilities are available in the Recovery room for extubation to be carried out there, if necessary.

4.3 The following meets the criteria for transfer to the Recovery area (to include point 4.2)

- Patient maintaining their own airway (Breathing spontaneously)
- Physiological parameters are normal (Blood transfusion to be started at the earliest opportunities preferably in theatres)

5.0 Recovery Function and Monitoring

5.1 In practical terms, the Recovery nurse role should commence when the patient is transferred from the operating table to the bed.

5.2 Monitoring is similar no matter what type of anaesthetic is used. Following a general anaesthetic, however more particular attention must be paid to the level of consciousness, oxygen saturation level and pain level. Birth partner to remain on labour ward till Recovery criteria for all general anaesthetic patients is met. (A, B, C, D, E)

5.3 Following a caesarean section, patients should be observed on a one-to-one basis by a competent trained member of staff until they have regained airway control, cardio-respiratory stability and are able to communicate.

5.4 The following should be monitored, at five-minute intervals for 30 minutes or until the transfer criteria are met:

- Blood pressure
- Respirations
- Pulse
- Oxygen saturation levels
- Amount of oxygen administered if any
- Level of consciousness (Refer to Appendix A))
- Pain level (Refer to Appendix B)
- Neurological observations to be checked if any concerns or on request of anaesthetist. (This includes: mobility of the all limbs, the level of the epidural block, this should be no higher than T4).

5.5 The patient’s temperature should be recorded on transfer to the Recovery area and should be 36 degrees centigrade or above. If the patient’s temperature is < 36 degrees centigrade the warm touch system can be commenced to restore an optimum temperature.

5.6 **In addition, it is necessary to check the following:**

- Pressure area checked on transfer
- Wound dressings and drains (reporting to the surgeon any excessive oozing)
- Vaginal loss (reporting any excessive loss to the surgeon)
- Catheter (noting amount and visual appearance of urine)
- IV fluids are prescribed for post operative period
- Post operative drugs are properly prescribed
- TED stockings are in situ
- Flowtrons-as keeping with the waterlow score

5.7 The time frame for a post operative patient to remain in the Recovery area is 30 minutes ensuring that the criteria highlighted in point 7.1 has been met.

5.8 It is the Recovery nurse's responsibility to contact the anaesthetic registrar or consultant on call should there be any concerns in terms of the stability/comfort of the patient.

6.0 Responsibilities of the Midwife Caring for the Baby in Theatre Post Operatively and on Transfer to the Recovery Room
(Refer to the guideline entitled 'Management of emergency caesarean section'; register number 04264)

6.1 The midwife should be competent in resuscitation of the newborn.

6.2 Carrying out a full baby examination, giving vitamin K (as indicated by the patient), weighing and labelling the baby.

6.3 Ensure that the baby is kept warm, wrapping the baby in warmed towels and placing a hat on the baby's head.

6.4 Introducing the baby to the patient and her partner.

6.5 Initiating feeding/skin to skin contact in the Recovery room, prior to transfer to the Postnatal Ward.

6.6 The midwife also has a responsibility to take MRSA swabs in recovery post caesarean. If MRSA swabs are taken between 36/40 gestation and delivery they do not need repeating.

6.7 Midwife to remain at all times in Recovery if new born present

7.0 Transfer to the Postnatal Ward

7.1 The patient should only be considered for transfer if the following criteria are met:

- a stable and acceptable blood pressure and pulse
- a pain score of no more than 1(Refer to appendix B)
- a salim score of 8 (Refer to appendix A)

- no excessive oozing, loss through drain or vaginal loss
- MEOW <2 (Refer to appendix C & D)

7.2 **Transfer to Labour Ward**

- Close monitoring (blood pressure and pulse)
- a pain score of no more than 1
- a salim score of 8
- for close observation of oozing, loss through drain or vaginal loss
- MEOW >3 (labour ward coordinator to be informed)
- If vaginal pack in situ
- PPH >1.5L
- For O2 monitoring
- Bakiri balloon in situ
- Loose stool due to medications (liaise with coordinator)

7.3 **All aspects of the mother's recovery should be handed over to the ward, including:**

- What type of anaesthetic has been used
- What drugs and IV fluids have been administered in the Theatre and Recovery
- What post-operative drugs and IV fluids have been prescribed
- State of wound, dressings, any drains and vaginal loss
- General summary of blood pressure, respiratory rate and pulse monitoring
- Report on urinary catheter drainage
- Waterlow score (appropriate action taken)

7.4 **The Recovery room should always be ready for immediate use.**

Midwife can be handed over the care of the patient in the Recovery- once Recovery criteria are met. If a named midwife available to stay on transfer to postnatal ward during the protected handover- Recovery nurse to assist with safe transfer to the bed space.

8.0 Post operative Care and Observations during the following 24 hours

8.1 The following should be monitored, at 30 minute intervals for a period of 2 hours and then subsequent observations, if the patient remains in a stable condition should continue at 2 hourly intervals for 2 hours and then 4 hourly intervals until 24 hours post anaesthesia; whilst an inpatient; these observations should be recorded in the 'Operative Delivery and Theatre Care Record' and on the observation chart to include the Maternity Early Warning System (MEOWS) score

- Blood pressure
- Respiratory rate
- Pulse
- Pain
- Sedation
- 02 monitoring

8.2 The patient's temperature should be recorded on transfer to the postnatal ward and 4 hourly until 24 hours post anaesthesia; and should be 36 degrees centigrade or above. If the patient's temperature exceeds 37.5 degrees centigrade, the midwife responsible for the patient's care should inform the senior house officer (SHO) and repeat the temperature again after one hour and record the findings in the 'Operative Delivery and Theatre Care Record' and on the observation chart to include the Maternity Early Warning System (MEOWS) score.

8.3 **In addition, it is necessary to observe the following:**

- Wound dressings and drains (reporting to the surgeon any excessive oozing)
- Vaginal loss (reporting any excessive loss to the obstetric registrar /consultant on call)
- Indwelling urinary catheter, noting amount and visual appearance of urine; this can be removed once the patient is mobile after a regional anaesthetic, unless otherwise indicated by the obstetric registrar/ consultant on call
  (Refer to the guideline for Bladder care in Maternity Services. Register number 09007)
- Intravenous fluids are prescribed for post operative period and running as per chart
- Post operative drugs are properly prescribed and administered i.e. for thromboprophylaxis
  (Refer to the 'Guideline for the management of emergency lower segment caesarean section (LSCS)' Register number 04264)
- Patient's analgesia is issued with full explanation for self administration
  (Refer to the 'Guideline for the management of emergency lower segment caesarean section (LSCS)' Register number 04264)

8.4 Patients who are recovering well and who do not have complications after LSCS can eat and drink when they feel hungry or thirsty.

8.5 Documentation of observations whilst in Recovery and agreed discharge and transfer criteria should be recorded in the 'Operative Delivery and Theatre Care Record'

9.0 Staffing and Training

9.1 Recovery staff are issued with a competency booklet which encompasses specific skills required for their role in the Recovery area. These competences are completed over a three month period and require a sign off section to ensure that the standards have been attained.

9.2 Mandatory training for Recovery staff occurs on an annual basis and includes adult resuscitation and immediate life support training (ILS).

10.0 Professional Midwifery Advocates

10.1 Professional Midwifery Advocates provide a mechanism of support and guidance to women and midwives. Professional Midwifery Advocates are experienced practising midwives who have undertaken further education in order to supervise midwifery services and to advise and support midwives and women in their care choices.

11.0 Infection Prevention

11.1 All staff should follow Trust guidelines on infection prevention by ensuring that they effectively 'decontaminate their hands' before and after each procedure.

11.2 All staff should ensure that they follow Trust guidelines on infection prevention. All invasive devices must be inserted and cared for using High Impact Intervention guidelines to reduce the risk of infection and deliver safe care. This care should be recorded in the Saving Lives High Impact Intervention Monitoring Tool Paperwork (Medical Devices).

12.0 Audit and Monitoring

12.1 Audit of compliance with this guideline will be considered on an annual audit basis in accordance with the Clinical Audit Strategy and Policy (register number 08076), the Corporate Clinical Audit and Quality Improvement Project Plan and the Maternity annual audit work plan; to encompass national and local audit and clinical governance identifying key harm themes. The Women's and Children's Clinical Audit Group will identify a lead for the audit.

12.2 As a minimum the following specific requirements will be monitored:

- Equipment that should be available, as defined in the AAGBI guidelines
- Criteria for transfer to the recovery area
- Minimum requirements for observations whilst in Recovery
- Agreed discharge and transfer criteria from Recovery
- Documentation of observations whilst in Recovery and agreed discharge and transfer criteria
- Guidelines for care for the following 24 hours, including frequency of the observations
- Maternity service's expectations in relation to staff training*, as identified in the training needs analysis
- Process for audit, multidisciplinary review of audit results and subsequent monitoring of action plans

* It is not expected that this training includes staff who are employed in a Recovery role

12.3 A review of a suitable sample of health records of patients to include the minimum requirements as highlighted in point 12.2 will be audited. A minimum compliance 75% is required for each requirement. Where concerns are identified more frequent audit will be undertaken.

12.4 The findings of the audit will be reported to and approved by the Multi-disciplinary Risk Management Group (MRMG) and an action plan with named leads and timescales will be

developed to address any identified deficiencies. Performance against the action plan will be monitored by this group at subsequent meetings.

12.5 The audit report will be reported to the monthly Directorate Governance Meeting (DGM) and significant concerns relating to compliance will be entered on the local Risk Assurance Framework.

12.6 Key findings and learning points from the audit will be submitted to the Clinical Governance Group within the integrated learning report.

12.7 Key findings and learning points will be disseminated to relevant staff.

13.0 Guideline Management

13.1 As an integral part of the knowledge, skills framework, staff are appraised annually to ensure competency in computer skills and the ability to access the current approved guidelines via the Trust's intranet site.

13.2 Quarterly memos are sent to line managers to disseminate to their staff the most currently approved guidelines available via the intranet and clinical guideline folders, located in each designated clinical area.

13.3 Guideline monitors have been nominated to each clinical area to ensure a system whereby obsolete guidelines are archived and newly approved guidelines are now downloaded from the intranet and filed appropriately in the guideline folders. 'Spot checks' are performed on all clinical guidelines quarterly.

13.4 Quarterly Clinical Practices group meetings are held to discuss 'guidelines'. During this meeting the practice development midwife can highlight any areas for further training; possibly involving 'workshops' or to be included in future 'skills and drills' mandatory training sessions.

14.0 Communication

14.1 A quarterly 'maternity newsletter' is issued and available to all staff including an update on the latest 'guidelines' information such as a list of newly approved guidelines for staff to acknowledge and familiarise themselves with and practice accordingly.

14.2 Approved guidelines are published monthly in the Trust's Focus Magazine that is sent via email to all staff.

14.3 Approved guidelines will be disseminated to appropriate staff quarterly via email.

14.4 Regular memos are posted on the guideline notice boards in each clinical area to notify staff of the latest revised guidelines and how to access guidelines via the intranet or clinical guideline folder

15.0 References

Hatfield, A; Tronson, M. (2014) The Complete Recovery Room. Oxford medical publishing. Fifth Edition. April

Royal College of Anaethetists, Royal College of Midwives, Royal College of Obstetricians and Gynaecologists, Royal College of Paediatricians and Child Health. (2007) Safer Child Birth

Appendix A

Post Anaesthetic Recovery Score - Salim's ABC Recovery Score

Score for Response

Physical Signs	3	2	1	0
Airways	Patient can cough or cry	Maintains clear airway without holding the jaw	Holding of jaw needed	Holding the jaw and other measures taken to maintain airway
Behaviour	Patient can lift the head	Can open the eyes and show his tongue	Some non-purposeful movement	No movement at all
Consciousness	Fully awake can talk, well orientated	Awake but needs some support	Responds to stimuli only	No response

Appendix B

Pain Score

Score 0	=	No pain at rest No pain on movement
Score 1	=	No pain at rest Slight pain on movement
Score 2	=	Intermittent pain at rest Moderate pain on movement
Score 3	=	Continuous pain at rest Severe pain on movement **Summon anaesthetist/ obstetric registrar**

Movement = Patient attempt to touch opposite side of bed with hand.

Modified Early Obstetric Warning System **Appendix C**

MODIFIED EARLY OBSTETRIC WARNING SYSTEM

Maternity & Obstetric Early Warning Score

	3	2	1	0	1	2	3
Systolic BP	< 70	71 - 80	81 - 100	101 - 140	141 - 160	160 - 180	> 180
Diastolic BP				< 90	91 - 104	> 105	
Heart Rate	< 40		40 - 50	51 - 100	101 - 110	111 - 130	> 130
Resp Rate		< 8		9 - 19	20 - 29	30 - 39	> 40
SPO2	< 85%	85 - 89%	90 - 94%	95 - 100%			
Temp		< 35.0	35.0 - 35.9	36.0 - 37.4	37.5 - 38.4	> 38.5	
Conscious level	Unresponsive	Pain	Voice	Alert	Confused		
Urine Output	Nil	< 0.5ml /Kg/Hr		0.5ml /Kg/Hr		> 3ml /Kg/Hr	

NB: The Shift Co-ordinator must be informed of any patients with a MEOWS score of 3. (Refer to page 26)

C - Confused
A - Alert
V - Responds to verbal stimuli only
P - Responds to painful stimuli only
U - Unresponsive

Action taken on patient triggering

Date	Time	Action	Signature / Print / Grade

MEOWS Trigger Process **Appendix D**