Resuscitation in pregnancy
Clinical guidelines

Register no 04247
Developed in response to: NICE Guidelines, RCOG guideline CQC Requirement

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1.0 Purpose

1.1 This guideline is aimed at all health care professionals working in the acute hospital setting who share in the provision of antenatal, labour and postnatal care.

1.2 This guideline is intended to assist professionals in providing timely evidence based practice, ensuring optimum care and outcome for the mother and the fetus.

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 Aim

3.1 To recognise maternal cardio-respiratory arrest and to treat appropriately.

4.0 Adult Resuscitation Equipment (Refer to Appendix D)

4.1 Resuscitation equipment should be available in all care settings as follows:

- Antenatal Clinic
- Day Assessment Unit
- Labour Ward
- Postnatal Ward
- Midwife-led Units (Braintree/ Maldon)
- Community Midwives

4.2 Refer to the adult resuscitation list of equipment that should be stored on the resuscitation trolley and appropriate stock levels.

(Refer to Appendix D)

4.3 The **outside** of the **trolley** is to be checked **daily.** This includes the oxygen cylinder (confirm expiry date and that cylinder is full), bag valve mask, suction unit and confirming the defibrillator is charging (AED's do not require charging).

4.4 If the trolley is sealed shut the contents of the drawers can be checked weekly.

Non sealed trolleys must be checked **daily** and the responsible midwife should sign the adult resuscitation record sheets provided to confirm that the appropriate equipment check has been completed. (Refer to Appendix D)

4.5 It is the overall responsibility of the senior midwives in all care settings to ensure that the resuscitation equipment used by the maternity service is checked, stocked and fit for purpose on a daily/weekly basis in line with point 4.4. In addition, it is the individual midwives' responsibility to ensure that resuscitation equipment within each care setting is fit for purpose on a daily/weekly basis as per adult resuscitation equipment checking list format.

(Refer to Appendix D)

4.6 The Midiwfe-led Units (MLU) at St. Peters and Braintree maintain the following adult resuscitation equipment:

- Defibrillator
- Portable oxygen cylinder
- Adult mask (oxygen tubing attached)
- Suction equipment
- Adult Igel airway (size 4 and 5)
- Adult guedal airway (size 2, 3 and 4) (Refer to Appendix F)

4.7 The MLU midwives should check their adult resuscitation equipment as outlined in point

4.3 and 4.4; and this should be recorded and signed off on the adult resuscitation equipment checking sheet provided. (Refer to Appendix F and G)

4.8 All community midwives carry basic adult resuscitation equipment; which should be stored in a 'grab bag' including:

- Portable oxygen cylinder
- Adult mask (oxygen tubing attached)
- Adult guedal airway (size 2, 3 and 4) (Refer to Appendix G)

4.9 Community midwives should check their adult resuscitation equipment daily as outlined in point 4.3 and this should be recorded and signed off on the adult resuscitation equipment checking sheet provided.

5.0 Recognition of Cardio-Respiratory Arrest

5.1 Use the following approach:

- Ensure a safe approach to the patient
- Shake and shout, «Are you alright?»
- Call for help if no response

6.0 Basic Life Support (Refer to Appendix A)

6.1 **Airway** — open the airway by:

- Head tilt
- Chin lift
- Jaw thrust — if cervical spine injury suspected
- Remove any obvious obstructions from the mouth

6.2 **Breathing** — assess for normal breathing for no more than 10 seconds:

- **Look** — For chest movement
- **Listen** — For breath sounds
- **Feel** — For movement of air

6.3 **Circulation** — if no signs of life start GOOD QUALITY CPR immediately, experienced staff may feel for a pulse AT THE SAME TIME as assessing breathing, do not delay CPR.

Call the cardiac arrest team. **Dial 2222**

ASK FOR AED OR DEFIBRILLATOR

- Commence CPR start with chest compressions (30) followed by 2 breaths (cardio-pulmonary resuscitation) with oxygen and airway adjuncts
- Continue compressions and ventilations in a ratio of 30:2
- Depress chest 5–6cm or 1/3 of chest depth
- Apply defibrillator pads / cardiac monitor / AED (automated external defibrillator)
- Attempt defibrillation if appropriate
- Advanced Life Support when team arrives

6.4 Secure large bore (14/16g) IV or IO access.

6.5 If the patient is not breathing but a pulse is present, undertake the following:

- Call the cardiac arrest team and cardiac trolley — **Dial 2222**
- Maintain airway (refer to point 6.1) with manual uterine displacement or wedge
- Continue to give 10 breaths per minute, using a self-inflating bag and face mask until spontaneous breathing returns
- Place patient in a recovery position and administer oxygen 15 litres/minute via a reservoir facemask
- Check and ascertain blood glucose level
- Check arterial blood gas

6.6 During CPR remember manual displacement of the uterus (see Appendix C) unless the patient is on a tilting table (i.e. operating table) where they can be tilted (minimum 15°)

6.7 The adult resuscitation audit form must be completed following any 2222 call; or in the community dial 999. (Refer to Appendix D)

6.8 In the event of a cardiac arrest the midwife should ensure that an electronic Datixweb is completed.

6.9 In the event of anaphylaxis with a systolic blood pressure <50mmHg commence CPR.

7.0 Advanced Life Support (Refer to Appendix B)

7.1 Intubation should be undertaken as rapidly as possible by the anaesthetist to protect the airway from aspiration of gastric contents. Use a small size ET tube to enable ease of intubation (size 7.0 or smaller). However there should be minimal interruption of high quality chest compressions throughout any intervention during ALS. The intervention should cause compressions to be stopped for less than 5 seconds. Waveform capnography should be used to confirm intubation and continued ventilation and quality of CPR.

7.2 Defibrillation and drugs should be carried out in accordance with the current recommendations of the Resuscitation Council UK (2015) Guidelines.

(Refer to appendix B for Advanced Life Support Algorithm Resuscitation Council (UK)

7.3 Treatment of shockable rhythms; Ventricular Fibrillation/ Ventricular Tachycardia (VF/VT)

- Attempt defibrillation. Give one shock of 150 joules (or AED)
- Immediately resume chest compressions (30:2) without reassessing the rhythm or continue CPR for 2 minutes, then pause briefly to check the monitor

If VF/VT persists:

- Give a further (2nd) shock of 150 joules (or AED)
- Resume CPR immediately and continue for 2 minutes

- Pause briefly to check the monitor
- If VF/VT persists give 3rd shock of 150 joules (or AED) immediately followed by adrenaline 1mg IV and 300mg Amiodarone IV
- Resume CPR immediately for 2 minutes
- Pause briefly to check the monitor
- Resume CPR immediately and continue for 2 minutes
- Give adrenaline 1mg IV immediately after alternate shocks (i.e. approximately every 3–5 minutes)
- Give further shocks after each 2 minute period of CPR and after confirming that VF/VT persist

7.4 If organised electrical activity compatible with a cardiac output is seen, check for a pulse:
- If a pulse is present, start post resuscitation care
- If no pulse is present, continue CPR and switch to the non-shockable algorithm

7.5 If asystole is seen, continue CPR and switch to the non-shockable algorithm.

7.6 Treatment of non-shockable rhythms (pulseless electrical activity and asystole)

7.7 Treatment for pulseless electrical activity (PEA)
- Start CPR 30:2
- Give adrenaline 1mg intravenously (IV) as soon as intravenous access is achieved
- Continue CPR 30:2 until the airway is secured — then continue chest compressions without pausing during ventilation
- Recheck the rhythm after 2 minutes

7.8 If organised electrical activity is seen, check first a pulse and/or signs of life.

7.9 If VF/VT at rhythm check, change to shockable side of algorithm.

7.10 If asystole or an agonal rhythm seen at rhythm check:
- Continue CPR
- Recheck the rhythm after 2 minutes and proceed accordingly
- Give further adrenaline 1 mg IV every 3–5 minutes

7.11 Treatment for asystole
- Start CPR 30:2
- Check that the leads are attached correctly without stopping CPR
- Give adrenaline 1mg as soon as intravenous access is achieved
- Continue CPR 30:2 until the airway is secured — then continue chest compressions without pausing during ventilation
- Recheck the rhythm after 2 minutes and proceed accordingly
- If VF/VT at rhythm check, change to shockable side of algorithm
- Give further adrenaline 1 mg IV every 3–5 minutes

8.0 Caesarean Section

8.1 If basic and advanced life support have failed to restore cardiac output within 5 minutes of maternal cardiac arrest in the near term pregnancy, then immediate caesarean section should be performed to relieve aortocaval compression and improve the likelihood of maternal survival.

9.0 Consider and Treat the Reversible Causes of Cardiac Arrest

9.1 The 4 H's:
- Hypoxia — post eclamptic seizure
- Hypovolaemia — due to haemorrhage, regional block or sepsis
- Hypo/hyperkalaemia and other metabolic causes
- Hypothermia

9.2 The 4 T's:
- Thromboembolism — pulmonary and amniotic fluid embolus
- Tension pneumothorax
- Tamponade — cardiac
- Toxicity — drugs or local anaesthetics

9.3 Finally, remember pre-existing cardiac disease.

10.0 Problems Associated with Term Pregnancy

10.1 Intubation may be more difficult.

10.2 Increased maternal oxygen consumption.

10.4 The pregnant mother will de-saturate more rapidly than the non-pregnant woman.

10.5 Acid aspiration — the problem of the potentially full stomach and the increased risk of aspiration derive from:
- Raised intragastric pressure due to the gravid uterus pressing on the stomach
- Slowed gastric emptying due to opiates in labour
- Incompetence of the gastro oesophageal sphincter

10.6 Aortocaval Compression — the gravid uterus occludes the inferior vena cava if the mother lies in the supine position, with some or all of the following consequences:

- Decreased maternal cardiac output
- Maternal hypotension
- Decreased placental blood flow
- Fetal hypoxia
- Fetal acidosis

10.7 In the event of cardiac arrest it is thought to be impossible to successfully resuscitate a near term pregnant woman in the supine position.

10.8 In the event of resuscitation being required then ideally one rescuer should lift the uterus upwards and to the left to relieve aorto-caval compression. Caesarean section may ultimately be the only way to fully relieve the situation and save the mother. **Manual displacement** of the **uterus** should be **promoted** unless on a tilting table. Manual displacement should only take place under the supervision of suitably trained clinicians (Refer to Appendix C).

11.0 Successful Resuscitation

11.1 After resuscitation the patient will need to be transferred to the intensive care unit.

12.0 Skill Levels Required Depending on Clinical Duties

12.1 Team leaders (Tier 4)

12.1.1 The Team Leader will direct the Resuscitation team in accordance with national guidance and is generally the most senior member of medical or nursing staff present in possession of ALS.

12.1.2 This includes those that carry the cardiac arrest bleep during their day-to-day work, the anaesthetic trust grade or training grade covering labour ward and the anaesthetic consultant covering labour ward.

12.1.3 Team Leaders must hold appropriate qualifications to undertake this role and be expected to competently lead the care of the deteriorating patient for the specific type of patient they care for.

12.1.4 The Team Leader is responsible for ensuring the smooth running of the arrest and following a CPR attempt, may provide support for staff through the opportunity for a debrief such that staff may discuss matters of concern.

12.1.5 Further support is available for staff in accordance with the Supporting staff involved in a traumatic incident, complaint and claim Policy. The resuscitation officers can also be contacted in this setting.

12.2 Staff expected to be involved in the resuscitation team (Tier 3)

12.2.1 This includes qualified individuals who have direct clinical contact with patients and are expected to participate as part of the resuscitation attempt either in the ward or in the out-patient setting. This would include the obstetric SHO, registrar & consultant and the midwife in charge of the clinical area.

12.2.2 These individuals would continue being part of the attempt even when the cardiac arrest bleep holder arrives.

12.3 Staff with direct clinical care responsibilities including all qualified healthcare professionals (Tier 2)

12.3.1 This includes doctors and nurses who have direct clinical contact with patients who would be expected to be a first responder but not have an on-going role within the resuscitation attempt. This would include all midwives.

12.4 Any clinical or non-clinical staff, dependent upon local risk assessment (Tier 1)

12.4.1 This tier incudes all health care assistants who have contact with inpatients or outpatients who would be expected to be part of the initial resuscitation attempt until the resuscitation team arrived.

12.5 **Table of requirements**

12.5.1 ILS is a whole day courses led by the resus department. Refresher ILS (Ref-ILS) and refresher PILS (Ref-PILS) are half day courses.

12.5.2 COSBART is available to consultant anaesthetists only. It is a high fidelity simulation course of emergency and critical incidents incorporating PILS and ALS algorithms.

	Adult Obstetric
Tier 4 **Valid Certification** **Annual refresher**	ALS, COSBART or Ref — ILS or Ref — COSBART
Tier 3 **Valid Certification** **Annual refresher**	ILS Ref — ILS
Tier 2 **Valid Certification** **Annual refresher**	BLS BLS
Tier 1 **Valid Certification** **Annual refresher**	BLS BLS

13.0 Unsuccessful Resuscitation (Refer to Appendix E)

12.1 (Refer to the guideline entitled 'Guidelines for professionals in the event of a maternal death'. Register number 06028)

12.2 Maternal death with survival of the baby must be disseminated to multiagency partnerships in order for them to instigate family support for this now, bereft child and family. This must include any tertiary units and other services that have been offering services to the child or mother.

12.3 If the death has occurred as a result of suicide, murder or other safeguarding indicators are present, the child/children must be referred to social services for assessment of needs and safety.

14.0 Debriefing

13.1 This should be commenced as early as possible for the patient, relatives and staff.

14.0 Staffing and Training

14.1 All midwifery and obstetric staff must attend yearly mandatory mandatory training which includes skills and drills training, including basic adult life support update. Immediate life support training is also available in the Trust.

14.2 All midwifery and obstetric staff are to ensure that their knowledge and skills are up-to-date in order to complete their portfolio for appraisal.

15.0 Professional Midwifery Advocates

15.1 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.

16.0 Infection Prevention

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

16.2 All staff should ensure that they follow Trust guidelines on infection prevention, using Aseptic Non-Touch Technique (ANTT) when carrying out procedures i.e. obtaining blood samples.

16.3 All invasive devices must be inserted and cared for using high impact intervention guidelines (refer to Saving Lives Policy guideline, DoH, 2007) 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).

17.0 Audit and Monitoring

17.1 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.

17.2 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.

17.3 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.

17.4 Key findings and learning points from the audit will be submitted to the Patient Safety Group within the integrated learning report.

18.0 Guideline Management

18.1 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.

18.2 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.

18.3 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.

18.4 Quarterly Clinical Practices group meetings are held to discuss 'guidelines'. During this meeting the practice development midwife can highlight any areas for future training needs will be met using methods such as 'workshops' or to be included in future 'skills and drills' mandatory training sessions.

19.0 Communication

19.1 A quarterly 'maternity newsletter' is issued to all staff to highlight key changes in clinical practice to include a list of newly approved guidelines for staff to acknowledge and familiarise themselves with and practice accordingly. Midwives that are on maternity leave or 'bank' staff have letters sent to their home address to update them on current clinical changes.

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

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

19.4 Regular memos are posted on the guideline and audit 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 folders.

20.0 References

http://www.resus.org.uk/pages/GL2010.pdf 2010 Resuscitation Council (UK) Resuscitation Guidelines

Barrett NA, Yentis SM. Outreach in obstetric critical care. Best Practice Resus Clinical Obstetric, Gynaecology 2008;22:885–98.

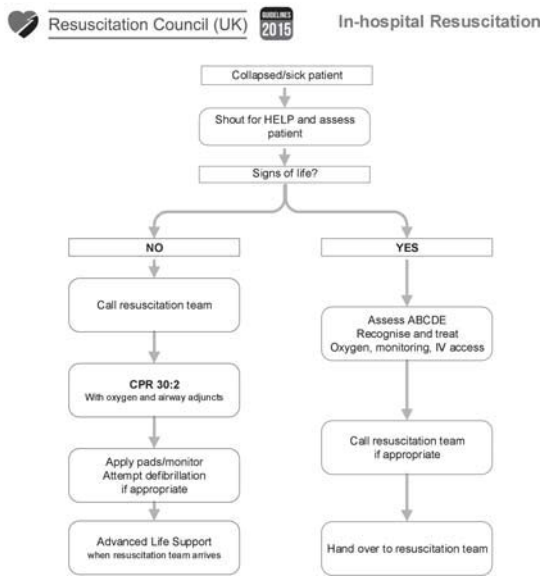
The Seventh Report of the Confidential Enquiries into Maternal Deaths in the United Kingdom. London: CEMACH; 2007.

Johanson R (2007) Managing Obstetric Emergencies and Trauma. RCOG Press.

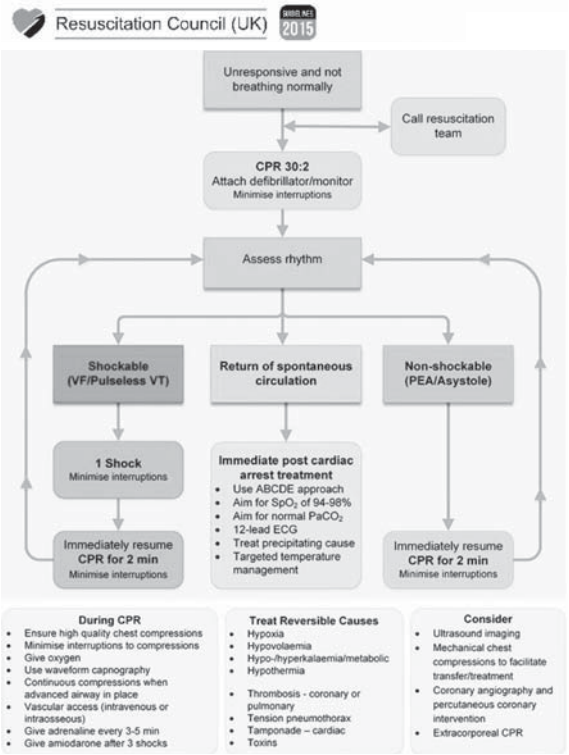
Lewis G. The Confidential Enquiry into Maternal and Child Health (CEMACH). Saving Mothers' Lives: Reviewing maternal deaths to make motherhood safer — 2003–2005

MBRACE-UK 2013-15, lessons for anaesthetic care. www.npeu.ox.ac.uk/downloads/files/mbrace-uk/presentations/saving-lives-nov-2017/05_Saving %20Lives%20-%20Messages%20for%Anaesthetic %20Care%20-%20Dec%202017.pptx

Appendix A

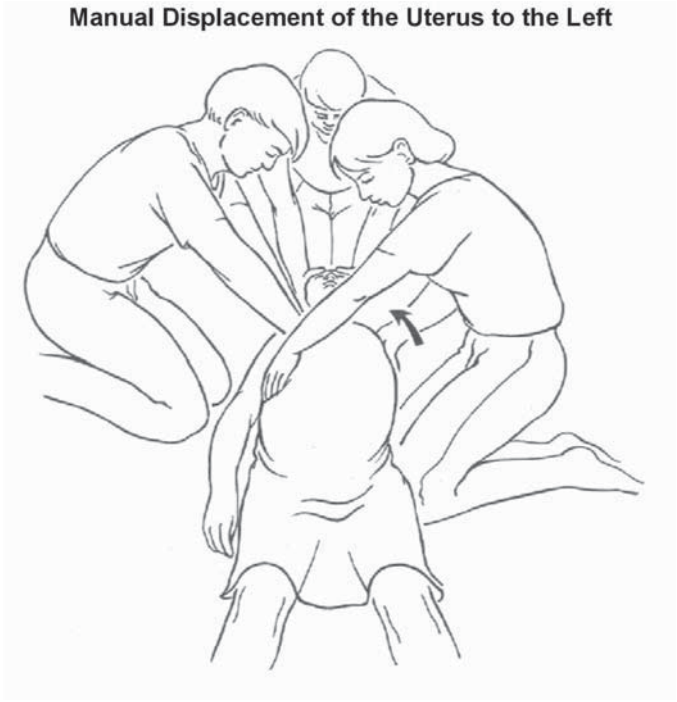


Appendix B



Appendix C

Manual Displacement of the Uterus to the Left



Appendix D

Mid Essex Hospital Services NHS
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Adult Resuscitation Trolley Checklist – Sealed Drawers

This is the list of equipment to be stored on the resuscitation trolley with identified stock levels. Items are laid out as marked below.

- The outside of the trolley is to be checked daily and documented on page 1 of the checklist.
- If the trolley drawers are sealed shut, the contents of the drawers should be checked weekly or after use and the check documented on pages 2 to 5.
- Page 6 is the audit form and must be completed following any 2222 call.
- Items marked Resus Store can be sourced from the Resus Equipment Store, 24hrs a day. This is located in the St Andrew's end of theatre (Entrance near E320). Door code C3578X.

Outside of Trolley - Daily Check *(Tick items if completed / present)*

Month	Year		Week 1							Week 2							Week 3							Week 4							Week 5						
Location		Date																																			
Item		NHS Code	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Defibrillator *(Daily check)*																																					
Bag/valve/mask *(Single use – disposable)*		Resus Store																																			
Anaesthetic Breathing System, Mapleson C 22F *(Single use – disposable)*		Resus Store																																			
Portable O_2 Supply *(Check within expiry date. Must be ≥50% full)*																																					
Portable Suction Supply *(Check working)*																																					
Bougie Introducer *(Single use)*		Resus Store																																			
Cardiac Arrest Audit Form *(Page 6)*																																					
Defibrillator Test Load *(MRX and Heartstart XL only)*		Ward Stock																																			
Check Completed by *(Initials)*																																					
Tag Number of Sealed Trolley																																					

Adult Resuscitation Trolley Checklist - Sealed Drawers

Resuscitation trolley drawers weekly check if drawers are sealed
Check after each use and re-seal.

Defibrillator Check

	Week 1	Week 2	Week 3	Week 4	Week 5
Date of Check					
Check Completed By (Initials)					

Top Covered Tray

Item	Quantity	NHS Code	Week 1	Week 2	Week 3	Week 4	Week 5
Adrenaline 1mg 1:10,000 prefilled	5	Pharmacy					
Amiodarone 300mg prefilled	2	Pharmacy					
Atropine Sulfate 3mg Prefilled	1	Pharmacy					
Calcium Chloride 10mmol Prefilled or vial 1x10ml	1	Pharmacy					
Magnesium Sulfate 50% 1g/2ml	1 Box of 3 Or 10	Pharmacy					
Sodium bicarbonate 8.4% 100ml vial	1	Pharmacy					
Box Adrenaline 1:1000 ampoules marked 'FOR ANAPHYLAXIS'	1	Pharmacy					
Protective Aprons	6	Ward Stock					
Medicinal Sharps Bin 1 litre volume (under top cover)*	1	Resus Store					
Defibrillator Pads (under top cover)*	1	Resus Store					
Disposable Razor (under top cover)	1	Ward Stock					
Stethoscope	1	Ward Stock					
Date of Check							
Check Completed by (Initials)							

Airway Tray - Top Drawer								
Item		Quantity	NHS Code	Week 1	Week 2	Week 3	Week 4	Week 5
Oral Airways;	Size 2	1	Resus Store					
	Size 3	1	Resus Store					
	Size 4	1	Resus Store					
Nasal Airways;	Size 6.0 mm	1	Resus Store					
	Size 7.0 mm	1	Resus Store					
Disposable Handle and blade;	Size 3	1	Resus Store					
	Size 4	1	Resus Store					
Endotracheal Tubes; Sealed in package	Size 7.0 mm	1	Resus Store					
	Size 8.0 mm	1	Resus Store					
	Size 9.0 mm	1	Resus Store					
I-Gel Airway;	*Size 4*	1	Resus Store					
	Size 5	1	Resus Store					
10ml Syringe		1	Ward Stock					
KY Jelly		2	Ward Stock					
Ribbon Gauze		1	Ward Stock					
McGills Forceps (Adult)		1	Resus Store					
Scissors "Tufkut"		1	WYQ524					
Catheter Mount (sealed)		1	Resus Store					
O_2 Mask / Reservoir / Tubing		1	FDD 321 Ward Stock					
Suction Catheters;	12g	2	FSQ 245					
	14g	2	FSQ 246					
Yankeur Sucker		2	FWP 092					
Nasogastric tubes;	12g	1	FWN 815					
	14g	1	FWN 820					
Scissors		1	FGP 010					
Date of Check								
Check Completed by (Initials)								

Circulation Tray - Second Drawer								
Item		Quantity	NHS Code	Week 1	Week 2	Week 3	Week 4	Week 5
Chloraprep applicators		5	Pharmacy					
Cannula;	14g	2	Ward Standard					
	16g	2	Ward Standard					
	18g	2	Ward Standard					
	20g	2	Ward Standard					
Adhesive Tape Roll		1	EHA 053 (Pack 12)					
I.V. Dressing		6	Ward Standard					
Central Line; Secalon 16g		2	Resus Store					
Semi-permeable film dressing, 19pprox. 10cm x 15cm (Opsite type)		2	Ward Standard					
Sterile Swabs 10 x 10		2	Ward Stock					
Blood Gas Syringes		4	Resus Store					
Syringes;	2mls	5	Ward Stock					
	5mls	5	Ward Stock					
	10mls							
	20mls	5	Ward Stock					
Needles;	21g Green	10	Ward Stock					
	23g Blue	10	Ward Stock					
Saline Ampoules: 5mls 0.9%		1 box	Pharmacy					
3 Way Taps (with extension)		2	FVK 956 (Individual)					
Blood Bottles		1 of each	Phlebotomy					
Roll of disposable tourniquets		1						
Date of Check								
Check Completed by (Initials)								

Third Drawer							
Item	Quantity	NHS Code	Week 1	Week 2	Week 3	Week 4	Week 5
Adrenaline 1mg 1;10,000 Prefilled	5	Pharmacy					
Amiodarone 300mg prefilled	2	Pharmacy					
Atropine 3mg 10 ml prefilled	1	Pharmacy					
Calcium Chloride 10mmol Prefilled or vial 1x10ml	1	Pharmacy					
Magnesium Sulfate 50% 1g/2ml	1 Box of 3 Or 10	Pharmacy					
Sodium bicarbonate 8.4% 100ml vial	1	Pharmacy					
500mls 0.9% NaCl	2	Pharmacy					
500mls Gelofusine	2	Pharmacy					
500mls 20% Dextrose	1	Pharmacy					
IV Giving Sets	2	Ward Stock					
Blood Giving Sets (dual chamber	2	Resus Store					
Date of Check							
Check Completed By (Initials)							

Bottom of Trolley - Forth Drawer							
Item	Quantity	NHS Code	Week 1	Week 2	Week 3	Week 4	Week 5
3 lead ECG Electrodes Adult. (Not 12 lead)	5 packs	Resus Store					
Defibrillation Gel Pads (Burns Unit Only)	1 pack	FDJ 406 (Pack 10)					
Gloves, S, M, L (1 box each) Non latex	1	Ward Stock					
Hands Free Defib Pads (Spare set)	1	Resus Store					
Defib Paper (Not for AED)	1	Resus Store					
Date of Check							
Check Completed By (Initials)							

Appendix E Mid Essex Hospitals Arrest Call Audit Form
Please complete this form following any event that requires a 2222 call for your area, and keep it on your resuscitation trolley. It will be collected by the Resuscitation Officers and used for audit purposes.
Date of Call:
Time:
Type of call (please circle): Cardiac Respiratory Peri- Arrest PAR7+
Patient Details (use label if available):
Name:
Date Of Birth:
Hospital/NHS Number:
Outcome (Please circle) Died Still on Ward MHDU ITU
Other (please specify):

Appendix F

Mid Essex Hospital Services NHS
NHS Trust

Midwife-led Unit 'Grab Bag' Equipment Checklist

This is the list of equipment to be stored on the resuscitation trolley with identified stock levels. Items are laid out as marked below.

- The top of the trolley is to be checked daily and documented on page 1 of the checklist
- If the grab bag is sealed shut, the contents of the grab bag should be checked weekly or after use and documented on page 2 of the checklist.
- Page 3 is the audit form and must be completed following any 2222 call.

Top of Trolley - Daily Check *(Tick items if completed / present)*

Month	Year		Week 1							Week 2							Week 3							Week 4							Week 5						
Location		Date																																			
Item		NHS Code	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
Advisory External Defibrillator: Phillips FR3																																					
CD O2 Cylinder		Resus Store																																			
Res-Q-Vac Suction		Resus Store																																			
	Check Completed by *(Initials)*																																				
	Tag Number of Sealed Trolley																																				

'Grab Bag' Equipment Weekly Checklist							
Item	Quantity	NHS Code	Week 1	Week 2	Week 3	Week 4	Week 5
Airway & Breathing							
Bag Valve Mask	1	Resus Stock					
Oral Airway Size 2	1	Resus Stock					
Oral Airway Size 3	1	Resus Stock					
Oral Airway Size 4	1	Resus Stock					
Oral Airway Size 6	1	Resus Stock					
Oral Airway Size 7	1	Resus Stock					
I-gel Size 4 Airway	1	Resus Stock					
I-gel Size 5 Airway	1	Resus Stock					
Catheter Mount	1	Resus Stock					
O2 Mask with Reservoir	1						
Circulation							
Sterets	10						
Cannula 20g (pink)	2						
Cannula 18g (green)	2						
Cannula 16g (grey)	2						
Cannula 14g (brown/orange)	2						
Blood Giving Set	2	Resus Stock					
20 ml syringes	5						
Cannula Dressing	4						
Blood Bottles Selection							
500ml 0.9% NaCl or Hartmann's	2						
500ml Volpex Gelofusine	2						
Adrenaline 1mg ampoules 1:000	5						
2 ml syringe	5						
Green Needles (21g)	5						
Blue Needles (23g)	5						
Misc.							
Defibrillator Pads	2						
Tuff Kut Scissors	1						
Disposable Razor	1						
Date of Check							
Check Completed by (Initials)							

Appendix G

Midwife-led Unit/Community Adult Resuscitation Equipment Checklist

Month _____ Year _____

Date	Check Complete Yes/no	Signature	Comments
1st			
2nd			
3rd			
4th			
5th			
6th			
7th			
8th			
9th			
10th			
11th			
12th			
13th			
14th			
15th			
16th			
17th			
18th			
19th			
20th			
21st			
22nd			
23rd			
24th			
25th			
26th			
27th			
28th			
29th			
30th			
31st			

Правила подачи и оформления статей

Авторская статья направляется в редакцию по электронной почте в формате MS Word. Статья сопровождается официальным направлением от учреждения, в котором была выполнена работа, с визой руководства (научного руководителя), заверенной круглой печатью учреждения, экспертным заключением о возможности публикации в открытой печати, заключением этического комитета учреждения или национальной комиссией по биоэтике. На последней странице статьи должны быть собственноручные подписи всех авторов и информация о процентном вкладе в работу каждого из авторов. Принимаются оригиналы сопроводительных документов с приложением печатного экземпляра рукописи, подписанного автором(ами), официального направления, присланные по почте, или сканированные копии вышеприведенных документов и первой (титульной) страницы статьи с подписью всех авторов статьи в формате Adobe Acrobat (*.pdf), присланные на электронный адрес редакции.

Статьи принимаются на украинском, русском или английском языках.

Структура материала: введение (состояние проблемы по данным литературы не более 5–7-летней давности); цель, задачи, материалы и методы; результаты исследований и их обсуждение (освещение статистически обработанных результатов исследования); выводы; перспективы дальнейших исследований в данном направлении; список литературы (два варианта), рефераты на русском, украинском и английском языках.

Реферат является независимым от статьи источником информации, кратким и последовательным изложением материала публикации по основным разделам и должен быть понятен без самой публикации. Его объем не должен превышать 200–250 слов. Обязательно указываются ключевые слова (от 3 до 8 слов) в порядке значимости, способствующие индексированию статьи в информационно-поисковых системах.

Реферат к ***оригинальной статье*** должен быть структурированным и повторять структуру статьи: цель исследования; материалы и методы; результаты; выводы; ключевые слова. Все разделы в реферате должны быть выделены в тексте жирным шрифтом.

Для остальных статей (обзор, лекции, клинический случай и др.) реферат должен включать краткое изложение основной концепции статьи и ключевые слова.

На первой странице указываются: индекс УДК слева, инициалы и фамилии авторов, название статьи, название учреждения, где работают авторы, город, страна.

При проведении исследований с привлечением любых материалов человеческого происхождения в разделе «Материалы и методы» авторы должны указывать, что исследования проводились в соответствии со стандартами биоэтики, были одобрены этическим комитетом учреждения или национальной комиссией по биоэтике. То же самое относится и к исследованиям с участием лабораторных животных.

Например: *«Исследование было выполнено в соответствии с принципами Хельсинской Декларации. Протокол исследования был одобрен Локальным этическим комитетом (ЛЭК) для всех участвующих».*

«При проведении экспериментов с лабораторными животными все биоэтические нормы и рекомендации были соблюдены».

Количество иллюстраций (рисунки, схемы, диаграммы) должно быть минимальным. Иллюстрации (диаграммы, графики, схемы) строятся в программах Word или Excel; фотографии должны быть сохранены в одном из следующих форматов: PDF, TIFF, PSD, EPS, AI, CDR, QXD, INDD, JPG (300 dpi).

Таблицы и рисунки помещают в текст статьи сразу после первого упоминания. В подписи к рисунку приводят его название, расшифровывают все условные обозначения (цифры, буквы, кривые и т.д.). Таблицы должны быть оформлены в соответствии с требованиями ГАК, компактными, пронумерованными, иметь название. Номера таблиц, их заголовки и цифровые данные, обработанные статистически, должны точно соответствовать приведенным в тексте.

Ссылки на литературные источники в тексте обозначаются цифрами в квадратных скобках, должны отвечать нумерации в списке литературы. **Статьи со списком литературных источников в виде постраничных или концевых ссылок не принимаются.**

Необходимо предоставлять два варианта списка литературы.

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Второй вариант полностью повторяет первый, но источники на украинском и русском языках **ПЕРЕВОДЯТСЯ!** на английский язык. Он необходим для сайта, повішения индекса цитирования авторов и анализа статьи в международных наукометрических базах данных.

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Автор АА, Автор ВВ, Автор СС. (2006). Название книги. Город: Издательство: 256.

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