Cardiopulmonary Resuscitation Policy and Procedures
Incorporating Do Not Attempt Cardiopulmonary Resuscitation Policy

Recommending Committee: Resuscitation Committee
Approving Committee: Clinical Performance Council
Signature: Chief Executive
Date:

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SUMMARY

The Resuscitation Committee is responsible for the cardiopulmonary resuscitation policy issues within the Trust.

The Trust has an adult cardiac arrest team and a paediatric emergency team available to attend cardiopulmonary arrests or deteriorating patient at all times.

Clear guidelines are available for when and how to call for the resuscitation team.

National and International guidelines for the management of cardiopulmonary arrest will be followed (available on all resuscitation trolleys, hospital Intranet and in the cardiopulmonary resuscitation file in each ward/department, listed in Appendix 4).

Appropriate equipment will be available throughout the Trust for use on patients and for training purposes.

The practice of cardiopulmonary resuscitation (CPR) will be recorded whenever applied and audited to maintain standards of care.

All clinical staff throughout the Trust will be provided with regular resuscitation training appropriate to their expected abilities and roles.

An effective ‘Do Not Attempt Cardiopulmonary Resuscitation’ (DNA-CPR) policy exists and is implemented where appropriate.

1 INTRODUCTION

1.1 Cardio Pulmonary Resuscitation (CPR) Standards for Clinical Practice and Training, published by the Resuscitation Council (UK) clearly sets out the expected national standards and targets for resuscitation.

1.2 Standards produced by the NHS Executive (1997) (Service Standards for Emergency Medical Admissions) state that all staff who have patient contact should receive CPR training.
1.3 International Guidelines 2000 for CPR and Emergency Cardiac Care (ECC) have set standards for resuscitation in hospitals, which include the need for a response time for defibrillation of less than 3 minutes. This has necessitated an increase in both training and equipment resources. Therefore, effective CPR skills along with first responder defibrillation must be evident throughout St Helens & Knowsley Hospitals Trust (STHK).

1.4 Clinical Governance requires that national standards be met in order to provide a consistently high quality service that minimises potential risk to patients.

1.5 In order to achieve resuscitation goals and promote optimal outcome from all resuscitation attempts, STHK must have a comprehensive resuscitation service.

1.6 The Resuscitation Council (UK) Guidelines (2005) include recommendations for the early recognition and treatment of the acutely ill patient, and the use of Early Warning Scoring (EWS) Systems. STHK Trust has a working Medical Early Warning System (MEWS) in place, which incorporates a track & trigger mechanism for the early identification of the acutely ill/deteriorating patient, in order to facilitate a prompt nursing/medical response. STHK Trust has an established Critical Care Outreach Service to promote the system.

1.7 The following operational and training policy will be adopted throughout the Trust, and is available for all staff involved in cardiopulmonary arrest incidents. All staff will be trained appropriately and regularly updated to a level compatible with their expected degree of competence.

2. **PURPOSE AND OBJECTIVES**

2.1 The purpose of the policy is to provide direction and guidance for the planning and implementation of a high-quality and robust resuscitation service to the organisation. The strategy for resuscitation incorporates the current published guidelines for resuscitation (Resuscitation Council (UK), 2005).

2.2 The provision of the most appropriate care for an individual patient and their family.

2.3 Establishes guidelines that act as a point of reference for the medical, nursing staff and other members of the multi-disciplinary team.

2.4 Provides a structure for training of medical and nursing staff.

2.5 Support the principles of clinical governance
2.6 Enable the continuing development of a consistent approach to good practices across the Trust.

3. RESPONSIBILITIES and DUTIES

Healthcare organisations have an obligation to provide an effective resuscitation service to their patients and appropriate training to their staff. A suitable infrastructure is required to establish and continue support for these activities.

3.1 RESPONSIBILITIES AND DUTIES WITHIN THE ORGANISATION

3.2 The Trust Board assumes responsibility for the appropriate provision of information, education, training and audit relating to resuscitation and Do Not Attempt Cardio Pulmonary Resuscitation (DNA-CPR) orders.

3.3 The Trust Board has overall responsibility for ensuring that Resuscitation Services has sufficient resources to facilitate the implementation of all elements of this policy.

3.4 The Senior Resuscitation Officer, as STHK Trust competent person for resuscitation, in conjunction with the Resuscitation Committee will ensure that policy and procedures comply with current national Resuscitation Guidelines and NHSLA Standards for resuscitation practice.

3.5 Line Managers/Clinical Leads will take responsibility for ensuring compliance with all elements of this policy within their remit.

3.6 Individual STHK Trust staff will take responsibility for familiarising themselves with this policy and their compliance.

4. APPROVAL OF THE RESUSCITATION POLICY

The policy has been recommended by the Resuscitation Committee and has been approved as an organisation-wide policy by the Trust Clinical Performance Council.

5. EMERGENCY CALL SYSTEM AND TEAM RESPONSE

5.1 The Trust utilises a Medical Early Warning System (MEWS) established for the prevention of cardiopulmonary arrest. All clinical staff should be trained in the identification of critically ill patients and the use of physiological observation charts to enhance the decision making process and care escalation. This preventative system has a clearly defined action pathway that must be adhered to.
5.2 The Trust cardiac arrest team should be called to respond to medical emergencies in addition to cardiopulmonary arrest.

5.3 In the event of a cardiac arrest / medical / obstetric or neonatal emergency being identified and triggered the appropriate emergency team must be alerted immediately as detailed below.

5.4 When an adult or child collapses on Trust premises with suspected cardiopulmonary arrest the team will be called.

**Cardiac Arrest Phone Numbers:**
Whiston Hospital 2222.
St Helens Hospital 2222 for the team and 9999 for an Ambulance at the same time.

- For adult patients state *adult cardiac arrest / medical emergency / obstetric emergency and the location*;

- For paediatric patients state *paediatric cardiac arrest / medical emergency and the location*;

- For neonates state *neonatal emergency and the location*.

The cardiac arrest team will respond in all cases and full resuscitation attempts will be instigated without hesitation.

**NB:** Where there is a specific, current, valid, up to date ‘Do Not Attempt Cardiopulmonary Resuscitation’ (DNA-CPR) Red Card at the front of the patient’s notes the Team should not be called. (See Do Not Attempt Cardiopulmonary Resuscitation (DNA-CPR) Form - Appendix 1)

5.5 The cardiac arrest team must be called and attend for any cardiac arrest that occurs within any Hospital building on the main Hospital site at both Whiston (not including Delph Lane) and St Helens Hospitals.

5.6 Upon receipt of the cardiopulmonary arrest-call the switchboard will immediately relay this to the cardiac arrest team ‘on call’. Members of the team will attend without delay to the specific location and will stay until relieved of this duty by the team leader.

5.7 Medical staff who cannot attend must immediately inform switchboard that they cannot attend and must arrange for another approved member of their specialty to attend on their behalf.
5.8 Similarly all bleep holders must respond to the test call performed by the switchboard at approximately 9.30am and 6.30pm each day.

5.9 All aspects of cardiopulmonary arrest management of the patient will follow the current guidelines of the Resuscitation Council UK (2005) and the European Resuscitation Council (2005). In addition the relevant parts of the Mental Capacity Act 2005 will be adhered to in relation to those patients over 16.

5.10 Cardiac arrest team members unfamiliar with the location given should contact the switchboard using the arrest call number 2222 to clarify the location. (See Maps – See Appendices 12 (Whiston) and 13 (St Helens).

6 ‘OFFSITE’ CARDIAC ARREST CALLS

6.1 If a cardiac arrest occurs in a car park or roadway a 999 ambulance must be called, this will provide a means of defibrillation and a means of transport to the Emergency Department.

6.2 A 999 ambulance should be called for any cardiac arrest occurring at any location on the Delph Lane site. The cardiac arrest team will not be asked to attend due to health and safety considerations. (Clinical Standards & Patient Focus Council meeting on 9th November 2006, Minute 71/06).

6.3 When a cardiac arrest trolley is not available at a hospital building location, the team leader should ensure (via switchboard) that a ‘999’ call has been made. This phone call can facilitate obtaining a means of defibrillation/transport to the Emergency Department by the ambulance paramedic services.

7 WHISTON & ST HELENS ADULT CARDIAC ARREST RESUSCITATION TEAM

7.1 The resuscitation committee will advise on the composition of the hospital adult resuscitation team and its role.

7.2 The adult cardiac arrest team will be called for adult arrest.

The Adult team will include:
1 x anaesthetist
1 x HO medicine
1 x SHO medicine
1 x Cardio-Respiratory Technician
1 x Middle Grade

This is in addition to other doctors, a senior clinical nurse and ward nurses/ midwives who may be present at the time. In addition to the team the Trust’s Resuscitation Officer may also attend when available, in an advisory and monitoring role. A duty
manager may also attend or be requested to assist with logistical problems, either during or after the arrest.

7.3 The shift leader will allocate a member of staff to liaise with the patient's family.

7.4 All resuscitation team members must be appropriately trained in Advanced Life Support.

7.5 A team leader will assume overall responsibility for the patient during an incident. For adult resuscitation, this will be the role of the Medical SHO or Registrar who should be qualified in Advanced Life Support.

7.6 The team leader has a specific role directing the resuscitation attempt, ensuring it continues in a coordinated manner and directing the overall management of the patient. The team leader will be responsible for patient assessment throughout, ensuring that:

- Adequate Basic Life Support is being performed.
- Adequate airway management is being performed.
- Defibrillation is delivered swiftly and safely.
- Tasks are designated to the other team members who have the most appropriate skills.
- Current Resuscitation Council UK (2005) guidelines and where relevant, the provisions of the Mental Capacity Act 2005 are complied with.

7.7 If resuscitation is successful, it will be the team leader's responsibility to communicate with those responsible for the further care of the patient.

7.8 It will be the team leader's responsibility to make the final decision to stop the resuscitation attempt after all appropriate avenues of treatment have been exhausted. This should be done after discussion with all members of the team, including relatives where appropriate.

7.9 It will be the team leader's responsibility to ensure that all necessary documentation is completed as soon as possible after the resuscitation attempt including the Resuscitation Documentation Form (see appendix 5).

7.10 After a resuscitation attempt the team leader should speak to the patient's relatives in an appropriate environment.

8 WHISTON HOSPITAL PAEDIATRIC EMERGENCY RESUSCITATION TEAM

8.1 The Resuscitation Committee will advise on the composition of the hospital paediatric resuscitation team and its role.
8.2 The paediatric emergency arrest team will be called for paediatric arrest/medical emergency.

**The paediatric team will include:**
1 x Anaesthetist  
1 x Paediatric Registrar  
1 x Paediatric SHO  
1 x Paediatric Nurse Clinician  
1 x Cardio-Respiratory Technician  
1 x Consultant Paediatrician will be called if requested.

This is in addition to other doctors, a senior clinical nurse and ward nurses/ midwives who may be present at the time. The Trust’s Resuscitation Officer may also attend when available.

9 **RESUSCITATION IN PAEDIATRICS**

9.1 Special conditions apply when resuscitating children; both in the aetiology of cardiopulmonary arrest and in the techniques of resuscitation and it is imperative that experienced personnel, who are aware of these special needs, are present at the resuscitation attempt.

9.2 Paediatric cardiopulmonary arrest teams will respond in similar manner to the adult team. (See page 7, point 5.4)

9.3 The team leader has a specific role directing the resuscitation attempt, ensuring it continues in a co-coordinated manner and directing the overall management of the patient. The team leader will be responsible for patient assessment throughout, ensuring that:

- Adequate basic life support is being performed
- Airway management is performed swiftly and in a competent manner.
- Defibrillation is delivered swiftly and safely.
- Tasks are delegated to the other team members, who have the most appropriate skills,
- Current Resuscitation Council (UK) Paediatric Advanced Life Support (PALS) guidelines are followed (2005).
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Cardiopulmonary Resuscitation Policy and Procedures Incorporating  
Do Not Attempt Cardiopulmonary Resuscitation Policy  
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NB: The team leader for paediatric cardiopulmonary resuscitation should normally be a paediatrician with Advanced Paediatric Life Support (APLS) or Paediatric Advanced Life Support (PALS)

9.4 Ethical issues are especially difficult when resuscitating a child and consideration will be given to the care of relatives who may be present. Wherever possible a member of staff will be delegated to stay with them and liaise with the team on their behalf.

9.5 Neonatal staff will be available specifically to deal with newborn and neonatal emergencies in the delivery suite, maternity and Special Care Baby Unit (SCBU) and if necessary in the Accident & Emergency Dept.

10 RESUSCITATION OF LARYNGECTOMY AND TRACHEOSTOMY PATIENTS

10.1 Emergency resuscitation of patients with a laryngectomy presents problems as the upper airway can not be used for CPR. Oxygen can only be delivered via the stoma. For tracheostomy patients a proportion will similarly not have a patent upper airway for CPR and need replacement of the tracheostomy to deliver adequate respiration. (For further information see the Trust’s Policy for Resuscitation of Laryngectomy & Tracheostomy Patients)

10.2 If a patient’s breathing has stopped the following action should be taken:

Check the neck, expose the entire neck, check stoma for any blockage and suction clear, give ventilations with a pocket mask or a resuscitator bag with infant mask (kept in bottom resus trolley) to the stoma keep neck opening clear give oxygen. (A replacement infant mask can be obtained from the resuscitation cupboard in the ECG department at Whiston Hospital and from the resuscitation cupboard based on Hulme ward at St. Helens Hospital).

11 TRAINING STRATEGY

11.1 Training will be as uniform as possible, following the current guidelines of both European and UK Resuscitation Councils.

11.2 All hospital-based training will be orientated in as realistic an environment as possible and reassessed at regular intervals. Hospital staff will undergo regular cardiopulmonary resuscitation training to a level compatible with their expected clinical responsibilities. The maximum period between training sessions will be one year. A resuscitation training needs analysis is undertaken as part of the policy review as detailed below (See Training Criteria for Staff Groups – Appendix 3).

11.3 All clinical staff with patient contact will undertake basic life support. This will include adult resuscitation, pocket mask, bag valve mask and the management of the choking patient and recognition of a patient at risk of cardio-respiratory arrest. Staff working in
maternity will receive tailored maternal resuscitation training see Appendix 14. Clinical staff should also receive MEWS training delivered by the Critical Care Outreach Team.

11.4 All support staff who have no clinical patient contact will receive first aid awareness via the intranet, Governance Newsletter or leaflet.

11.5 New members of staff, including locum (bank) staff will have Cardiopulmonary resuscitation training incorporated into their induction programme which will take place on the commencement of their employment with the Trust.

11.6 Specific training for cardiopulmonary arrests in special circumstances (eg paediatrics, neonates and pregnancy) should be provided for the relevant medical and nursing staff working in these specialties.

12 NEONATAL RESUSCITATION

12.1 All paediatric and obstetric medical staff, neonatal nurses including neonatal support staff, midwives and midwifery support staff, must undertake neonatal resuscitation training on the Trusts local induction and annually.

12.2 Neonatal life support training is included in the following programmes:-

- Skills and Drills (all grades of obstetric medical staff, midwives and maternity support staff must attend annually).

- Neonatal resuscitation training delivered “in-house” by Neonatal Life Support practitioners (All grades of obstetric medical staff, neonatal nurses and neonatal support staff, midwives and midwifery support staff must attend annually)

12.3 Attendance at training is monitored centrally by the Learning and Development department. Non-compliance of attendance will be monitored in line with the Learning and Development departments’ non-attendance policy contained within the Learning Together Strategy.

12.4 The key to a successful resuscitation is adequate preparation. Anticipation of potential problems (obtaining a good history) and requesting help. You need more than one pair of experienced hands. This is a team effort.

The format is ABCDEF (E = Equipment, F = Family)

12.5 Equipment should be checked before each use as equipment failure would seriously compromise resuscitation. Always have a spare laryngoscope, ETT a size bigger
and smaller. Aim to use size 3 cm or 3.5 cm (2.5 cm preterm) as ventilation is better achieved. Check blow off valve for term baby is 30 cm of H₂O and for preterm 25 cm of H₂O. Suction, bag and appropriate size mask. Clock-check it is working. A stethoscope, UVC set, oropharyngeal airway

12.6 CHECK LIST

- Introduce yourself to mother and family members.
- Read notes and history from obstetrician/midwife.
- Send for help if baby is likely to need resuscitation or congenital malformation
- Check resuscitaire
- Ensure warm towels and hat available for baby
- Wash hands, put on gloves.

12.7 INITIAL MANAGEMENT OF BABY

- The moment baby is free from mother start clock.
- Dry, remove wet towels and cover with warm towels
- Assess: **Airway** \{ breathing rate
  **Breathing** \} and quality
  **Circulation** – listen with stethoscope for heart rate (fast, slow, absent)
  - colour (pink, blue, pale)
  - unconscious, apnoeic babies are floppy
- Follow algorithm
- During resuscitation make sure that the chest is moving and lungs are being inflated. If this is not happening something is wrong and if bag and mask ventilation is being used, then baby should be intubated. Intubation should be within first 5 minutes of birth.
- Babies who are active, breathing easily and pink by 10 minutes can go to the postnatal ward. Prolonged foetal distress with low cord pH should be observed in the Neonatal Unit.
ALGORITHM FOR NEONATAL RESUSCITATION

BIRTH

Term gestation? Amniotic fluid clear? Breathing or crying? Good muscle tone?

YES

Routine care
Provide warmth
Dry
Clear airway if necessary
Assess colour

NO

Provide warmth
Position
Clear airway if necessary
Dry, stimulate, reposition

Evaluate breathing, heart rate, colour and tone

Apnoeic or HR < 100

Listen to heart rate with stethoscope after 5 inflation breaths listen with stethoscope again.

Give positive pressure ventilation

HR < 60

Ensure effective lung inflation then add chest compressions
Compression: ventilation 3:1

HR < 60

Consider adrenaline etc

➢ Tracheal intubation may be considered at several steps
➢ Consider supplemental oxygen at any stage if cyanosis persists
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<tr>
<td>Adrenaline (Epinephrine)</td>
<td>1:10,000</td>
<td>0.1 ml/kg</td>
<td>UVC/ET tube</td>
<td>Dose up to 0.3 ml/kg (repeated every 3-5 mins)</td>
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<tr>
<td>Sodium Bicarbonate</td>
<td>4.2%</td>
<td>2-4 ml/kg</td>
<td>UVC</td>
<td>Never give through ET tube</td>
</tr>
<tr>
<td>Saline</td>
<td>0.9%</td>
<td>10 ml/kg</td>
<td>UVC</td>
<td>Can be repeated</td>
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<tr>
<td>Dextrose</td>
<td>10%</td>
<td>2.5 ml/kg</td>
<td>UVC</td>
<td>Never give through ET tube</td>
</tr>
<tr>
<td>Naloxone</td>
<td>400 mcg/ml</td>
<td>0.1 ml/kg</td>
<td>IM</td>
<td>Given only when airway is secure. Not an emergency drug Not to be used in mothers with narcotics addiction</td>
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12.8 REFERENCES

13 **DEFIBRILLATION**

Defibrillators must only be operated by persons specifically trained in their use. The operation of defibrillators by nurses, midwives and Allied Health Professionals is subject to successful completion of an Advanced Life Support course /Immediate Life Support course or Resuscitation Services Defibrillation Training Session.

14 **MEDICAL STAFF**

14.1 All medical staff must attend cardiopulmonary resuscitation training particularly upon appointment. House Officers and Senior House Officers will receive an induction lecture to explain the hospital procedures for membership of the cardiopulmonary arrest teams, followed by the requirement to attend one of a list of additional training sessions organised throughout the year. (See Training Criteria for Staff – Appendix 3).

- All House Officers must attend an appropriate life support course according to the Undergraduate Dean’s requirement.
- All Senior House Officers and Registrars must attend cardiopulmonary resuscitation training according to their clinical role.
- Members of the cardiac arrest team should ideally be Advanced Life Support (ALS), Advanced Paediatric Life Support (APLS) or Paediatric Advanced Life Support (PALS) qualified providers.
- All Consultants and non-training grade medical staff, i.e. staff grades must attend a refresher course on a yearly basis.
- Staff who successfully complete an ALS/ILS or have taught as an ALS Instructor are compliant with BLS mandatory training for a period of one year following the course.

15 **REGISTERED NURSES/MIDWIVES AND SUPPORT STAFF**

15.1 All nursing staff, including those not in regular patient contact, must undertake an annual basic life support update session. This will ensure that their role at a cardiopulmonary arrest is fully understood and in line with current guidelines, and to a standard compatible with their level of experience and expected duties within the hospital.

15.2 It will be the responsibility of the line managers for each specialty to monitor attendance at such sessions, to ensure that all staff attends training in basic life support. In addition, nurses/midwives in specialist areas, ie A&E, CCU, ICU, HDU, etc may receive additional training to facilitate their role.
15.3 All nursing support staff will be given the opportunity to attend basic life support sessions with the trained staff, to provide integrated team approach to CPR.

15.4 Resuscitation Officer(s) will conduct training with adequate provision of both basic and advanced training equipment. Resuscitation Services will take responsibility for ensuring adequate cleaning and maintenance of manikins and training equipment held centrally.

15.5 An attendance record will be completed for all resuscitation training that is undertaken. All completed/signed forms will be sent to the Learning & Development Department for inputting onto a central database.

15.6 All non-attendees will be followed up as per STHK Mandatory Training Policy.

15.7 Monitoring and evaluation of mandatory resuscitation training will be carried out centrally, as per STHK Mandatory Training Policy.

16 ANCILLARY STAFF AND SUPPORT STAFF INCLUDING CLERICAL, SECRETARIAL ETC

16.1 Whilst staff in these areas may not have direct patient contact, staff will receive first aid awareness via the intranet, Governance Newsletter or leaflet.

17 RESUSCITATION TRAINING RECORDS

17.1 Line Managers/Clinical Leads must take responsibility for keeping local records of staff attendance to mandatory resuscitation training, and ensure that all their staff attend appropriate training annually.

18 EQUIPMENT

18.1 St Helens and Knowsley Hospital NHS Trust is committed to providing sufficient equipment in each patient area to support the patient’s treatment, and to comply with the recommendations of both the UK and European Resuscitation Council.

18.2 All resuscitation trolleys must be maintained in a state of readiness at all times. Trolleys should be checked by a qualified member of staff at least once every 24 hours using the trolley check list and immediately following conclusion of a resuscitation event. (See Contents of Trolleys - Appendices, 7, 8, 9, and 10). This will be audited for compliance by the Resuscitation Officer periodically.

18.3 All defibrillators should be checked at the commencement of every shift. It is the responsibility of the nurse in charge to ensure that the defibrillator checks are carried out. A pulsing hour glass is confirmation that the defibrillator is
performing its safety self check and is ready for use. A red cross denotes a fault and must be reported to EBME/Resuscitation Officer immediately. A weekly operational check will be carried out by ECG staff.

18.4 No equipment is to be added or removed from the resuscitation trolleys unless it has been discussed with Resuscitation Officer. All clinical staff must be familiar with the resuscitation equipment available for use.

18.5 The Resuscitation Committee will determine the siting and selection of equipment for each ward/department. This will depend upon the anticipated workload and availability of equipment from nearby departments.

18.6 Equipment for cardiopulmonary resuscitation, including trolleys and defibrillators, will be standardised wherever possible.

18.7 On paediatric wards and other areas where children are treated, equipment suitable for paediatric resuscitation will be available on a dedicated trolley. Such equipment will be available throughout the Trust, as directed by the Resuscitation Committee.

18.8 Defibrillators will include the option of paediatric pads in areas where babies and children are treated.

18.9 Phillips MRX defibrillators with external pacing are located strategically throughout the Trust. (See Department and Type of Defibrillator Location List – Appendix 4).

18.10 The Resuscitation Committee will provide appropriate advice to the Trust to ensure that equipment; particularly defibrillators are in line with current specifications and technological developments.

18.11 Resuscitaires should be checked daily/after use and prior to delivery.

18.12 It is the responsibility of the Head of Department/Ward Manager to ensure that resuscitation equipment is checked daily. A system of immediate replenishment will be adopted. Stock can be replenished via Cardio Respiratory Department at Whiston Hospital. This includes out of hours. For St Helens, stock can be replenished via the resuscitation cupboard based on Hulme Ward.

18.13 All staff must know the procedure for cleaning and maintenance of reusable equipment and know which items are for single-use only. Single use items include all bag/valve/mask (BVM) devices and resuscitation masks (Pocket Masks). (Please read in conjunction with the Infection Control Policy).

18.14 All clinical staff must know the location of basic equipment within their immediate working area and know the location of their nearest resuscitation trolley containing
advanced equipment. It is the responsibility of staff where the arrest has occurred to ensure the nearest trolley is collected.

18.15 Following a cardiac arrest in a clinical area, it is the responsibility of the staff working in the area where the arrest has occurred to check and re-stock the resuscitation trolley used, and return it to its original location.

18.16 Following a cardiac arrest in a non-clinical area, it is the responsibility of team members to ensure that the resuscitation trolley is returned to its original location, where it must then be checked and re-stocked as per the policy.

18.17 It is the responsibility of the department/ward Allied Health Professional (AHP) to ensure that all emergency equipment in their respective areas is checked according to this policy, and that a written record of all checks is completed.

19 DRUGS

19.1 Portable oxygen and suction devices will be available in the ward and department, and on all resuscitation trolleys. Where piped or wall oxygen and suction are available, these should always be used in preference.

19.2 Resuscitation drugs and equipment for airway management, circulatory access and fluid administration is standardised for every resuscitation trolley/box and are available on every ward/dept.

19.3 It is the responsibility of the nurse in charge of the ward or department who uses the drugs from the trolley/box to replace them as soon as possible from the stock cupboard which is situated within the Cardio-Respiratory Department at Whiston and the resuscitation cupboard based on Hulme Ward at St Helens Hospital.

19.4 The Pharmacy Department is responsible for the drugs in the trolleys drug boxes. The Ward Manager is responsible to ensure that arrangements are in place to check that the drug box seal is intact and the box is in date within the emergency trolley.

20 MONITORING COMPLIANCE WITH, AND EFFECTIVENESS OF THIS POLICY.

20.1 Audit of both the process and outcome of cardiopulmonary resuscitation attempts is essential. Accurate data from resuscitation attempts will be kept, for audit and training purposes. During the resuscitation, one team member should be designated to document events. (See Resuscitation Documentation Form - Appendices 5). It is the responsibility of the Resuscitation Committee to monitor all cardiac arrest audits.

- Resuscitation Documentation Forms are available on each cardiac arrest trolley.
The team leader involved with the resuscitation team will ensure that all events are accurately documented and the Resuscitation Documentation Form is completed in its entirety and faxed to the Clinical Governance Audit Research Resource Department (C-GARRD).

Wherever possible the audit process will include periods of reflective practice or ‘debriefing’ after resuscitation attempts. This will allow staff time to reflect on events that occurred and provides the opportunity to discuss matters of concern.

Audit of the process of resuscitation will include the availability and performance of the members of the team, the standard and reliability of equipment used and the ongoing care of the patient in the post resuscitation phase.

20.2 The Resuscitation Committee will be responsible for auditing compliance of this policy. A sub-group of the Resuscitation Committee will undertake this, led by the Senior Resuscitation Officer. Individual audits may be delegated to other relevant personnel. (Examples of audits include: DNA-CPR audit, Documentation audit, Trolley/Equipment audit and Pre-cardiac arrest audit) All audit results will be reported back to the Resuscitation Committee who will identify and initiate any remedial action required. Similarly the checking of resuscitation trolleys will be audited periodically.

20.3 There will be a local review by the Resuscitation Committee of resuscitation attempts and of critical incident reports (IR1 forms) to highlight any serious deficiencies quickly and effectively.

20.4 Monitoring and evaluation of mandatory resuscitation training will be carried out centrally, as per STHK Mandatory Training Policy.

21 PATIENT TRANSFER AND POST-RESUSCITATION CARE

21.1 The immediate post-resuscitation phase is characterised by high dependency and clinical instability. Most patients require either coronary care or intensive care treatment. Facilities for ongoing care of the patient may not be available at the location of the cardiopulmonary arrest and transfer of the patient may be necessary. Therefore, when appropriate, referral to specialists (eg cardiologist or intensivist) will be made. It will be the responsibility of the Team leader at the resuscitation event to ensure that the transfer of care from one group of clinicians to another is both appropriate and efficient.

21.2 The team leader will not leave the patient until transfer has occurred unless he/she has delegated care to another appropriate colleague.
21.3 The patient’s condition should be stabilised as far as possible prior to transfer, but this should not delay definitive treatment. Careful coordination is required to ensure that no delays occur. The nurse present should do this in conjunction with the doctor responsible for clinical care.

21.4 Equipment for transfer, including drugs, should be kept readily accessible and appropriate monitoring equipment should be obtained. It may be necessary to liaise with the ambulance service for incidents outside the hospital.

21.5 An anaesthetist/doctor and an appropriately trained nurse or Operating Department Practitioner should accompany a patient being transferred. Relatives should be informed of the transfer of the patient.

21.6 In the event of a cardiac arrest in a non-clinical area, or if the person is an outpatient, once stabilised the casualty will be taken to the A&E department for post resuscitation management.

21.7 Following successful resuscitation in a clinical area the decision must be made with regard to transfer to Coronary Care/Intensive Care Unit/High Dependency Unit (CCU/ICU/HDU). The patient should be stabilised first if possible, but this should not delay definitive treatment.

21.8 The patient must be transferred with defibrillator/monitor, airway equipment, oxygen and appropriate drugs. A full medical and nursing handover of the patient’s care must be evident verbal and written, including details of drugs given and any defibrillation used.

22  MANUAL HANDLING

22.1 A mechanical lift using a hoist is the safest method of lifting a patient from the floor.

22.2 If in a confined space - the patient should be rolled onto sliding sheets with one person protecting the head and two persons sliding the person in small stages into a open space so that a hoist can be used

22.3 Lifting an adult in an emergency is a high risk activity and should only be undertaken in life threatening or exceptional circumstances, where no other option is available:

• The patient should be rolled to position a transfer or lifting sheet underneath them. There must be a minimum of seven staff for this procedure.

• Three members of staff are positioned on each side of the person and hold the edge of the transfer sheet with both hands.
• The seventh member of staff will bring in a trolley from the foot or head end of the person.

• The handlers staring position will be one leg inform not the other to maintain a stable base. On the command the six handlers will stand in unison keeping the person as close to then as possible. The seventh handler will then bring in the trolley.

• A bed should not be used as this will cause the handlers to hold the person at arms length increasing the risk of injury the handlers will be taking all the of the persons body weight Increasing the risk of injury to the handlers.

• The handlers are also lifting from below mid lower leg height. The safe working load of the transfer lifting sheet should be checked to ensure that the weight of the person do not exceed it.

To be read in conjunction with Guidance for safer handling during resuscitation (Resuscitation Council UK) http://www.resus.org.uk/pages/safehand.pdf

23 CROSS INFECTION

Whilst the risk of infection transmission from patient to rescuer during direct mouth-to-mouth resuscitation is extremely rare, isolated cases have been reported. It is therefore advisable that direct mouth-to-mouth resuscitation be avoided in the following circumstances:

• All patients who are known to have or suspected of having an infectious disease;
• All undiagnosed patients entering the Accident & Emergency department, Outpatients or other admission source;
• Other persons where the medical history is unknown.

All clinical areas should have immediate access to airway devices (e.g. a pocket mask) to minimise the need for mouth-to-mouth ventilation. However, in situations where airway protective devices are not immediately available, start chest compressions whilst awaiting an airway device. If there are no contraindications consider giving mouth-to-mouth ventilations.

24 ANAPHYLAXIS

The management of suspected anaphylaxis / anaphylactoid reactions should be conducted in accordance with the Resuscitation Council (UK) Guidelines for the management of anaphylaxis. (see Trust anaphylaxis policy)
25 PROCUREMENT

All resuscitation equipment purchasing is subject to the organisation’s standardisation strategy; therefore all resuscitation equipment purchased must be sanctioned by the Resuscitation Officer/Resuscitation Committee prior to ordering.

26 INCIDENT REPORTING SYSTEM (IR1)

26.1 Should a resuscitation event incur delays, errors, equipment failure etc it is the policy of St Helens & Knowsley Hospital NHS Trust that all such incidents, clinical, non-clinical and all near misses should be reported. The Incident Reporting System has been developed to capture all incidents and near misses.

26.2 The responsibility for reporting the incident lies with all staff, at all levels, within the Trust. Guidance on incident reporting can be found in the Trust’s Incident Reporting Policy.

An example of an incident includes:
- A failure or delay in starting resuscitation
- A failure of the 2222 call-out system
- Failure of oxygen supplies during cardiac arrest
- Failure of any equipment during cardiopulmonary resuscitation

An example of a near miss includes:
- Incomplete ‘Do Not Attempt Cardiopulmonary Resuscitation’ (DNA-CPR)
- Discovery of missing equipment from the resuscitation trolley during routine checks
- Discovery of damaged bag valve mask during checking

26.3 The aim of incident reporting is to understand the cause of adverse healthcare events and to learn from them and not to blame individuals who have made mistakes. By reporting incidents and near misses, staff are helping the Trust to understand the nature of risk, analyse the systems, and continuously improve by learning.

27 DO NOT ATTEMPT CARDIOPULMONARY RESUSCITATION

Individual consultants (or their appointed deputy) are responsible for the DNA-CPR decision making progress in relation to the care of individual patients. Whilst the consultant or his/her designated deputy remains responsible for this process, it remains the responsibility of individual staff members to ensure they are aware of and understand the DNA-CPR policy.
Clinical staff should identify to the Trust ongoing personal and education needs which will allow best practice to be achieved and will be encouraged to participate in relevant training and discussion.

28  GENERAL PRINCIPLES

28.1 The legal presumption/starting position in relation to patients (particularly those who lack capacity) is that it will normally be in the patient’s best interests for life to continue and there must be no motivation to bring about a patient’s death.

28.2 Every CPR decision should be assessed on the basis of the individual patient, taking into account his or her particular circumstances. Such a decision should only be made after appropriate consultation and consideration of all relevant aspects of the patient’s condition including:

- The likely clinical outcome, including likelihood of successfully restarting the heart and breathing and the overall benefit of achieved by successful resuscitation

- The Patient’s (or where the patient lacks capacity, the relatives/carers/other relevant individuals) known or ascertainable wishes

- The patient’s human rights including the right to life and the right to be free from degrading treatment.

- The views of all members of the medical and nursing team, including those involved in a patient’s primary and secondary care will be relevant although due regard should be had to the patient’s right to confidentiality. The views of these people and others close to the patient are valuable informing a decision.”  

28.3 The decision maker (the individual consultant or their appointed deputy) must therefore carefully consider whether the burden of potential CPR clearly outweighs the potential benefits.

28.4 In the absence of any valid and applicable Advance Decision made by the patient while competent refusing/specific treatment, there is a common law duty of care to give appropriate treatment to incapacitated patients when such treatment is clearly in their best interests. Relevant individuals such as relatives or carers should be consulted as to their views, but the final decision as to what decision is in the patient’s

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1 Taken from relevant national guidance from the Resuscitation Council UK/BMA/GMC/RCN & other sources such as the Human Rights Act 1998
best interests rests with the individual consultant (or their appointed deputy) responsible for considering whether a DNA- CPR decision is appropriate.

28.5 All inpatients, outpatients, visitors and staff are assumed to be for CPR unless there are clear instructions to the contrary.

28.6 A patient’s status is to be regarded as either “FOR CPR” or “DNA- CPR”. The practice of half-hearted resuscitation attempts is unacceptable.

A DNA-CPR decision applies solely to CPR. It has NO implications for any other decision concerning the patients general clinical management. All other treatment and care, which is appropriate for the patient, should given and must not be influenced by a DNA-CPR decision. The withdrawing or withholding of other treatment is a separate issue and should be considered as such.

28.8 A DNA-CPR order comes into effect only when it has been clearly documented in the medical notes using the appropriate DNA-CPR form and placed in the front of the patient’s notes. See Do Not Attempt Cardiopulmonary Resuscitation (DNA-CPR) Form - Appendix 1.

28.9 All expressed wishes of the patient and where the patient lacks capacity, other relevant individuals (particularly relevant family members or carers) must be recorded by the most senior member of the clinical team.

28.10 All decisions and reasons for such decisions made by the clinician must be recorded by the most senior member of the medical team and must be effectively communicated to other medical and nursing staff. It must be clearly understood that it is:

- the patient, where they have made a valid and applicable Advance Decision refusing such treatment once they lose capacity, or
- where the patient lacks capacity and has not made such a valid and applicable advance decision, the relevant consultant/nominated deputy, or
- After 1.10.07, where the patient lacks capacity, but there is a valid and applicable Lasting Power of Attorney, the welfare Attorney

who determines their DNA-CPR, not any other person. However, such relevant individuals must be consulted when determining the patient’s best interests if the patient is incapable, where practicable and appropriate, and their views fully considered by the decision-maker.
If the patient lacks capacity refer to consent form 4 – lack of capacity for further advice. (See Consent Form 4 (for adults who are unable to consent to investigation or treatment) – Appendix 7).

28.11 Where an adult lacks capacity to the present legal position is that no adult can give consent to or refuse medical treatment on behalf of another adult. [NB: Lack of capacity, incapacity and incompetence concerning decision making are synonymous terms). This position is changing in October 2007 when the provisions of the Mental Capacity Act 2005 relating to Lasting Powers of Attorney, in particular the powers of a Welfare Attorney, come into force in England and Wales.

29 **LASTING POWERS OF ATTORNEY (LPA)**

- The MCA introduces a new Lasting Power of Attorney ("LPA"). An LPA is a legal document whereby one person (the Donor) gives another person(s) (the Donee(s)) authority to act on the Donor’s behalf in respect of property, finances and/or personal welfare, including medical treatment.

- To be valid, an LPA must be executed in the prescribed form and registered with the Public Guardian. A Donee can only make personal welfare decisions on behalf of a patient, including consent to and refusal of medical treatment, where this is provided for in the LPA and only after the patient loses capacity.

- A Donee has no power to consent to or refuse life-sustaining treatment, unless the LPA expressly authorises this.

- Donees are under a duty to act in accordance with the principles of the MCA and must act in the patient/donor’s best interests.

- When presented with an LPA, it is important to ensure that: -

  29.1 the LPA is registered with the Public Guardian;
  29.2 the patient is incompetent;
  29.3 the LPA authorises the Donee to make treatment decisions on the patient’s behalf; and
  29.4 no Advance Decision was made by the patient subsequent to the LPA.

- In the event of a dispute between the Donee and multi-disciplinary team as to what is in the patient’s best interests urgent advice should be sought as it may be necessary to seek a High Court Declaration.
In the event of any uncertainty as to whether an LPA is valid and/or what power it confers on the Donee, urgent advice should be sought.

30 THE MENTAL CAPACITY ACT 2005

The following provisions of the Mental Capacity Act 2005 came into force on 1st April 2007:

- the Independent Mental Capacity Advocate Service (IMCA)
- the two new criminal offences of ill treatment or neglect of a person who lacks capacity
- the general principles and code of practice, so far as they relate to those two items.

The remainder of the Act is expected to come into force on 1st October 2007 and will be highly relevant to this policy, particularly in relation to patients who lack capacity or require support to help them make decisions about their lives.

31 THE PRINCIPLES OF THE MENTAL CAPACITY ACT

The following principles must be taken into account when making decisions about the treatment of patients, including DNA-CPR decisions:

1. A person must be assumed to have capacity unless it is established that they lack capacity

2. A person is not to be treated as unable to make a decision unless all practicable steps to help him do so have been taken without success

3. A competent adult has the right to make unwise decisions

4. Where a person over 16 lacks capacity, treatment decisions must be made on the basis of what is in that person’s best interests

5. The treatment chosen should be wherever possible the treatment that interferes least with the patient’s rights or freedoms
32 THE STATUTORY TEST OF CAPACITY

A patient will lack capacity to make such a decision themselves if at the material time he or she :-

1. Has an impairment of or a disturbance in the functioning in the mind of the mind or brain? and
2. Is unable to understand the information relevant to the decision and
3. Is unable to retain that information and
4. Is unable to use or weigh that information as part of the process of making the decision

Or

Is unable to communicate their decision, whether by talking using sign language or any other means.

33 BEST INTERESTS CHECKLIST

A fundamental principle of the Mental Capacity Act 2005 is that any act or decision made on behalf of a person who lacks capacity must be done or made in that persons' best interests'. In such a situation the consultant/decision maker must be therefore be satisfied that a decision that a patient is not for cardiopulmonary resuscitation is in the patients’ best interests. In ascertaining this, the consultant/decision maker must consider the ‘best interest checklist’ set out in the Mental Capacity Act 2005. This checklist is as follows:

a) The patient should be encouraged to participate in the decision; the consultant or his/her team should do whatever possible to permit and encourage the patient to take part in, or to improve their ability to take part, in making the decision

b) The consultant/decision maker must take into consideration all relevant factors and should identify all the things that the person who lacks capacity would take into account if they were making the decision or acting for themselves.

c) The consultant/decision maker should attempt to find out the views of the patient, including their past and present wishes and feelings, which may have been expressed verbally in writing or through behavioural habits. Any beliefs and values (e.g. religious, cultural, moral or political) that would be likely to influence them in this decision should also be considered.
d) Avoid discrimination; the person making the CPR decision must not make assumptions about the patient’s best interests simply on the basis of the patient’s age, appearance, condition or behaviour.

e) The consultant/decision maker must consider whether the patient might regain capacity and if so whether the decision as to whether or not CPR will be appropriate in the future can wait until then.

f) The decision that a patient is not for CPR should not be motivated in way by a desire to bring about the patient’s death and assumptions should not be made about the patient’s quality of life; the starting point is that it will usually be in a patient’s best interests for life to continue.

g) Consult others – the consultant/decision maker should consult other people for their views about the patient’s best interests, to see if they have any information about the person’s wishes, feelings, beliefs and values. In particular the following should where possible be consulted if this is practical and appropriate:

- Anyone previously named by the patient as someone to be consulted in relation to CPR issues or similar issues.
- Anyone engaged in caring for the person such as other members of the care team.
- Close relatives, friends or others who take an interest in the patient’s welfare.
- An Attorney appointed under a Lasting Power of Attorney or Enduring Power of Attorney made by the person.
- Any Deputy appointed by the Court of Protection to make decisions for the person.

Where there is no such person to consult and the decision is not urgent it may be necessary to make a referral to the Independent Mental Capacity Advocate (IMCA) service. Where such a referral is made the IMCA’s views should be taken into consideration by the Consultant when making a CPR decision. Please refer to the Trusts General Guidance Mental Capacity Act 2005 Version 2 July 2007 for further Information.

A careful note should be made in the patient record as to who is being consulted and what their views were, together with reasons why a particular view presented for example is not agreed as being in the patient’s best interests by the decision-maker.

The final decision is that of the consultant/decision maker. He or she must consider all of the above in deciding whether a ‘not for CPR’ decision is in the patient’s best interests.
34 THE MENTAL CAPACITY ACT & LIFE SUSTAINING TREATMENT

The Mental Capacity Act 2005 Code of Practice gives the following guidance:

- all reasonable steps which are in the persons best interests should be taken to prolong their life

- however there will be a limited number of cases where treatment is futile, overly burdensome to the patient, or where there is no prospect of recovery and in circumstances such as these it may be that an assessment of best interests leads to the conclusion that it would be in the best interest of the patient to withdraw or withhold life sustaining treatment even if this may result in a persons death.

- Before deciding to withdraw or withhold life-sustaining treatment the decision maker must consider the range of treatment options available to work out what would be in the patient’s best interests. All the factors in the best interest checklist above should be considered and in particular the decision maker should consider any statements that the person has previously made (whilst they had capacity to make such a statement) about their wishes and feelings about life sustaining treatment.

- This does not mean that Doctors are under an obligation to provide or continue to provide life sustaining treatment where that treatment is not in the best interests of the person, even where the person’s death is foreseen; Doctors must apply the best interests checklist and use their professional skills to decide whether CPR is in the persons best interests.

- Further training can be accessed by contacting the Care of the Elderly Department at St Helens Hospital on ext 8485

35 GUIDELINES COVERING THE BASIS OF A “DNA-CPR” DECISION

It is essential to recognise that this can be a difficult and emotional issue.

It is appropriate to consider a DNA-CPR decision in the following circumstances.

1. Where a patient’s condition indicates that effective CPR is unlikely to be successful or would be futile e.g. advanced dementia, or
2. Where CPR is not in accord either with the recorded or sustained wishes of the patient who is mentally competent,
or
3. Where CPR is not in accord with a valid applicable Advance Decision. (A patient’s informed and competently-made refusal which relates to the circumstances which have arisen is legally binding upon doctors),
or
4. Where successful CPR is likely to be followed by a length and quality of life, which would not be in the best interests of the patient to sustain.

36 THE RESPONSIBILITY FOR A DNA-CPR DECISION

1. The overall decision for a patient’s resuscitation status rests with the consultant or deputising/delegated associate specialist or middle grade in charge of that patient. However, he/she must always consider carefully the views of the patient and where relevant, practicable and appropriate, family, in addition to other members of the medical, nursing, and multi-disciplinary team (including the general practitioner) caring for the patient, to help determine the patient’s best interests. (See Consent Form 4 (for adults who are unable to consent to investigation or treatment – Appendix 6). The consultant must also in every case take into account the factors listed in the Mental Capacity Act ‘best interests checklist’ set out at section 20 x above.

2. When a consultant decision is likely to be delayed, a decision** should be made by the associate specialist/middle grade following admission of the patient and should be reviewed by the consultant in charge of the patient at the soonest available opportunity.

** This decision can be implemented by an SHO, following a discussion between the SHO and Consultant or deputising/delegated associate specialist or middle grade in charge of the patient who must accept responsibility for the decision.

The decision must be clearly documented on the DNA-CPR form (red card). It should state ‘discussed with’ and the name of the Consultant, deputising/delegated associate specialist or middle grade responsible for the decision and recorded in the relevant box on the form. Similarly, the SHO must sign per pro in the signature box.

3. The decision should be reviewed if the clinical condition of the patient changes.

4. The DNA-CPR order will always be reviewed on each consultant, associate specialist or middle grade ward round. If no such DNA-CPR review takes place the order lapses after 48 hours. The review decision can be implemented by an SHO, following a discussion between the SHO and consultant or deputising/delegated associate specialist or middle grade in charge of the patient
who must accept responsibility to the decision. This must be recorded as in 22ii above. Best practice advises that the consultant involves the patient (or their qualifying relationship to the patient with a patient without capacity) in the decision making process.

He/she should explain the meaning of a DNA-CPR order. It should also be explained that the order has no implications for any other decisions concerning the patients clinical management.

5. If the patient is discharged, the DNA-CPR decision and form are immediately rescinded. If the patient is readmitted to hospital, this will be classed as a new event and the patients DNA-CPR status must be recommenced.

37 THE DOCUMENTATION OF A DNA-CPR DECISION

Any decision regarding the implementation of a DNA-CPR order, or its reversal, needs to be clearly recorded in the patient’s records and on the attached proforma by the most senior member of the medical team. This person now has the responsibility to ensure the decision is communicated to all relevant personnel, and must do so.

When recording the decision the following should be noted:

- Patients wishes regarding resuscitation, and where relevant, practical and appropriate, the views of others close to him/her in accordance with the determination of ‘best interests’.

- Confirmation that all the matters included in the Mental Capacity Act ‘best interests checklist’ have been considered

- Where it has been necessary to involve an Independent Mental Capacity Advocate under the Mental Capacity Act 2005, the view of the IMCA

- The basis and reasons on which the decision has been reached.

- The name, date, time, designation and signature of the doctor responsible for the decision or alternatively signed per pro by the SHO following telephone discussion with the Consultant/Associate Specialist/Middle Grade in charge of the patient. If this is the case it must be recorded on the DNA-CPR red card underneath Name (Consultant) ‘Discussed With’ and then document the Consultants name.

- A declaration of how often the decision will be reviewed.

- The senior nurse in charge must co-sign the DNA-CPR form as a record of communication.
38  THE REVIEW OF A DNA-CPR DECISION

   i. The DNA-CPR order should be reviewed by the consultant, associate specialist or middle grade/whom responsibility has been delegated to. If the patient’s clinical condition changes significantly the review must be documented dated and signed.

   ii. The DNA-CPR order will always be reviewed on each consultant, associate specialist or middle grade ward round. If no such DNA-CPR review takes place the order lapses after 48 hours. The review decision can be implemented by an SHO and Consultant or deputising/delegated associate specialist or middle grade in charge of the patient who must accept responsibility for the decision.

39  THE CANCELLATION OF A DNA-CPR DECISION

   If a DNA-CPR order is reversed, the following rules apply:

   1. The original DNA-CPR order must be cancelled and the form clearly filed in the patient notes, at the back of the record.

   2. The reversal must be named, signed, dated timed and the reason for reversal given by the consultant (associate specialist or middle grade) responsible for the patient.

   3. The decision must then be communicated by the person signing the reversal to all members of the medical /nursing /therapy team involved in caring for the patient.

   4. The names of any other person(s) consulted in the decision and the reason for the reversal of the original order should (if applicable) be given.

   5. Once the patient is discharged from hospital, the DNA-CPR is automatically rescinded.

40  PARTICULAR CIRCUMSTANCES

   A. Paediatrics and DNA-CPR

   The Royal College of Paediatrics and Child Health have produced the following guidelines which identify five situations where it may be appropriate to consider withholding or withdrawal of curative medical treatment:

   1. Brain Dead Children- where artificial ventilation and Intensive Care are futile.
2. **Permanent Vegetative State** - A child’s brain is so damaged by injury or lack of oxygen that they cannot react or relate to the outside world.

3. **No Chance** - Such severe disease that treatment may delay death but without alleviating suffering.

4. **No Purpose** - Survival possible with treatment, but only with such severe mental or physical impairment that the child will never be capable of choice and his/her suffering would be unreasonable for them to bear.

5. **Unbearable Situation** - Child and/or family feel further treatment for progressive and irreversible illness is more than they can bear, e.g., aggressive treatment of oncology patients.

The courts have recognised that a child (someone under the age of 16) can in law be competent to make their own decisions providing he or she has sufficient understanding and intelligence to enable him or her to understand fully what is proposed (“Gillick” competent). However, a refusal by a competent child does not have the same force as a child consenting to treatment, and can be overridden by those with parental responsibility or the Court (acting in that child’s best interest).

In essence a child can give permission for but cannot refuse a procedure if it is in the child’s best interests. [NB: at age 18, a person is viewed as an adult with capacity, with full rights to give or refuse permission].

Young people aged 16 and 17 who are not Gillick competent due to a disturbance in the functioning of the mind or brain, may be treated either under the doctrine of Parental Responsibility, or alternatively in their best interests under the Mental Capacity Act 2005 (see above for details).

**B. DNA-CPR WITHIN A&E**

The nature of an Accident and Emergency Department often means that little or nothing is known about the previous medical condition of a patient. In general, it is usual that a person would be in at least a fair medical condition before cardiac or respiratory or other severe central neurological arrest. With this in mind the **basic rule must be to start resuscitation in persons suffering cardiac or respiratory arrest, unless there is clear evidence to establish death.**

**C. ADVANCE DECISIONS/LIVING WILLS**

See also - Living Wills Policy
What is an Advance refusal?

Advance refusals of treatment are known by various names and terms, including Advance Decision, Advance Statement, Advance Directive and Living Will. For the purposes of this Policy the term ‘Advance Decision’ will be used throughout.

1. An Advance Decision is an anticipated decision refusing certain specific medical treatment, in certain future specific circumstances in a situation where the person no longer has capacity, made by a competent person who is over 18 years old. Such an Advance Decision, where valid and applicable to the situation in hand, must be respected.

2. An Advance Statement is something entirely different; this is a statement that declares the person’s general wishes as to how he or she would like to be treated or cared for after their loss of capacity; it is effectively a declaration of their view of their best interests. Such general expressions are unlikely to constitute a legally binding Advance Decision, however they may assist with assessing what would be in the patient’s best interests and should be respected wherever appropriate and possible.

3. Advance Decisions cannot be used as a means of insisting upon any particular form of treatment.

4. An Advance Decision cannot authorise treatment or any action which is unlawful, including assisted suicide.

5. It is usual practice that a copy of the AD is held in a GP’s practice or other recognised office of a professional.

6. An Advance Decision must be clear about which clinical techniques, or care, are refused.

41 REQUIREMENTS OF A VALID ADVANCE DECISION

Advance Decisions are currently recognised and regulated by the common law, rather than statute; this position will shortly change when the relevant parts of the MCA come into force (expected commencement date: October 2007). See below for the position after the MCA comes into force. The requirements for a valid Advance Decision are as follows:

- There are no specific legal requirements as to the format or content of an Advance Decision.

- An oral statement is as equally valid as a written statement, provided there is sufficient evidence that the oral statement was made and remains valid.
The individual must have been at least 18 years old at the time the Advance Decision was made.

The Advance Decision must have been made freely by a competent person, without undue influence.

In law there is a presumption that an adult has capacity to consent to or refuse treatment. Capacity requires the patient to have the ability to:

1. understand the information presented to them;
2. believe the information;
3. retain the information; and
4. weigh the information in the balance as part of the decision making process.

The individual must have envisaged the type of situation which has subsequently arisen.

An Advance Decision can be withdrawn or amended at any time whilst the patient remains competent.

VALIDITY OF ADVANCE DECISIONS

In addition to the requirements set out above, in order for an Advance Decision to be binding, it must first be shown to exist and that the refusal is valid and applicable. It is for the treating clinician to consider all the available evidence and assess how convincing that evidence is. Any decision reached must be carefully recorded in the case notes, as well as the reasoning behind that decision.

In cases of doubt as to whether or not the Advance Decision is valid, emergency life-sustaining treatment should normally be given. In such circumstances it may be necessary to seek a Declaration from the High Court and therefore urgent advice should be sought.

APPLICABLE

In order to be legally binding, the individual must have envisaged the type of situation which has subsequently arisen. If the situation is not identical to that described in the Advance Decision, health professionals should still act within the general spirit of the statement if this is clearly described and in so far as is practicable. However if there is doubt as to what the patient intended and this cannot be resolved, for example through discussion with the patient's GP and
family, then the law requires treatment to be provided in the patient’s best interests.

44 **UNCERTAINTY**

If doubt exists, whether to the existence, validity or applicability of an Advance Decision, the law supports a presumption in favour of providing treatment which is both necessary and in the patient’s best interests. In such circumstances the health professionals involved must be able to demonstrate that they had genuine and reasonable doubts as to the validity or applicability of the Advance Decision. In such circumstances it is essential that clear and detailed entries are made in the case notes detailing the evidence presented, the nature and extent of the enquiries made, the final decision reached and the reasons for the decision. In some circumstances it may be necessary and appropriate to seek a declaration from the High Court and therefore urgent advice should be sought.

If treatment is provided and a valid Advance Decision is subsequently discovered, the Advance Decision should nevertheless be respected and complied with, including the withdrawal of treatment where necessary and appropriate.

45 **MENTAL CAPACITY ACT 2005**

New statutory provisions regarding Advance Decisions concerning life sustaining treatment under the Act are due to come into force in October 2007.

After the coming into force of the MCA, an Advance Decision relating to life-sustaining treatment will **only** be valid where:

1. it is in writing;
2. the decision is verified by a statement by the patient that it is to apply to that treatment even if life is at risk;
3. it is signed by the patient or by another person in the patient’s presence and by the patient’s direction;
4. the signature is made or acknowledged by the patient in the presence of a witness; and
5. the witness signs it, or acknowledges his signature, in the patient’s presence.

46 **‘LIFE-SUSTAINING TREATMENT’** is defined within the MCA as:

“treatment which in the view of the person providing health care for the person concerned is necessary to sustain life”

This therefore includes an Advance Decision to refuse CPR.
If the patient has created an LPA after the Advance Decision was made, and the LPA confers authority on the Donee to give or refuse consent to the treatment to which the Advance Decision relates, the Advance Decision is no longer valid. However, if a valid and applicable Advance Decision is made subsequent to the LPA, then the Advance Decision takes precedence.

47 **DETERIORATION OF IATROGENIC ORIGIN**

Iatrogenic – Induced inadvertently by a physician or surgeon, or by medical treatment or diagnostic procedures.

There may be exceptional circumstances whereby even in the presence of a DNA-CPR Order, intervention would be appropriate. For example in the circumstances of an acute reversible deterioration due to medical therapy/intervention (or omission of prescribed intervention).

48 **THE RATIONALE FOR DNA-CPR POLICY**

There must be robust and indisputable clinical evidence that the current path of the disease process is relentless and that the *inevitable outcome is death*.

Alternatively, in the event of CPR being successful the patient’s existence would be followed by a length and quality of life, which would not be in the best interests of the patient. In the absence of a valid, applicable Advance Decision, or after 1.10.07, a valid, applicable Lasting Power of Attorney, the decision regarding patient’s best interests when a patient is incompetent to decide, rests with the consultant or his deputy.

49 **INTRODUCTION**

Resuscitation is complex, there can be potential benefits and also there can be inevitable failures.

50 **END OF LIFE SCENARIOS**

They broadly fall into one of four areas:-

**A. PLANNING FOR INEVITABLE DEATH**

Where death is the inevitable conclusion of a disease process that is remorseless and irreversible. An example would be the patients with advanced and end stage carcinomatosis or irretrievable end stage core organ failure. Here the patients face
death and in partnership with palliative care Medicine they can be offered the opportunity to manage distressing symptoms and aspire to comfort and dignity in their demise. They will have the opportunity to put their affairs in order and say farewell to those dear to them.

Resuscitation would not usually figure in the planning of treatment and care management.

Advance planning will ensure that resuscitation does not needlessly become an issue.

B. DISEASE THAT IS INCREASINGLY REFRACTORY TO ESCALATING MEDICAL MANAGEMENT

Where escalating single or multiple chronic organ failure is proving increasingly unresponsive to maximised medical interventions, “death” will not usually be far away.

Where a patient’s condition is progressive and irreversible and resuscitation techniques will not resurrect organ function. In the treatment planning for such patient’s, we must endeavour to escalate therapy to the point of maximum intervention but accepting that if it fails, then resuscitation will also fail and death will be an unavoidable consequence.

Evidence, transparency, communication, confidence, seniority and courage are required in the treatment planning for this type of scenario.

Timely communication with the patient, their family/ partners/ carers and caring team will avoid later crisis management or the inappropriate summoning of the resuscitation team. (Please see Appendix - Consent Form).

C. CARDIOPULMONARY RESUSCITATION WOULD BE AGAINST THE WISHES OF THE PATIENT

Where CPR is not in accord with the sustained, recorded and documented wishes of a patient who is mentally competent, including evidence in a signed witnessed and dated Advance Decision/Living will. It is important to note the new rules set out above on Advance Decisions relating to life sustaining treatment that come into force in October 2007. Following the introduction of those new statutory requirements, an Advance Decision will only be binding where the four requirements are fulfilled. Such an invalid Advance Decision however may be highly relevant in the determination as to what is in the patient’s best interests.

When there is any doubt as to the mental competence of the patient concerned unless this is a long established problem, it is commonly a consequence of the acute illness threatening the patient’s life.
Medical staff should be prepared to seek additional assistance from a senior colleague if necessary.

It might be beneficial to seek assessment of the patient’s mental state by a psychiatrist where there is lack of clarity as to the cause of the patient’s mental state.

A patient’s valid and applicable Advance Decision to refuse treatment, is legally binding upon doctors.

It is essential that doctors are satisfied that an Advance Decision is valid and has not been revoked.

It must cover the particular and specific circumstances that have arisen.

Legal advice may be required through the Trust’s legal advice management team as to the validity of the document and clinical input at Consultant/Directorate level is likely to be required.

D. SUDDEN ONSET OF A LIFE THREATENING EVENT

This might be the development of a new potentially fatal illness of an abrupt deterioration in a long-standing ailment with immediate life threatening consequences.

It is in this area that there is a need to consider the appropriateness of resuscitation attempts and any relationship to Advance Decision/Living wills.

51 CHAPLAINCY SERVICE

NB. Chaplaincy services are available for spiritual care if requested by the patient/relatives.

52 PROCESS FOR REVIEWING, APPROVING AND ARCHIVING THIS DOCUMENT

This document will be reviewed every 3 years or whenever national policy or guideline changes are required to be considered (whichever occurs first), primarily by the organisation-wide Resuscitation Committee following which it will be subject to re-ratification by the Recommending Committee (STHK Trust Resuscitation Committee) and Approving Committee (Trust Governance Board). Archiving of this document should be conducted in accordance with the organisation’s electronic archiving procedure.
DISSEMINATION, IMPLEMENTATION AND ACCESS TO THIS DOCUMENT

This policy should be implemented and disseminated throughout the organisation immediately following ratification and will be published on the organisations intranet site. Access to this document is open to all.

ASSOCIATED DOCUMENTATION

To be read in conjunction with the:
- Infection Control Policy
- Moving and Handling Policy
- Moving and Handling during cardiac arrest (Resuscitation Council)
- MEWS Card and Action Pathway

REFERENCES

A Joint Statement from the British Medical Association, the Resuscitation Council (UK) and the Royal College of Nursing February 2001

ALS Course Provider Manual, 4th edition


London; BMJ Books, 2000


MCA Code of Conduct 2005

Mental Capacity Act 2005 Department of Health

National Health Service Litigation Authority (2007) NHSLA Risk Management Standards for Acute Trusts
Clinicians should be aware that much of this guidance however, does not yet fully take account of the new provisions of the Mental Capacity Act 2005, relating to the assessment and treatment of adults lacking capacity.

Therefore in cases of doubt, advice should be sought and the MCA Code of Practice referred to. There are also a range of useful guides for clinicians available which are listed below.

The Mental Capacity Act 2005 and related Code of Practice

1. “Making Decisions” series of booklets produced by the Department of Constitutional Affairs: ‘1. making decisions about your health, welfare or finance. Who decides when you can’t?’
2. A guide for family, friends and other unpaid carers
3. A guide for people who work in health and social care
4. A guide for advice workers
5. An easy read guide
6. The Independent Mental Capacity Advocate (IMCA) Service”

Available online at www.dca.gov.uk/legal-policy/mental-capacity/publications.htm Or telephone 023 80 878036, fax 023 80 528324 or email; recorder@inprintlitho.com to order free copies
Appendix 1
DO NOT ATTEMPT CARDIOPULMONARY RESUSCITATION (DNA-CPR) FORM

PLEASE DO NOT PHOTOCOPY, AS THIS IS A RED CARD WHICH IS AVAILABLE ON ALL WARD AREAS

<table>
<thead>
<tr>
<th>Hospital No:</th>
<th>Hospital: ..........................................................</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surname:</td>
<td>.................................................................</td>
</tr>
<tr>
<td>First Name:</td>
<td>.................................................................</td>
</tr>
<tr>
<td>Date of Birth:</td>
<td>.............................................................</td>
</tr>
</tbody>
</table>

Basis on which DNA-CPR decision has been reached:

Those involved in discussion (if patient not involved please state why not)

Review date or period (if appropriate):

The senior / named nurse has been informed (state name)

Name (Consultant)  Communicated to: ..........................................................

Name: .............................................................

(nurse in charge):

Signature: .............................................................

Signature: .............................................................

Dated: .............................................................

Dated: .............................................................

Bleep No: Information to be recorded by the nurse identified above in the care plan

Patient discharged and this order is now withdrawn. Doctor making the decision:

Doctors name: ............................................................. (Please print)

Doctors signature: ............................................................. Dated: .............................................................

DNA-CPR REVERSAL STATEMENT

Date of reversal ………………………Decision made by ………………………Grade……………Bleep……..

Reason decision reversed……………………………………………………………………………………………..

Communicated to…………………………………………………………………………………………………………..
Collapsed Patient Algorithm

Collapsed patient

Shout for HELP and assess patient

In Hospital Building or Clinical Area

NO

If access to internal phone
Call 2222 (Switch to call 999)

Access nearest phone/
Personal Mobile
Call 999

YES

Call Resuscitation team
2222

Appendix 2
# TRAINING CRITERIA FOR STAFF GROUPS

<table>
<thead>
<tr>
<th>Clinical Staff Groups</th>
<th>Mandatory Resuscitation Training</th>
<th>Frequency and Duration</th>
<th>Additional Resuscitation Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allied Health Professionals: Radiographers, Dieticians, ECG, Neurophysiology, Occupational Therapists, Orthoptists</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>Cardio Respiratory Technicians</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td>Immediate Life Support course. 75% of staff from this area annually.</td>
</tr>
<tr>
<td>Cardiac Arrest Team Medical Staff</td>
<td>Hospital life support. Advanced Life Support course.</td>
<td>Induction and annually 1½ hrs. 2 day course every 4 years</td>
<td></td>
</tr>
<tr>
<td>Clinical staff working in areas that see Paediatrics</td>
<td>Paediatric Life Support</td>
<td>Induction and annually 1½ hrs</td>
<td>Advanced Paediatric Life Support course every 4 years</td>
</tr>
<tr>
<td>Obstetric medical staff, midwives and maternity support staff.</td>
<td>Skills and Drills</td>
<td>Annually</td>
<td></td>
</tr>
<tr>
<td>Obstetric medical staff, neonatal nurses/midwives, neonatal/midwifery support staff.</td>
<td>Neonatal resuscitation training</td>
<td>Induction and annually</td>
<td></td>
</tr>
<tr>
<td>Core delivery suite midwives</td>
<td>Advanced Life Support in Obstetrics course</td>
<td>2 day course every 3 years</td>
<td></td>
</tr>
<tr>
<td>Doctors</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>Health Care Assistants</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>High risk areas: CCU, ITU, HDU, Theatre, Recovery</td>
<td>Hospital life support</td>
<td>Induction and annually 1 day course</td>
<td>Immediate Life Support course. 75% of nursing staff from these areas annually.</td>
</tr>
<tr>
<td>Lead Consultants for Delivery Suite</td>
<td>Managing Obstetric Emergency and Trauma</td>
<td>2 day course every 3 years</td>
<td></td>
</tr>
<tr>
<td>Locum Medical Staff, long term (&gt;1 month)</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>Locum Medical Staff, short term (&lt;1 month)</td>
<td>Provided by agency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Students</td>
<td>Hospital life support</td>
<td>Induction 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>ODP</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>Paediatric Emergency Team</td>
<td>Advanced Paediatric Life Support Team</td>
<td>APLS course every 4 years</td>
<td></td>
</tr>
<tr>
<td>Phlebotomists</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>Plaster room technicians</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs</td>
<td></td>
</tr>
<tr>
<td>Shift Leaders within Paediatric Dept.</td>
<td>Advanced Paediatric Life Support</td>
<td>APLS course, every 4 years</td>
<td></td>
</tr>
<tr>
<td>Staff group</td>
<td>Hospital life support.</td>
<td>Induction and annually 1½ hrs. 2 day course every 4 years.</td>
<td></td>
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<tr>
<td>-------------------------------------------------</td>
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<td></td>
</tr>
<tr>
<td>Staff who require advanced life support as part of job role, eg. Radiologists, Endoscopists</td>
<td>Induction and annually 1½ hrs. 2 day course every 4 years.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staff with specific duty for Paediatrics</td>
<td>PLS course</td>
<td>1 day course, every 4 years</td>
<td></td>
</tr>
<tr>
<td>Student Nurses</td>
<td>Provided by university</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ward Nursing/Midwifery Staff</td>
<td>Hospital life support</td>
<td>Induction and annually 1½ hrs.</td>
<td></td>
</tr>
</tbody>
</table>

**TRAINING CRITERIA FOR STAFF GROUPS**

<table>
<thead>
<tr>
<th>Support Services Staff Groups</th>
<th>Frequency and Duration</th>
<th>Additional Resuscitation Training</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mandatory Resuscitation Training</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Induction</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Annually attached to wage slip</strong></td>
<td></td>
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<tr>
<td><strong>Administrative Services Staff Group</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<td></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
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<td></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
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<td></td>
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<tr>
<td><strong>Induction</strong></td>
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<td></td>
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<tr>
<td><strong>Annually attached to wage slip</strong></td>
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<tr>
<td><strong>Ancillary Staff</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
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<td></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
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<tr>
<td><strong>Induction</strong></td>
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<tr>
<td><strong>Annually attached to wage slip</strong></td>
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<tr>
<td><strong>Other Medical Staff</strong></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
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<tr>
<td><strong>Induction</strong></td>
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<td><strong>Annually attached to wage slip</strong></td>
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<tr>
<td><strong>Pathology Staff</strong></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
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<td><strong>Induction</strong></td>
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<tr>
<td><strong>Annually attached to wage slip</strong></td>
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<tr>
<td><strong>Pharmacy Staff</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
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<tr>
<td><strong>Induction</strong></td>
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<tr>
<td><strong>Annually attached to wage slip</strong></td>
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<tr>
<td><strong>Security</strong></td>
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<tr>
<td><strong>Induction Training</strong></td>
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<tr>
<td><strong>Awareness Leaflet</strong></td>
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<tr>
<td><strong>Frequency and Duration</strong></td>
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<tr>
<td><strong>Induction</strong></td>
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<tr>
<td><strong>Annually attached to wage slip</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26
### Appendix 4

#### Department and Type of Defibrillator Location List

<table>
<thead>
<tr>
<th>Department</th>
<th>Type of Defibrillator</th>
<th>Sharing Facilities</th>
<th>Lead for Checking Defib.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Whiston Hospital</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A&amp;E Observation Ward</td>
<td>Hartstream XL Advisory/Manual</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>A2 Isotope Scan</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>Accident &amp; Emergency x 7 &amp; Internal Paddles</td>
<td>Hartstream XL Advisory/Manual</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>B1 Medical</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>B2 Care of Elderly WA</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>Brandreth Suite</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>Burney Breast Clinic</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>C1 Respiratory Gen</td>
<td>Philips MRX Advisory/Manual with Pacing / Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>C2 Medical</td>
<td>Philips MRX Advisory/Manual with Pacing / Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>C3 Wards Day</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>Cardio Respiratory x 2</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>Coronary Care Unit x 3</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>D1 General Surgery</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>D2 General Surgery</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>D3 General Surgery</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>Delivery Suite</td>
<td>Philips FR2+ Advisory</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>E1 Paediatrics Ward</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>E2 Paediatrics Ward</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
<td></td>
<td>Ward Manager</td>
</tr>
<tr>
<td>E3 General Medical</td>
<td>Philips MRX Advisory/Manual with Pacing</td>
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<td>Endoscopy Unit</td>
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<td>Ericsson Suite</td>
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<td>F1 Care of Elderly WA</td>
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<tr>
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<td>G1 Burns Unit</td>
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<td>Department</td>
<td>Type of Defibrillator</td>
<td>Sharing Facilities</td>
<td>Lead for Checking Defib.</td>
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<td>G12 Stroke Rehabilitation</td>
<td>Philips MRX  Advisory/Manual with Pacing / Philips FR2+ Advisory</td>
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<td>G16 Respiratory Ward</td>
<td>Philips FR2+ Advisory</td>
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<td>G2 Orthopaedics Ward</td>
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<td>G5 Haematology Onco</td>
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<td>H4 Gynaecology Ward</td>
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<td>H5 Day Ward</td>
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<td>HDU</td>
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<td>Intensive Care Unit x 2</td>
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<td>Neonatal Unit</td>
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<td>Theatre Plastics</td>
<td>Philips MRX  Advisory/Manual with Pacing</td>
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<td>Ward Manager</td>
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<td>Theatres Main (WH)</td>
<td>Philips MRX  Advisory/Manual with Pacing &amp; Internal Paddles</td>
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<td>Ward Manager</td>
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<td>Theatres Mat</td>
<td>Philips MRX  Advisory/Manual with Pacing</td>
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<td>Transfer Lounge</td>
<td>Philips FR2+ Advisory</td>
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<td>X Ray Whiston</td>
<td>Philips MRX  Advisory/Manual with Pacing</td>
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<td>Ward Manager</td>
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<td>Department</td>
<td>Type of Defibrillator</td>
<td>Sharing Facilities</td>
<td>Lead for Checking Defib.</td>
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<td>-----------------------------------------------</td>
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<td>Bishop Ward</td>
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<td>Foxton Ward</td>
<td>Hartstart FR2 Advisory</td>
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<tr>
<td>Gamble Ward Surg Day</td>
<td>Hartstart FR2 Advisory</td>
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<td>Ward Manager</td>
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<td>Garton Ward</td>
<td>Hartstart FR2 Advisory</td>
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<td>Hulme Ward</td>
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<td>Hartstart FR2 Advisory</td>
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<td>Mellor Ward</td>
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<td>Pilkington Ward</td>
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<td>Ward Manager</td>
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<td>Seddon Suite St Helens</td>
<td>Hartstart FR2 Advisory</td>
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<td>Wilcock Ward</td>
<td>Hartstart FR2 Advisory</td>
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<td>Ward Manager</td>
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RESUSCITATION DOCUMENTATION FORM

Please place this form in the patients case notes and fax a copy to Clinical Audit Ext: 4208

<table>
<thead>
<tr>
<th>Name: ______________________________</th>
<th>Doctor Details</th>
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<tbody>
<tr>
<td>Hospital Number: ___________________</td>
<td>Name (print): ____________________</td>
</tr>
<tr>
<td>DOB: <em><strong><strong>/</strong></strong></em>/_______</td>
<td>Signature: ________________________</td>
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<tr>
<td>Gender: Male ☐ Female ☐</td>
<td>Designation: ______________________</td>
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<tr>
<td></td>
<td>Bleep No: ________________________</td>
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Event Variables

<table>
<thead>
<tr>
<th>Date of Admission: <em><strong><strong>/</strong></strong></em>/_______</th>
<th>Location:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Event: <em><strong><strong>/</strong></strong></em>/_______</td>
<td>Before ambulance arrived ☐</td>
</tr>
<tr>
<td></td>
<td>After ambulance arrived ☐</td>
</tr>
<tr>
<td></td>
<td>Within Emergency Department ☐</td>
</tr>
<tr>
<td></td>
<td>CCU ☐ ICU ☐ Other ward ______</td>
</tr>
<tr>
<td></td>
<td>Operating area ☐</td>
</tr>
<tr>
<td></td>
<td>Outpatient ☐</td>
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<table>
<thead>
<tr>
<th>Witnessed? Yes ☐ No ☐ Unknown ☐</th>
<th>Immediate cause</th>
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<tbody>
<tr>
<td>Monitored? Yes ☐ No ☐</td>
<td>Lethal arrhythmia ☐</td>
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<tr>
<td></td>
<td>Hypotension ☐</td>
</tr>
<tr>
<td></td>
<td>Respiratory depression ☐</td>
</tr>
<tr>
<td></td>
<td>Metabolic ☐</td>
</tr>
<tr>
<td></td>
<td>MI or Ischaemic ☐</td>
</tr>
<tr>
<td></td>
<td>Unknown ☐</td>
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<td></td>
<td>Other, state ______</td>
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<table>
<thead>
<tr>
<th>Initial condition</th>
<th>ALS intervention (tick all that apply)</th>
</tr>
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<tbody>
<tr>
<td>Conscious Yes ☐ No ☐</td>
<td>None ☐ IV access ☐ IV medications ☐</td>
</tr>
<tr>
<td>Breathing Yes ☐ No ☐</td>
<td>ECG monitor ☐ Intubation ☐</td>
</tr>
<tr>
<td>Pulse present Yes ☐ No ☐</td>
<td>Mechanical ventilation ☐</td>
</tr>
<tr>
<td>If Yes to all, MEWS Score</td>
<td>Inter-arterial catheter ☐</td>
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<tr>
<td></td>
<td>Implantable defibrillator/cardioverter ☐</td>
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<table>
<thead>
<tr>
<th>Initial rhythm</th>
<th>Event times (Please use 24hr clock)</th>
</tr>
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<tbody>
<tr>
<td>VF ☐ PEA ☐ Bradycardiac ☐</td>
<td>Collapse / Onset: <strong><strong><strong>:</strong></strong></strong></td>
</tr>
<tr>
<td>VT ☐ Asystole ☐ PERFUSING RHYTHM ☐</td>
<td>CPR team called: <strong><strong><strong>:</strong></strong></strong></td>
</tr>
<tr>
<td></td>
<td>CPR team arrived: <strong><strong><strong>:</strong></strong></strong></td>
</tr>
<tr>
<td></td>
<td>Arrest confirmed: <strong><strong><strong>:</strong></strong></strong></td>
</tr>
<tr>
<td></td>
<td>CPR started: <strong><strong><strong>:</strong></strong></strong></td>
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<tr>
<td></td>
<td>First defibrillation shock: <strong><strong><strong>:</strong></strong></strong></td>
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<tr>
<td></td>
<td>Airway achieved: <strong><strong><strong>:</strong></strong></strong></td>
</tr>
<tr>
<td></td>
<td>First dose of adrenaline: <strong><strong><strong>:</strong></strong></strong></td>
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<table>
<thead>
<tr>
<th>Resuscitation attempted? (tick all that apply)</th>
<th>Spontaneous circulation</th>
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<tr>
<td>Yes ☐ Chest compression ☐ Defibrillation ☐</td>
<td>Returned ☐ Never returned ☐ Unsustained ☐</td>
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<tr>
<td>☐ Defibrillation ☐</td>
<td>≤ 20 min ☐ &gt; 20 min ☐ &gt; 24 hours ☐</td>
</tr>
<tr>
<td>☐ Airway ☐</td>
<td>VT = Ventricular Tachycardia</td>
</tr>
<tr>
<td>☐ Found dead ☐</td>
<td>VF = Ventricular Fibrillation</td>
</tr>
<tr>
<td>☐ Considered futile ☐</td>
<td>PEA = Pulseless Electrical Activity</td>
</tr>
<tr>
<td>☐ DNA-CPR ☐</td>
<td>ROSC = Return of Spontaneous Circulation</td>
</tr>
<tr>
<td></td>
<td>DNA-CPR = Do Not Attempt cardiopulmonary Resuscitation</td>
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</table>

Please see overleaf for free text space, where necessary use continuation sheet(s)
It is a Trust requirement that all relevant sections of the data collection form are completed.
This is the front sheet of Consent Form 4, as published by the Department of Health, which is available on all ward areas.
Appendix 7

CONTENTS -

ADULT RESUSCITATION TROLLEY

Top of the trolley
1 x Disposable Pocket mask
1 x Sharps Disposal Bin

Only wards and departments Supplied with a defibrillator
1 x Defibrillator (MRX connected to mains for charging)

MRX Defibrillator
3 x Pkt, self-adhesive multifunction pads
1 roll of ECG recording paper
1 Pkt monitoring chest electrodes
1 x ECG Monitoring cable connected
1 Hands free pads cable connected

FR2+ Advisory Defibrillators
3 x Pkt, self-adhesive multifunction pads
pads in date & not attached to machine
1 x ECG Monitoring cable stored in
bottom drawer should not be connected to
defibrillator

Top drawer -Airway support equipment
1 x Adult Laryngoscope
1 x Pair of Magill’s Forceps
1 x Intubation Stylet
1 x Pair of Scissors
1 x Cuffed Endotracheal Tube size 7mm
1 x Cuffed Endotracheal Tube size 8mm
1 x Cuffed Endotracheal Tube size 9mm
1 x Size 2 Airway
1 x Size 3 Airway
1 x Size 4 Airway
1 x 20ml Syringe
1 x Bandage to secure E.T. tube
2 x Suction Catheters size 14ch(Green)
1 x Adult Yankauer Suction Catheters
1 Disposable Pocket Mask

Second drawer
2 x Blood giving set
3 x I.V. Film dressing
2 x Venflon Cannulas size (green) 18g
2 x Venflon Cannulas size (gray) 16g
2 x 10ml Syringes
2 x 5ml Syringes
2 x Blood Gas Syringes (only available at Whiston site)
2 x 3 way taps
10 x Sterets
1 x Tourniquet (contains latex)
2 x Disposable Razors
2 x HP 11 Duracell batteries
2 x Intraflon 13g C.V. Cannula

**Second drawer (Continued)**
- 4 x 21g x 1½” needles
- 4 x 23g 1” needles
- 1 x High Concentration Oxygen Mask (strap contains latex)
- 3pkts Gauze Swabs
- 1 x Roll of Tape

**Third drawer**
- 1 x 1000mls glucose 5%
- 2 x 500mls gelofusine
- 1st 2nd line drug boxes - **Please see separate list.**

**Bottom drawer**
- 2 x Disposable resuscitation bag, size 5 mask, reservoir and Oxygen tubing attached. Sealed
- 2 x Disposable face mask size 4
- 10 x Trolley Security seals
- 1 x Security Seal Broken form
- 1 x Box of vinyl gloves

Size 1 circular mask for resuscitation of laryngectomy and tracheostomy patients only

**Side of Trolley**
- 1 x Size E oxygen cylinder with regulator and flow meter attached
- 1 x Long length of oxygen tube connected

**NB:** No additional equipment should be placed on this trolley, without consultation with the Resuscitation Officer at Whiston Hospital, bleep 1375.

**PLEASE ENSURE ALL EXPIRY DATES ARE CHECKED**
Appendix 8

CONTENTS -
ADULT RESUSCITATION BOX

1 Disposable Pocket mask
(Should be available on ward/department)

MRX Defibrillator
3 x Pkt, self-adhesive multifunction pads
1 roll of ECG recording paper
1 Pkt monitoring chest electrodes
1 x ECG Monitoring cable connected
1 Hands free pads cable connected

FR2+ Advisory Defibrillators
3 x Pkt, self-adhesive multifunction pads
pads in date & not attached to machine
1 x ECG Monitoring cable stored in
bottom drawer should not be connected to
defibrillator

Intubation Equipment
1 x Adult Laryngoscope
1 x Pair of Magill’s Forceps
1 x Intubation Stylet
1 x Pair of Scissors
1 x Cuffed Endotracheal Tube size 7mm
1 x Cuffed Endotracheal Tube size 8mm
1 x Cuffed Endotracheal Tube size 9mm
1 x Size 2 Airway
1 x Size 3 Airway
1 x Size 4 Airway
1 x 20ml Syringe
1 x Bandage to secure ET tube
2 x Suction Catheters size 14
1 x Adult Yankauer Suction Catheters
1 Disposable Pocket Mask

Sundry Items
1 x Blood giving set
3 x I.V. Film dressing
2 x Venflon Cannulas size (green) 18g
2 x Venflon Cannulas size (grey)16g
2 x 10ml Syringes
2 x 5ml Syringes
2 x Blood Gas Syringes (in date) - Only supplied for Whiston site
Sundry Items (Continued)

- 2 x 3 way taps
- 2 x Hp 11 Duracell batteries
- 2 x Intraflon 13g C.V Cannula
  - 4 x 21g x 1 ½" needles
  - 4 x 23g 1" needles
  - 1 x tourniquet
- 1 x High Concentration Oxygen Mask (strap contains Latex)
  - 3 x pkts Gauze swabs
  - 10 x Sterets
  - 1 x Roll of Tape
- 2 x Disposable resuscitation bag, size 5 mask, reservoir and Oxygen tubing attached. Sealed.
- 2 x Disposable face mask size 4
- 10 x Box Security seals
- 1 x Security Seal Broken form
- 1 x 1000mls 5% Glucose (stored in resus box) In Date
- Size 1 circular mask for resuscitation of laryngectomy and tracheostomy patients only

IN BLUE BOX IF SUPPLIED

Drugs- please see separate list

NB: No additional equipment should be placed in this box, without consultation with the Resuscitation Officer at Whiston Hospital, bleep 1375

The Equipment in this box should be replaced ASAP.

PLEASE ENSURE THAT ALL EXPIRY DATES ARE CHECKED
Appendix 9

CONTENTS -
PAEDIATRIC RESUSCITATION TROLLEY
Paediatric Resuscitation Trolley Contents

MRX Defibrillator
3 x Multifunction Pads
1 roll of ECG recording paper
1 Pkt monitoring chest electrodes
1 x ECG Monitoring cable connected
1 Hands free pads cable connected

Top of trolley
1 x Disposable pocket mask
1 x Stop watch
1 Small sharps disposable bin

Top drawer - Airway support equipment
1 x Adult Laryngoscope size 3
1 x Straight Paediatric Laryngoscope Size 0
1 x Straight Paediatric Laryngoscope Size 1
1 x Straight Paediatric Laryngoscope Size 2
1 x Endotracheal tube size 6 mm (no cuff)
1 x Endotracheal tube size 5 mm (no cuff)
1 x Endotracheal tube size 4.5 mm (no-cuff)
1 x Endotracheal tube size 4 mm (no-cuff)
1 x Endotracheal tube size 3.5 mm (no-cuff)
1 x Endotracheal tube size 3 mm (no-cuff)
1 x Endotracheal tube size 2.5 mm (no-cuff)
1 x Endotracheal tube size 2 mm (no-cuff)
1 x Magills forceps - Child
1 x Size 3 Airway
1 x Size 2 Airway
1 x Size 1 Airway
1 x Size 0 Airway
1 x Size 00 Airway
1 x Adult Yankauer Suction
1 x Paediatric Yankauer Suction
2 x Fine Bore Suction Catheter
1 x Pair of scissors
1 x Adult Intubation stylet
1 x Paediatric Intubation stylet
2 x LR14 Batteries
2 x Spare bulbs
1 x Bandage to secure ET tube
1 x Mini-trach set (in date)
Second drawer - Sundry Equipment

1 x Disposable pocket mask

Second drawer - Sundry Equipment (Continued)

2 x IV child film dressing
2 x IV adult film dressing
2 x Jelco Cannulas size 24 (Yellow)
2 x Jelco Cannulas size 22 (blue)

Second drawer – Sundry Equipment (Continued)

2 x Venflon Cannulas size 20 (pink)
2 x Venflon Cannulas size 18 (green)
2 x Intreousous Cannulas with extension set
  1 x 1ml syringes
  2 x 5 ml syringes
  2 x 10 ml syringes
  1 x 50 ml syringes
2 x Blood gas syringes (in date)
  2 x 3 way taps
  10 x Sterets
  2 x Green needles
  2 x Blue needles
  1 x Roll 1/2" tape
  3 Packet gauze

1 x Filter for Resus bag - Paediatric
1 x High Oxygen concentration mask – Child (strap contains latex)

Third drawer- Mini-Jets

1 x Paediatric giving set (Buretrol set)
1 x Adult blood giving set
1 x Adult drug box (Blue)
1 x Paediatric drug box (black)
  1 x 500ml Dextrose 5%
  1 x 500ml 0.9% Saline
  1 x Gelofusine
2 x 100 ml human albumin 4%

ADULT SECOND LINE (red box) AVAILABLE FROM........................................

All the above should be in date

Bottom drawer - Resuscitation bags and masks

1 x Child Resus bag 500ml with size 3 mask filter with Oxygen tubing connected
Size 00, 01, 2 Masks mask filter and Oxygen tubing connected (Disposable)
  1 x box vinyl gloves
  10 x Trolley security seals
  1 x Security seal broken form.

Side of Trolley
1x Size E oxygen cylinder with regulator and flow meter attached
1x Long length of oxygen tube connected

NB. No addition equipment should be placed on this trolley, without consultation with the Resuscitation Officer at Whiston Hospital -Bleep 1375.
Appendix 10

CONTENTS -
PAEDIATRIC RESUSCITATION BOX

Airway Management Equipment
2 x Disposable Pocket Masks
1 x Laryngoscope handle and size 2 curved blade attached
   1 x Straight Paediatric Blade Size 0
   1 x Straight Paediatric Blade Size 1
1 x Endotracheal tube size 6 mm (no cuff)
1 x Endotracheal tube size 5 mm (no-cuff)
1 x Endotracheal tube size 4 mm (no-cuff)
1 x Endotracheal tube size 3 mm (no-cuff)
   1 x Magills forceps – Child Size
   1 x Size 3 Airway Guedel
   1 x Size 2 Airway Guedel
   1 x Size 1 Airway Guedel
   1 x Size 0 Airway Guedel
   1 x Size 00 Airway Guedel
1 x Paediatric Yankauer Suction tube
1 x Fine Bore Suction Catheter gauge 8ch
   1 x Pair of scissors
   1 x Adult Intubation stylet
   1 x Paediatric Intubation stylet
   1 x tape to secure ET tube

Sundry Items
2 x Child IV film dressing
2 x Adult IV film dressing
2 x Jelco Cannulas size 24 (Yellow)
2 x Venflon Cannulas size 20 (pink)
2 x Venflon Cannulas size 18 (green)
1 x tourniquet (may contain latex)
1 x Intreousous Cannulas with extension set
   1 x 50 ml syringes
   2 x 5 ml syringes
   2 x 10 ml syringes
   2 x 3 way taps
   2 x Green needles
   2 x Blue needles
   3 Packet gauze
   1 x Valve for pocket mask
1 x High concentration oxygen mask – Child (strap contains latex)
   2 x Hp 11 Duracell batteries
   1 x Blood giving set
Sundry equipment (Continued)

1 x Burretol giving set
1 x Roll of Tape
1 x 500ml Resuscitation bag, size 3 mask, reservoir and Oxygen tubing attached (disposable)
1 x Face mask size 01, 2 and 3
10 x Box Security seals
1 x Security Seal Broken form
1 x 500mls 4% Glucose 0.18% Saline (stored in resus box) In Date

Drug Boxes Separate
BLACK BOX (PAEDIATRIC)
BLUE BOX (ADULT 1ST LINE)
RED BOX (ADULT 2ND LINE)

Drugs- please see separate list

NB: No additional equipment should be placed in this box, without consultation with the Resuscitation Officer at Whiston Hospital, bleep 1375.

The Equipment in this box should be replaced ASAP.

Replacement box available from Hulme Ward at St. Helens Hospital & ECG at Whiston Hospital.

PLEASE ENSURE THAT ALL EXPIRY DATES ARE CHECKED
A score of 3 or more should alert the practitioner that the patient is at risk of RAPID deterioration.

Seek IMMEDIATE medical review by patient’s own/on call team.

<table>
<thead>
<tr>
<th>Score</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temp</td>
<td>≤ 35</td>
<td>35.1 – 36</td>
<td>36.1 – 38</td>
<td>38.1 – 38.5</td>
<td>≥ 38.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Systolic BP</td>
<td>&lt;70</td>
<td>71 – 80</td>
<td>81 – 100</td>
<td>101 – 199</td>
<td>&gt;200</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pulse</td>
<td>≤ 40</td>
<td>41 – 50</td>
<td>51 – 100</td>
<td>101 – 110</td>
<td>111 – 130</td>
<td>&gt;131</td>
<td></td>
</tr>
<tr>
<td>Resp. rate</td>
<td>≤ 10</td>
<td>11 - 14</td>
<td>15 - 20</td>
<td>21 – 29</td>
<td>≥ 30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Urine output</td>
<td>≤10ml/hr</td>
<td>≤ 30ml/hr</td>
<td>&gt; 30ml/hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No-Cathete</td>
<td>&lt;200mls /12hrs</td>
<td>&lt;100mls /8hrs</td>
<td>NPU /6hrs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conscious level</td>
<td>Un-responsive</td>
<td>Responds to Pain</td>
<td>Responds to Voice</td>
<td>Alert</td>
<td>Confused /Agitated</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**St Helens & Knowsley Hospitals NHS Trust**  
Cardiopulmonary Resuscitation Policy and Procedures Incorporating  
Do Not Attempt Cardiopulmonary Resuscitation Policy  
February 2008 – Version 05

<table>
<thead>
<tr>
<th>Action pathway</th>
<th>Observe</th>
</tr>
</thead>
</table>
| 1              | Repeat TPR, BP, AVPU, urine output over last 2 hours *(if known)*  
**NOW RECALCULATE**  
If unchanged – observe / inform PRHO |
| 2              | Bleep patients PRHO (SHO if not available)  
Consider following ALERT Algorithm (A to E) to initiate treatments  
Airway, oxygen, fluids  
Now place patient on hourly observation / fluid chart and regularly recalculate score |
| 3 - 4          | Confirm with Senior Nurse then bleep PRHO/SHO of patient’s speciality, who is expected to attend within 30 minutes  
**DO YOU NEED SENIOR REVIEW?**  
Inform Senior Nurse then bleep SHO/Registrar of patient’s speciality  
CONSIDER REFERRAL TO HDU / ICU (following discussion with consultant responsible for the patient) |
| 5 - 7          |  
8 or more      |
Appendix 12

WHISTON MAIN HOSPITAL SITE

We recognize that this is a particularly busy construction site on the hospital site and sincerely apologize for any inconvenience you may experience when visiting the hospital. We ask that you continue to support us during this busy major rebuilding programme in the future. Please be extra careful when walking or driving around the hospital grounds whilst construction work is in progress.
Your Key to Main Areas

1. Ferry Outpatient Department
2. GU Medicine (first floor)
3. Peasley Suite
4. Pharmacy
5. Audiology Department
6. Garton Ward
7. X-Ray
8. Gamble Day Ward
9. Rennie Outpatient Clinic
10. Elyn Lodge
11. Wilcock Ward
12. Hulme Ward
13. Physiotherapy Department
14. Staff Restaurant
15. Eccleston Centre
16. Mortuary
17. Catering Department
18. Medical Records
19. Maintenance Operations Centre

We recognize that this is a particularly busy construction time on the hospital site and sincerely apologise for any inconvenience you may experience when visiting the hospital. We ask that you continue to support us during this key major re-building programme in the future.

Please be extra careful when walking or driving around the hospital grounds whilst construction work is on going.

ST HELENS HOSPITAL SITE

Appendix 13
Maternal Resuscitation

To treat the critically ill pregnant patient:

- ABCDE Approach
- Place the patient in the left lateral position (see below).
- Give 100% oxygen.
- Establish intravenous (IV) access and give a fluid bolus.
- Consider reversible causes of cardiac arrest and identify any pre-existing medical conditions that may be complicating the resuscitation.
- Consider early intubation

Modifications of Basic Life Support

At a gestational age of 20 weeks and beyond, the gravid uterus can press against the inferior vena cava and the aorta, impeding venous return and cardiac output. The gravid uterus restricts venous return and can produce pre-arrest hypotension or shock and in the critically ill patient may precipitate arrest.

In cardiac arrest the compromise in venous return and cardiac output caused by the gravid uterus limits the effectiveness of the chest compressions. The gravid uterus may be moved away from the inferior vena cava and the aorta by placing the patient in the left lateral position of at least 15° or by pulling the gravid uterus to the side. This may be accomplished manually or by placement of a rolled blanket, sandbags, firm pillow, rescuers knees or a purpose made wedge (e.g. Cardiff Wedge) if available under the right hip and lumbar area.