Document Details	
Title	Cardiopulmonary Resuscitation (CPR) and Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) Policy
Trust Ref No	519- 85849
Main points the document covers	Procedures to be undertaken in relation to CPR and DNACPR
Who is the document aimed at?	All clinical staff
Authors	Andy MacAuley - Resuscitation Officer Emily Peer - Resuscitation Lead Susan Watkins – Chief Pharmacist
Approval process	
Approved by (Committee/Director)	Patient Safety Committee
Approval Date	13/11/2023
Initial Equality Impact Screening	Yes
Full Equality Impact	No
Lead Directors	Medical Director, Director for Clinical Delivery, Nursing and Workforce
Category	Clinical
Review date	13/11/2026
Distribution	
Who the policy will be distributed to	All Clinical Staff
Method	Electronically to senior managers for dissemination and via the Trust intranet for all clinical staff to access
Document Links	
Required by CQC	Yes
Required by NHLSA	No
Keywords	Resuscitation, Resus, CPR, Do not resuscitate, DNACPR, ReSPECT, choking, BLS, ILS, Life support, ALS

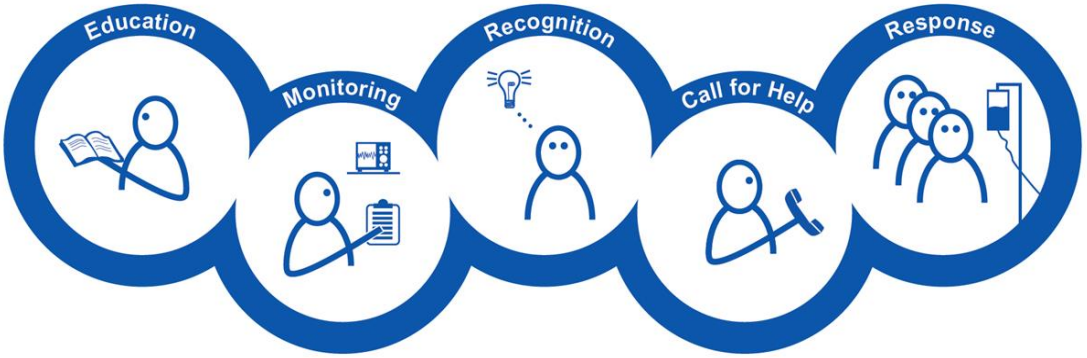
Amendments History		
No	Date	Amendment
1	July 2014	Amendment to comply with recent court judgment R v Tracey, Breach of Human Rights, Article 8
2	April 2015	Section 8.7 - DNACPR Decision and Recording – Trusted Assessment and reviewed within 7 days on transfer into SCHT
3	June 2016	Addition of updated DNACPR form and guidance.
4	June 2020	Scheduled review – full update and review with addition of ReSPECT document, strengthened quality assurance. COVID Adult resus protocol and algorithm
5	Sept 2021	Updated with RCUK 2021 guidance and amended resuscitation assembly checklists
6	Nov 2023	Added: DNACPR reversible causes. ROLE Criteria. Administration of oxygen and fluids in arrest. Manual defibrillation. UCR to training matrix. Removed COVID guidance appendix. Amended checklist MM002.

Index: **Page**

1.0 Introduction

A cardiac arrest is the ultimate medical emergency – the correct treatment must be given immediately if the patient is to have any chance of surviving. The interventions that contribute to a successful outcome after a cardiac arrest can be conceptualised as a chain – the Chain of Survival. The four links of the chain comprise of: early recognition and call for help (i.e. phone 999), early cardiopulmonary resuscitation (CPR), early defibrillation and post resuscitation care (Resuscitation Council 2015).

Chain of Prevention



2.0 Purpose

2.1 Based on the guidance and recommendations from the Resuscitation Council (UK) Guidelines issued in 2021, the purpose of this policy is to ensure that Shropshire Community Health NHS Trust (SCHT) has in place a standardised approach in circumstances where a person appears to have suffered cardiac arrest and that staff are enabled to provide a prompt and appropriate response.

2.2 Health care professionals who attempt resuscitation will be expected to employ the highest standard of care in line with the professional codes of conduct. This guideline is intended to support life support techniques across the age ranges and settings and includes:

- Adult Basic Life Support (Appendix 1)
- Adult In Hospital Resuscitation (Appendix 2)
- Use of Automated External Defibrillators (AED) (Appendix 3)
- Adult Advanced Life Support Algorithm (Appendix 4)
- Adult Choking Algorithm (Appendix 5)
- Paediatric Basic Life Support (Appendix 6)
- Paediatric Choking Algorithm (Appendix 7)

3.0 Definitions

Advanced Life Support (ALS)
The term ALS describes additional resuscitation measures aimed at restoring ventilation and a perfusing cardiac rhythm to improve the chance of long-term survival. This is the algorithm taught on Immediate Life Support (ILS) courses.

Anaphylaxis
An acute life-threatening hypersensitivity reaction and should be considered when there is an acute onset, life threatening airway and/or breathing and/or circulation problems; especially if skin changes present.

Automated External Defibrillators (AED)
Automatic defibrillators analyse the cardiac rhythm, and advises whether a shock is indicated or not, and selects the appropriate energy levels according to the current Resuscitation Council (UK) Guidelines. AEDs allow all staff to defibrillate prior to the arrival of more expert help. AEDs may be used on paediatric patients however attenuated pads that reduce the energy delivered are used for children aged under 8/ less than 25kg. Where possible, AEDs should be avoided in the under one year old age group due to potential problems with rhythm recognition.

Basic Life Support (BLS)
The purpose of BLS is to maintain adequate oxygenation to the vital organs through maintenance of ventilation and circulation. This is continued until the respiratory/cardiac arrest is reversed, and/or the underlying cause treated, or the resuscitation attempt is stopped. It is therefore a "holding measure" until defibrillation and/or advanced life support is available. Failure of the circulation for three to four minutes (less if the victim is initially hypoxaemic) will lead to irreversible cerebral damage. Delay in commencing BLS will lessen the eventual chances of a successful outcome. Emphasis must therefore be placed on prevention of cardiac arrest and early access to help then rapid institution of BLS by a rescuer if required.

Basic Life Support with Airway Adjunct
Basic life support implies that no equipment is employed. When a simple airway device or facemask is used to assist the delivery of ventilations, this is defined as "basic life support with airway adjunct".

Cardiac Arrest
Cardiac arrest is the sudden cessation of mechanical cardiac activity, confirmed by the absence of normal breathing and unresponsiveness.

Cardiac Arrhythmia
Arrhythmia associated with cardiac arrest can be divided into two groups: shockable and non-shockable:

- Shockable rhythms are ventricular fibrillation and pulseless ventricular tachycardia (VF/VT)
- Non-shockable rhythms (Non VF/VT) include asystole and pulseless electrical activity (PEA)

The principal difference in the management of these two groups is the need for defibrillation in those patients with VF/VT. Other actions, including chest compressions, airway management and ventilation, venous access, the administration of adrenaline, and the identification and correction of reversible causes, are common to both groups.

Cardiopulmonary Resuscitation (CPR)
Cardiopulmonary Resuscitation is a combination of artificial ventilation, chest compressions, drug therapy and defibrillation.

Chain of Survival
The interventions that contribute to a successful outcome after cardiac arrest can be

conceptualised as a chain. The four links of the chain comprise of: early recognition and call for help (i.e. phone 999), early CPR, early defibrillation and post resuscitation care.

Chain of Prevention
The actions that contribute to successful prevention of cardiac arrest and deterioration include staff education, physiological monitoring (NEWS2), recognition of deterioration, call for help (SBAR), and appropriate clinical response.

Clinical Staff
A member of trust staff whose job description includes direct patient care.

Defibrillation
Defibrillation is the definitive treatment for VF and pulseless VT. It involves the delivery of a DC electric shock to the myocardium. The energy level to be administered is defined in the current ALS guidelines by the Resuscitation Council (UK). Successful defibrillation allows the heart's own pacemaker to resume control.

Do Not Attempt Cardiopulmonary Resuscitation (DNACPR)
A DNACPR order indicates that in the event of a cardiac arrest from an expected and non-reversible cause, CPR will not be initiated. DNACPR decisions are the responsibility of the senior clinician in charge of the patient's care. It is emphasised that a DNACPR decision does not prevent other forms of treatment being provided.

Immediate Life Support
The ILS course teaches the knowledge and skills to

- identify the causes and promote the prevention of cardiopulmonary arrest;
- recognise and treat the deteriorating patient using the ABCDE approach;
- undertake the skills of quality CPR and defibrillation (manual and /or AED) and simple airway manoeuvres;
- utilise non-technical skills to facilitate initial leadership and effective team membership

This level of training may be advised for clinical staff who may have to act as first responders and treat patients in cardiac arrest until the arrival of a cardiac arrest team.

NEWS2
National Early Warning Score 2- the second version of this tool to assess deterioration by monitoring of physiological measurements: Pulse, BP Respiration rate, Oxygen saturations, Temperature and Cognition.

PEWS
Paediatric Early Warning Score tool to assess deterioration in children.

Recognition of Life Extinct
There are some conditions which are unequivocally linked with death, in the presence of which resuscitation does not need to commence.

Respiratory Arrest
Respiratory arrest is the cessation of spontaneous breathing.

ReSPECT- Recommended Summary Plan for Emergency Care and Treatment
This is a form and a process that creates personalised recommendations for a person's clinical care in a future emergency in which they are unable to make or express choices. The ReSPECT form is used to record a decision for CPR or DNACPR and is the approved tool for this and recognised by our partner organisations across our local health economy. www.resus.org.uk/respect

4.0 Duties

4.1 **Chief Executive:** It is the responsibility of the Chief Executive to appoint a non-executive Director with designated responsibility on behalf of the Trust Board to ensure that the Trust fulfils its duties under relevant NHS guidance in relation to CPR and that a resuscitation policy is agreed, implemented, and regularly reviewed within the agreed clinical governance framework.

4.2 **Medical Director**: It is the responsibility of the Medical Director to identify a Trust Resuscitation Lead and ensure the resources to carry out their duties.

4.3 **Director of Nursing and Operations**: It is the responsibility of the Director to:

- Approve the work of the Trust Resuscitation Committee reporting through the Trust Quality and Safety governance processes.
- Ensure implementation of operational policies governing cardiopulmonary resuscitation, practice and training
- Appoint a Resuscitation Officer and ensure the resources to carry out their duties.

4.4 **Resuscitation Officer (RO)**: It is the responsibility of the RO to:

- co-ordinate the teaching and training of staff in resuscitation in conjunction with the Organisational Development (OD) team
- ensure that there are systems in place for maintaining resuscitation equipment in good working order
- ensure all cardiorespiratory arrests are documented (by the staff who are involved in the resuscitation attempt) and audited and results shared contemporaneously through the Quality and Safety Service Delivery Groups and reported and reviewed at each Resuscitation Committee meeting
- have appropriate clinical supervision and support, be enabled to attend professional meetings, and undertake quality improvement activities.

4.5 **Resuscitation Lead:** It is the responsibility of the Resuscitation Lead to Chair the Trust Resuscitation Committee whose work will be:

- ensuring implementation and adherence to national resuscitation guidelines and standards;
- defining the roles and composition of the resuscitation team (or the summoning of ambulance service) within the organisation;
- ensuring that resuscitation equipment for clinical use is available and ready for use;
- ensuring that appropriate resuscitation drugs (including those for peri-arrest situations) are available according to local policy, and ready for use;
- planning adequate provision of training in resuscitation for all staff identified on the training needs analysis (TNA) produced in conjunction with the Organisational Development (OD) team.
- determining requirements for, and choice of resuscitation training equipment;
- preparing and implementing all policies relating to resuscitation including managing anaphylaxis
- preparing and implementing policies relating to prevention of cardiac arrest and recognising patients who are deteriorating;
- preparing and implementing a policy on resuscitation decisions (e.g. DNACPR decisions ReSPECT and advanced care planning);
- quality improvement – action plans should be based on audits;
- recording and reporting of incidents in relation to resuscitation in which patients' safety may have been at risk.

4.6 **Clinical Services Managers (CSM):** It is the responsibility of the CSMs to:

- Ensure that all the clinical areas under their managerial control have the appropriate resuscitation equipment.
- Ensure that systems and processes are in place for the checking, storage, servicing, maintenance and decontamination of medical devices.
- Participate in policy development relevant to their areas and ensure that all areas comply with the resuscitation policy.

4.7 **Team Leaders/Ward Managers:** It is the responsibility of Team Leaders and Ward Managers to:

- Ensure that they and all their staff receive appropriate BLS or ILS training as identified on the TNA
- Ensure all clinical staff have an awareness and understanding of the ReSPECT process and have accessed the training
- Ensure review of training through appraisal and personal development plans.
- Take action as required should a member of staff either not complete their mandatory training as identified or are deemed not to have achieved the competency required following training. This will involve additional training to ensure competence is reached.
- Ensure all resuscitation equipment is checked and recorded according to Trust requirements and that it is always fully functional and fit for use and replenished immediately following use.
- Any faults identified with the equipment should be reported immediately via DATIX, to the appropriate CSM and then repaired by Medical Engineering Service (MES)

4.6 **All clinical staff:** It is the responsibility of all clinical staff to:

- Undertake annual CPR training as identified in the TNA and to maintain their competencies in resuscitation procedures
- Ensure that the directions set out in this policy are adhered to and implemented in practice.

5.0 Resuscitation Standards

5.1 The guidance in this policy follows recommendations by the Resuscitation Council UK 2021. CPR will be attempted for all persons requiring help due to a medical emergency or cardiopulmonary arrest. All cardiac arrests should result in the emergency services being called as soon as possible.
If however, there is a clear indication that resuscitation is not to be performed, then the “Do Not Attempt Cardiopulmonary Resuscitation” Guidance in section eight below should be followed.

5.2 For guidance on adult CPR procedures, anaphylaxis and the management of choking refer to appendices 1-4. All patients who suffer a cardiopulmonary arrest will be transferred when relevant via the ambulance service for further immediate treatment and then on to an appropriate Accident & Emergency Department for specialist care.

5.3 Where there is no time to establish the medical history and/or in the absence of a prior decision not to resuscitate, CPR must be initiated. This is in accordance with both professional responsibilities and legal obligations. Failure to attempt CPR in this instance may attract legal action against the practitioner and/or the Trust.

5.4 All staff who may be involved in resuscitation decisions have a responsibility to understand and implement this policy.

5.5 Cardiopulmonary arrest is uncommon in infants and children. The fundamental

difference between resuscitation of a child compared to an adult is that most children have a healthy heart. Hence it is usual that cardiac arrest occurs following respiratory arrest, mainly due to hypoxia.

5.6 For guidance on CPR procedures and the management of choking in children refer to Appendices 5 and 6 to this policy.

6.0 Mental Capacity Act (2005) (MCA) and Best Interests

6.1 As a basic principle, providing staff have complied with the MCA in assessing a person's capacity and have acted in the person's best interests, they will be able to diagnose and provide life sustaining treatments in an emergency without consent.

6.2 For a person who lacks capacity acts done or decisions made must be in their best interest. Where any determination relates to life sustaining treatments, begin with the assumption that it is in the incapacitated person's best interest for their life to continue, for example emergency procedures such as cardiopulmonary resuscitation.

6.3 It will be important to keep a full record of what has happened. The protection from liability will only be available if you can demonstrate that you have assessed capacity, reasonably believe it to be lacking and then acted in what you reasonably believe to be in the person's best interests. In emergencies, it will often be in a person's best interests for you to provide urgent treatment without delay.

6.4 Staff will need to record accurately the decisions they make about the assessment of mental capacity, and the determination of best interests, in the patient's clinical record. Staff should remember that the records they keep might in the future be referred to if there is a dispute or as part of legal proceedings.

7.0 Advance Decisions to Refuse Life-sustaining Treatment.

7.1 The MCA has far-reaching effects for people who work in health and social care because it extends the ways in which people using services can plan ahead for the time when they may lack capacity. These may be expressed through an advance decision to refuse certain treatment if they lack capacity.

7.2 Providing care or treatment for people who have made advance decisions is a complex area and it is advisable to refer to the Mental Capacity Act Code of Practice or the Trust Consent Policy for more detailed guidance.

7.3 Where it is known that an Advance Decision exists, refer to the SCHT Policy on Advance Decisions available on the Trust intranet. Any known ADRT's need to be documented on the ReSPECT document during discussions and completion.

7.4 Whilst fortunately an infrequent occurrence in paediatrics, there are situations whereby a child's illness is such that cardiopulmonary resuscitation would not be appropriate. Such a decision is reached only after lengthy discussion with the child's family and will have involved all key health professionals. The child's lead consultant will be responsible for ensuring any and all decisions are clearly and accurately documented in the child's clinical record, and all relevant professionals and family receive written documentation of decisions agreed. In the community setting the Community Children's Nursing Service will initiate an Advance Care Plan (ACP) for a Child or Young Person in conjunction with child's lead paediatrician. The ACP has been adopted from the West Midlands Paediatric Palliative Care Network 2011 and includes the ReSPECT document.

7.5 For guidance on CPR decision making refer to Appendix 8 which reflects the

decision-making framework in a joint statement by the British Medical Association, the Resuscitation Council UK and the Royal College of entitled "Decisions Relating to Cardiopulmonary Resuscitation".

8.0 Do Not Attempt Cardio Pulmonary Resuscitation (DNACPR)

8.1 All patients should be assessed on an individual basis and any decisions made for DNACPR must be in the best interest of the patient and in discussion with the patient, multidisciplinary team and where appropriate the patient's relatives. The DNACPR discussion/decision should be part of a broader conversation in advanced care planning using the ReSPECT document and process, described in detail in the Trust ReSPECT Standard Operating Procedure and on www.resus.org.uk/respect
DNACPR orders apply solely to the application of CPR or respiratory arrest. Other forms of treatment are not precluded and must not be influenced by a DNACPR order. Decisions will be clearly recorded using the ReSPECT form and in the patients clinical record. Separate alerts for DNACPR and ReSPECT documents will be added to the patients EPR, where used. This information will be shared with the patient's GP and OOH provider.
Please note if a person has a ReSPECT document this doesn't mean that they have a DNACPR decision made.

8.2 There must be an identified need to consider DNACPR. It is appropriate to consider a DNACPR decision in the following circumstances:

- Where a patient is in the terminal phase of illness or for whom the burdens of the treatment clearly outweigh the benefits
- Where CPR is not in accord with the recorded, sustained wishes of the patient who has mental capacity to make the decision
- Where CPR is not in accord with a valid applicable Advanced Decision
- Where successful CPR is likely to result in a quality of life that would not be in the best interest of the patient
- When a clinical decision is made that CPR should not be attempted, because it will not be successful, and the patient has not expressed a wish to discuss CPR, it is not necessary or appropriate to initiate discussion with the patient to explore their wishes regarding CPR

8.3 In all cases the presumption is that the patient and / or their family must be involved in the DNACPR and ReSPECT discussions and decisions. However, for some patients, for example those who know that they are approaching the end of their life, making decisions about interventions that would not be clinically successful will be unnecessarily burdensome and of little or no value. An assessment should be made of how much information the individual patient (or, if the patient lacks capacity, those close to them) wants to know. Although patients should be helped to understand the severity of their condition, whether they should be involved or informed explicitly of a clinical decision not to attempt CPR will depend on the individual circumstances.

8.4 In some cases, the decision not to attempt CPR is a straightforward clinical decision. If the clinical team believes that CPR will not re-start the heart and maintain breathing, it should not be offered or attempted. CPR (which can cause harm in some situations) should not be attempted if it will not be successful. However, the patient's individual circumstances and the most up-to-date guidance must be considered carefully before such a decision is made.

8.5 When a patient is in the final stages of an incurable illness and death is expected within a few days, CPR is very unlikely to be clinically successful.
Uncommonly, some patients for whom a DNACPR decision has been established may develop cardiac or respiratory arrest from a readily reversible cause such as choking, induction of anaesthesia, anaphylaxis or blocked tracheostomy tube. In such situations CPR would be appropriate, while the reversible cause is treated, unless the patient has

specifically refused intervention in these circumstances.

8.6 Responsibility for a DNACPR decision rests with the most senior healthcare professional responsible for the patient's care. When a DNACPR decision is made it should be recorded clearly in the ReSPECT document, together with the reasons for it and other discussions taken place and the names and designation of those involved in the discussion and decision and the date the ReSPECT form was completed. If no discussion takes place either with the patient or with those close to them, the reasons for this must be recorded.

8.7 The ReSPECT process and documentation is agreed across partner organisations in our local health economy and includes decisions and discussions in relation to DNACPR. These decisions should be regarded as a Trusted Assessment and reviewed:

- On transfer into a Community Hospital at admission clerking or at the next MDT but within 7 days. The existing Respect / DNACPR remains valid until this time.
- Whenever clinically appropriate, but particularly when there is an improvement in the patient's clinical condition
- Whenever the patient and/or relatives/carers ask for it to be reviewed

Refer to Appendix 8 for further guidance

8.8 There are some conditions which are unequivocally associated with death in adults and can be used by clinicians in community settings who unexpectedly find a patient deceased as a valid reason to not commence CPR. (Recognition of Life Extinct)

- Decapitation
- Massive cranial and cerebral destruction
- Hemicorporectomy or similar massive injury
- Decomposition and putrefaction – where tissue damage indicates that the patient has been dead for some hours, days or longer
- Incineration – full thickness burns across greater than 95% of the body
- Hypostasis – the pooling of blood in congested vessels in the dependent part of the body in the position in which it lies after death. Initially, hypostatic staining may appear as small rounded patches looking like bruises, but later these will begin to merge. Above the hypostatic engorgement there is obvious pallor.
- Rigor Mortis – the stiffness occurring after death from the post-mortem breakdown of enzymes in muscles.

9.0 Reporting and Review of care after a Resuscitation Event or near miss

Audit of the practice, process and outcomes of resuscitation attempts is essential and accurate data from all resuscitation attempts is required for audit, training and medico-legal purposes.

9.1 An incident report should be logged using the trust reporting system (DATIX) as a Resuscitation incident. The RO will receive notification and follow up with the service area to identify any immediate issues and action, and provide staff support. Any significant issues identified will be escalated to the Resuscitation Lead and Operational Lead immediately.

9.2 **In addition to a DATIX report** there should be a local review of all resuscitation attempts and near misses within the service area. The Post Resuscitation event and 'near miss' Rapid Learning Tool (Appendix 11) should be completed as soon as possible after the event/ incident and emailed immediately to the RO, or completed online via the form here: https://forms.office.com/e/My0wqffKuy.
If any clinical concerns are raised these will be investigated and actions shared to

address any issues, learn from events and improve staff training and quality of care for patients.

9.3 Where a death occurs these will be investigated as part of the formal Trust Learning from Deaths process.

9.4 The RO will report all resuscitation events and near misses twice yearly to the Resuscitation Committee for learning and to inform decisions about training and delivery across the trust.

10.0 Training Standards

10.1 The Trust will ensure that all identified staff are trained to a minimum of BLS (adult) standard and for appropriate staff to Immediate Life Support (ILS) standard. Additional training in Paediatric BLS and the use of Automated Electronic Defibrillator (AED) devices will be necessary for different groups of professionals.

10.2 It is the responsibility of each service manager to ensure that training is attended by all identified staff at the appropriate time. However, the individual has a professional obligation to ensure that they are adequately trained to perform the appropriate level of Life Support for their role.

10.3 Training provided will be carried out in accordance with and conform to the Resuscitation Council Guidelines 2021 and will include SCHT ReSPECT training/ Resus council online ReSPECT training.

10.4 Staff unable to meet the required standard within the training session will be given the opportunity to undertake further training (within an agreed time). If after additional training the required standard is not achieved or if staff members are physically unable to perform to required standards their manager will be contacted and informed. At this point an action plan can be devised to achieve outcomes and realise potential risks and manage them appropriately.

10.5 A full training register will be maintained by the Organisational and Workforce Development Department and compliance monitored through ESR and shared with the RO.

10.6 Employed staff requiring RCUK Advanced Life Support (ALS) training to maintain both their professional role and employed role for the Trust will be supported to do this.

10.7 Agency / locum / independent contractors are not included in the Trust's resuscitation training programme and are individually responsible for remaining appropriately trained for the role in which they are employed.
Bank staff who are directly employed by the Trust are covered by this policy.

11.0 Equipment and Cardiac and Anaphylaxis Drugs

11.1 Basic equipment required for BLS should be available in all health care settings where staff carry out clinical procedures. It is the responsibility of the individual carrying out a clinical procedure to assure that resuscitation equipment is accessible and fit for use and recorded as such.

11.2 Staff carrying out clinical procedures away from the health care setting, such as a patient's home do not normally need to carry resuscitation equipment although it is advisable to carry an airway adjunct e.g. Pocket Mask as a precaution against infection.

11.3 Where specific equipment is required for higher risk procedures such as immunisations,

it is expected that staff will not carry out a procedure without the appropriate resuscitation equipment being available.

11.4 For guidance on the minimum level of equipment required for each clinical setting refer to Appendix 10.

11.5 Clinical areas will have a local system for monitoring all resuscitation equipment, to ensure sufficient availability, usable expiry date, packaging is not compromised, and it is fit for purpose. Services will have an identified role responsible for checking and recording the state of readiness of all resuscitation drugs and equipment. These checks should be undertaken at least daily and clinical leads for each division/Clinical service managers and team leaders **must** ensure that they are recorded so that they provide an audit trail. All staff however have a responsibility to familiarise themselves with the emergency equipment within their clinical environment.

11.6 Where appropriate documented equipment checks should include the following:

- Tested and electrical safety stickers are within date.
- Suction equipment performs to its specification. If battery powered check charging light is on and functional check when disconnected from charger
- Ensure oxygen cylinder contains sufficient gas. Check oxygen is present at flow meter outlet when turned on with a maximum delivery of up to 15l/m. Check for leaks.
- Monthly cleaning of trolley and exposed equipment e.g., AED using detergent wipes to include top, ledges and inside draws and a record of cleaning documented.

11.7 Where possible all emergency medical equipment should be single use and latex free.

11.8 Cardiac drugs will be available in accordance with the Resuscitation Council (UK) guidance for some sites dependent on acuity and staff training. **Only staff currently qualified to RCUK ALS level, or Paramedics, or Doctors can administer cardiac arrest drugs and other IV drugs during resuscitation**.

The Trust documents for assembly and replenishment of the Resuscitation Trolley and equipment check lists can be seen in Appendix 10.
The ALS Algorithm and RCUK Drugs commonly used in Cardiac Arrest can be seen in Appendix 4
Laminated copies of these documents will be available on resuscitation trolleys and will include a clear statement to the effect:
'Only staff currently qualified to ALS level, Paramedics or Doctors can administer cardiac arrest and IV drugs. Such staff must be kept up to date in cannulation skills and acting within their competence, other staff will not be expected to administer these drugs.'

11.8 Dental Practitioners have an obligation to be conversant with Primary Dental Care- Quality standards for cardiopulmonary resuscitation practice and training issued by the Resuscitation Council (UK) 2020 and ReSPECT process www.resus.org.uk/respect.

The resuscitation equipment and drugs available for any resuscitation emergency or cardiopulmonary arrest at dental sites are as recommended in the guideline.

11.9 In the event of a cardiac arrest, clinicians may administer oxygen without prescription, and registered nurses and paramedics with the appropriate current skills in cannulation may administer IV sodium chloride 0.9% 250ml where there is a belief that the arrest is due to hypovolemia, and where this does not detract

from the CPR and defibrillation efforts.

11.10 A Cardiac Arrest Action Checklist (Appendix 10) has been produced for use as an aide-memoire for staff involved in a cardiac arrest where a resuscitation trolley or bag is available. It is recognised that this is a highly stressful situation, and the checklist serves as a reminder to all involved to follow best-practice. It is to be used alongside the RCUK ALS algorithm. Laminated copies of the checklist should be kept on all resuscitation trollies and bags. Additional non-laminated paper copies which can be written on should be provided in locations where this will be practical (wards, MIU) – but it is recognised that non-laminated paper copies in clinical areas where a resuscitation bag is used may not be practical.

12.0 Defibrillators

12.1 The Resuscitation Council (UK) advise that 'Electrical defibrillation is well established as the only effective therapy for cardiac arrest due to ventricular fibrillation (VF) or pulseless ventricular tachycardia (VT)'. The scientific evidence to support early defibrillation is overwhelming, the single most important determinant of survival being the delay from collapse to delivery of the first shock. The chances of successful defibrillation decline at a rate of 7-10% with each minute; basic life support will help to sustain a shockable rhythm but is not a definitive treatment'.

12.2 Within SCHT there are Automated External Defibrillators (AED) situated in the locations shown on the Resuscitation Zone of Staffzone, here: https://staffzone.shropcom.nhs.uk/smii/s00cont.asp?shid=571&x=1679520169840

12.3 AEDs are sophisticated, reliable, safe, computerised devices that deliver electric shocks to victims of cardiac arrest when the ECG rhythm is one that is likely to respond to a shock. Simplicity of operation is a key feature: controls are kept to a minimum, voice and visual prompts guide rescuers. Modern AEDs are suitable for use by both lay rescuers and healthcare professionals.

12.4 All AEDs analyse the victim's ECG rhythm and determine the need for a shock. The semi-automatic AED indicates the need for a shock, which is delivered by the operator, while the fully automatic AED administers the shock without the need for intervention by the operator. Some semi-automatic AEDs have the facility to enable the operator (normally a healthcare professional) to override the device and deliver a shock manually, independently of prompts.

12.5 Smaller paediatric self-adhesive pads that attenuate the delivered current during defibrillation are available for use with older AEDs – the ZOLL AED3 uses the same UniPads for adults and children. In children between 1- and 8-years paediatric pads or paediatric mode should be used if available; if not available the AED should be used as it is.

12.6 Where a manual defibrillator (e.g. Lifepak 15) is used, clinicians are responsible for the recognition of cardiac rhythms, and are responsible for safe delivery of appropriate shocks in line with current RCUK guidelines. Clinicians MUST be current and competent in the recognition of cardiac rhythms to use a manual defibrillator.

13.0 Prevention of Cardiac Arrest

13.1 The Resuscitation Council 2021 recommend strategies for the prevention of in hospital cardiac arrest and recognition of deterioration.

13.2 The Trust has detailed its approach to assessing and monitoring patients'

clinical observations, recognising deterioration and sepsis in the Trust Clinical Observations and recognition of the Deteriorating Patient Policy - including NEWS 2, SBAR and Sepsis recognition.

14.0 Dissemination and Implementation

14.1 Dissemination of this policy will be via the Trust intranet as per the front sheet and via DATIX alert.

14.2 Implementation of the training will be organised through the Organisational Development and Training teams.
The RO will be responsible for training, individually and by training support staff. The RO will ensure quality assurance through staff feedback after training and review of resuscitation events and near misses.

14.3 Staff resuscitation training requirement will be reviewed by the Resuscitation Leads annually and approved at the Resuscitation Committee and agreed with the Organisational Development Team.

14.4 ReSPECT training will be provided to all clinical staff as advised and overseen by the ReSPECT implementation group with ReSPECT- SCHT training sessions and ReSPECT online training resource www.resus.org.uk/respect. Awareness of ReSPECT will also comprise part of resuscitation training at BLS, ILS and ALS level.

14.5 NEWS2, Deteriorating Patient and Sepsis training is being implemented to all staff on induction and will be provided to clinical staff based on role-specific requirements for competency review.

14.6 Summary of BLS/ILS Training Requirements for SCHT staff

Location	Profession	Frequency	BLS Adult	ILS Adult	Paed BLS	Paeds ILS	AED	Anaphylaxis
Community Teams	Nursing / Doctors	Annual	X		X			X
	Therapist	Annual	X					
	Health Visitors	Annual	X		X			X
	School Nurses	Annual	X		X			X
	Children's Nurses	Annual	X		X			X
Community Hospitals including DAARTs	Registered Nurses / Doctors	Annual		X	X		X	X
	Unregistered Health Care Assistants	Annual	X					
	Therapists	Annual	X					
	Radiographers	Annual	X					
	Pharmacists Pharmacy Technicians	Annual	X				X	X
Podiatry	Podiatrists	Annual	X					X
Prison Healthcare	Registered Nurses / Doctors	Annual		X			X	X
	Unregistered Clinical Staff	Annual		X			X	X
Dental Services	Dentists / Dental Nurses Special Care Dentistry and Children's	Annual		X		X		X
	Dentists, Dental Nurses, Therapists and Hygienist based in dental sites with AED	Annual	X		X		X	X
	Dentists, Dental Nurses, Therapists and Hygienist	Annual	X		X			X
Minor Injuries Units	Registered Nursing Staff	Annual		X		X		X
	Unregistered Health Care Assistants	Annual		X		X		X
APCS	Therapists	Annual	X				X	X
UCR	All clinicians	Annual		X	X			X

15.0 Monitoring compliance with this policy

Element to be monitored	Lead	Tool	Frequency	Reporting Arrangements	Acting on recommendations and leads	Change in practice and lessons to be shared
Resuscitation and near miss events	Resus Officer	DATIX reports and Rapid Learning tool review	Bi-annual audit	Reports to Resuscitation Committee	To be agreed by the committee and implemented through Q&SDG	All involved staff and Professional group and Trainers
Training	Resus Officer	Training records	Bi-annual	Reports to Resuscitation Committee	To be agreed by the committee and implemented through OD and Q&SDG	Ops and Professional, Leads and Trainers
Record Keeping	Records Officer	Records audit	Annual	Reports to Q&SDG and Resuscitation Committee	To be agreed by the committee and implemented through Q&SDG	Ops and Professional, Leads
Training Matrix	Resus Leads across services	Annual review	Annual	Reports to Q&SDG and Resuscitation Committee	To be agreed by the committee and implemented through OD and Q&SDG	Ops and Professional, Leads and Trainers
ReSPECT and DNACPR implementation	EOL Lead	Annual audit	Annual	ReSPECT Steering group reporting to the Q&SDG and update to Resuscitation Group	To be agreed by the ReSPECT Steering group and implemented through Q&SDG	Ops and Professional, Leads and Trainers

16.0 Consultation

Consultation on the content of this policy has taken place with the following members of staff:

- Dr Ganesh, Medical Director
- Dr Emily Peer, Associate Medical Director
- Susan Watkins, Chief Pharmacist
- Tom Seager, Clinical Director, Dental Services
- Dr Pat Staite, Associate Medical Director, Prisons
- Vickie Clayton, Clinical Lead for Quality
- Michelle Murray, Team Lead MIU
- Shelley Ramtuhul, Governance and Risk
- Narinder Kular, Consultant Nurse for Children with Complex Needs.
- Andy MacAuley, Resuscitation Officer
- Shirley Pickstock, ACP
- Claire Horsfield, Director of Operations & Chief AHP

17.0 Associated Documents

- SCHT Policy on Advanced Decisions
- SCHT Consent to Examination and Treatment Policy.
- SCHT Anaphylaxis policy
- SCHT Learning from Deaths policy
- SCHT SOP for the ReSPECT document and process 2147-59229 https://staffzone.shropcom.nhs.uk/smii/doclib/13842.pdf
- SCHT SOPs 05.05 and 05.04 Daily check of Resuscitation trolley and Assembly and Replenishment of the Resuscitation trolley respectively
- ReSPECT Clinicians guide- Resuscitation Council May2019
- Free Resources and Research - Together for Short Lives

18.0 References

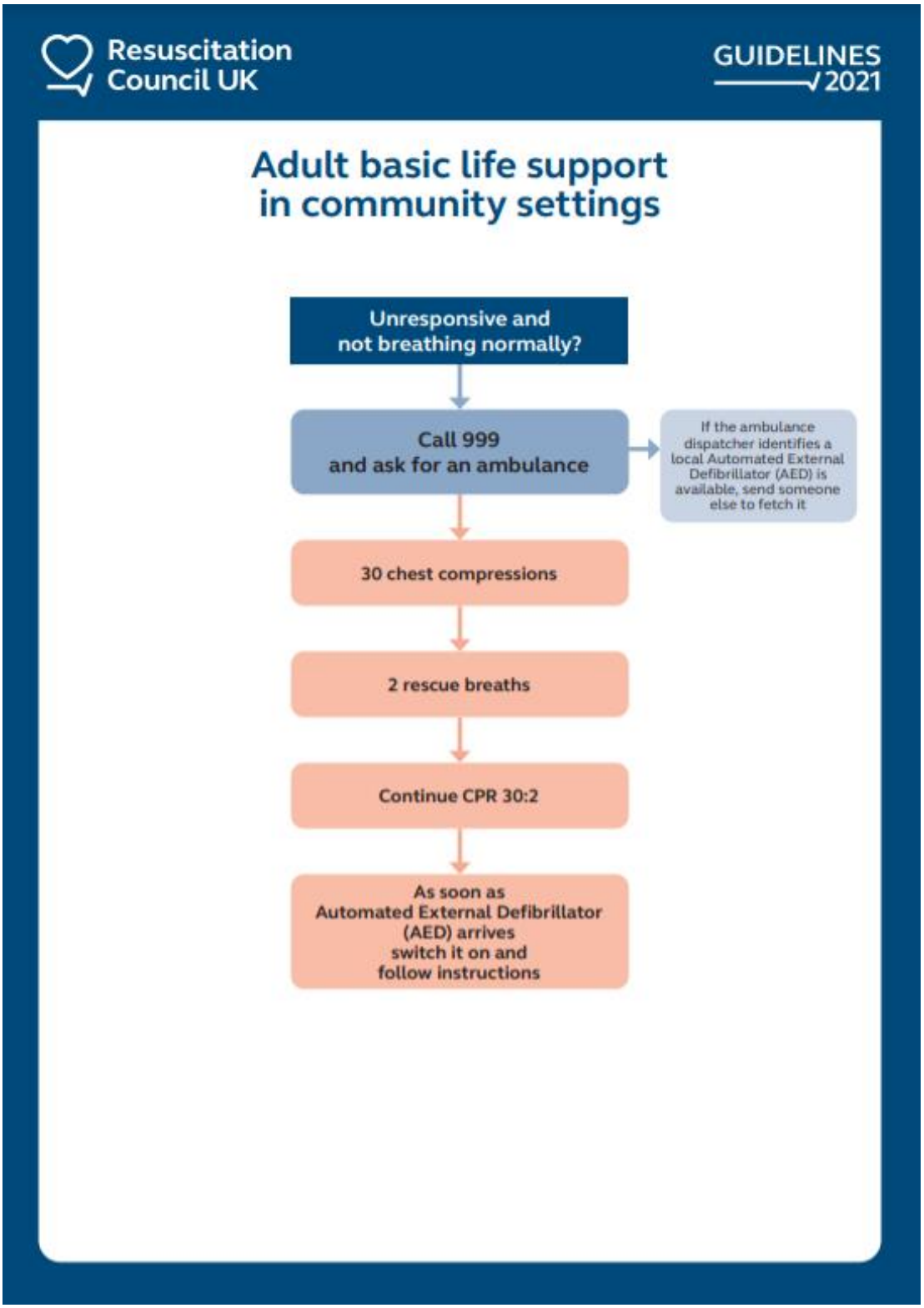
2021 Resuscitation Guidelines | Resuscitation Council UK
https://www.resus.org.uk/respect

19.0 Appendices

1. Adult Basic Life Support (Community settings including patients' own homes)
2. Adult ALS Algorithm (Areas with AEDs- Community Hospitals, DAARTS and MIUs)
3. Adult Choking Treatment
4. Paediatric Basic Life Support
5. Paediatric Choking Treatment Algorithm
6. Resuscitation Decision Making Framework
7. EXAMPLE ReSPECT document
8. Resuscitation Assembly checklists MM002, MM003, MM004
9. Post Resuscitation event and 'near miss' Rapid Learning Tool
10. Cardiac Arrest Action Checklist

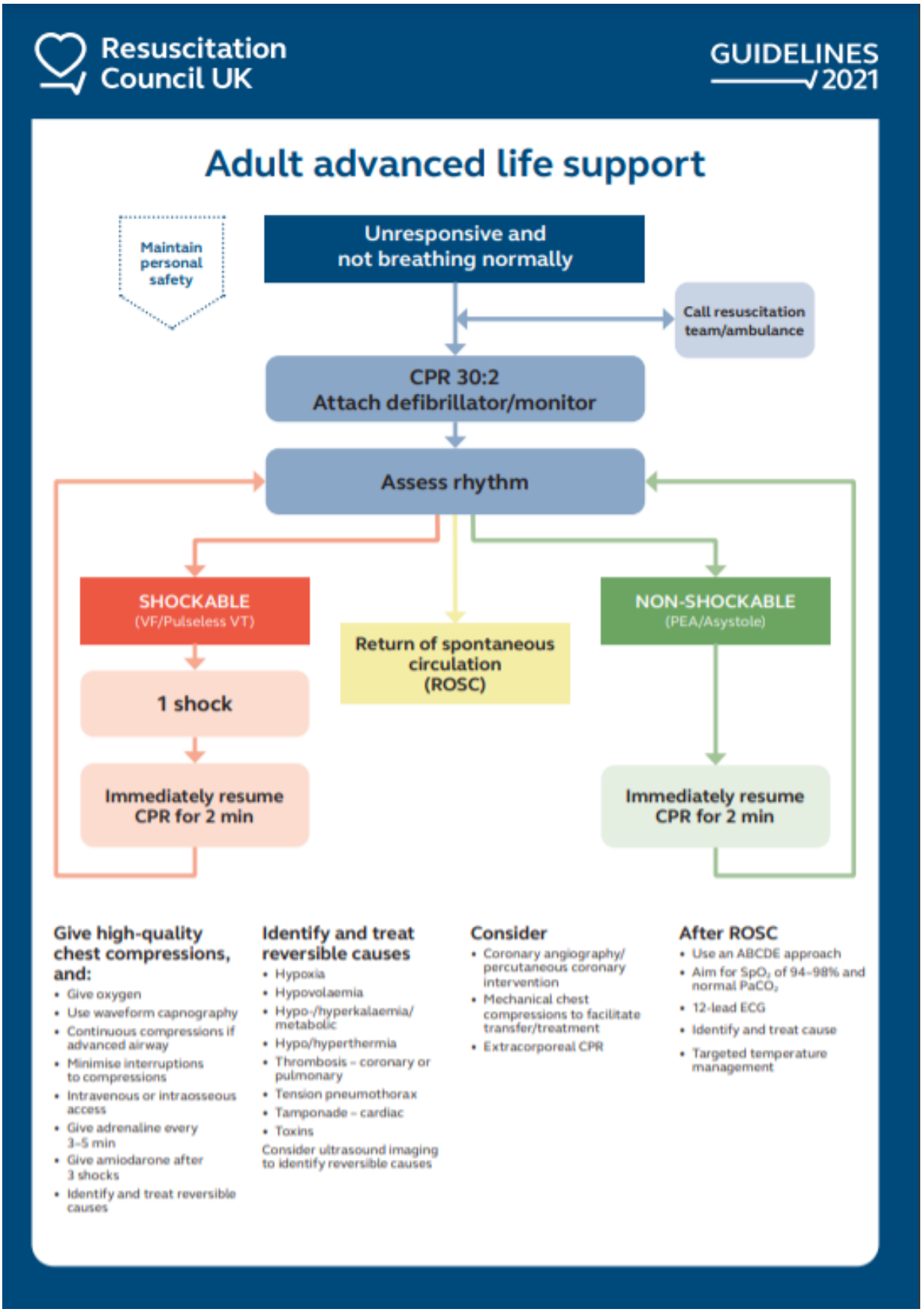
Appendix 1

Adult Basic Life Support (Resuscitation Council 2021)
(Community settings including patients' own homes)



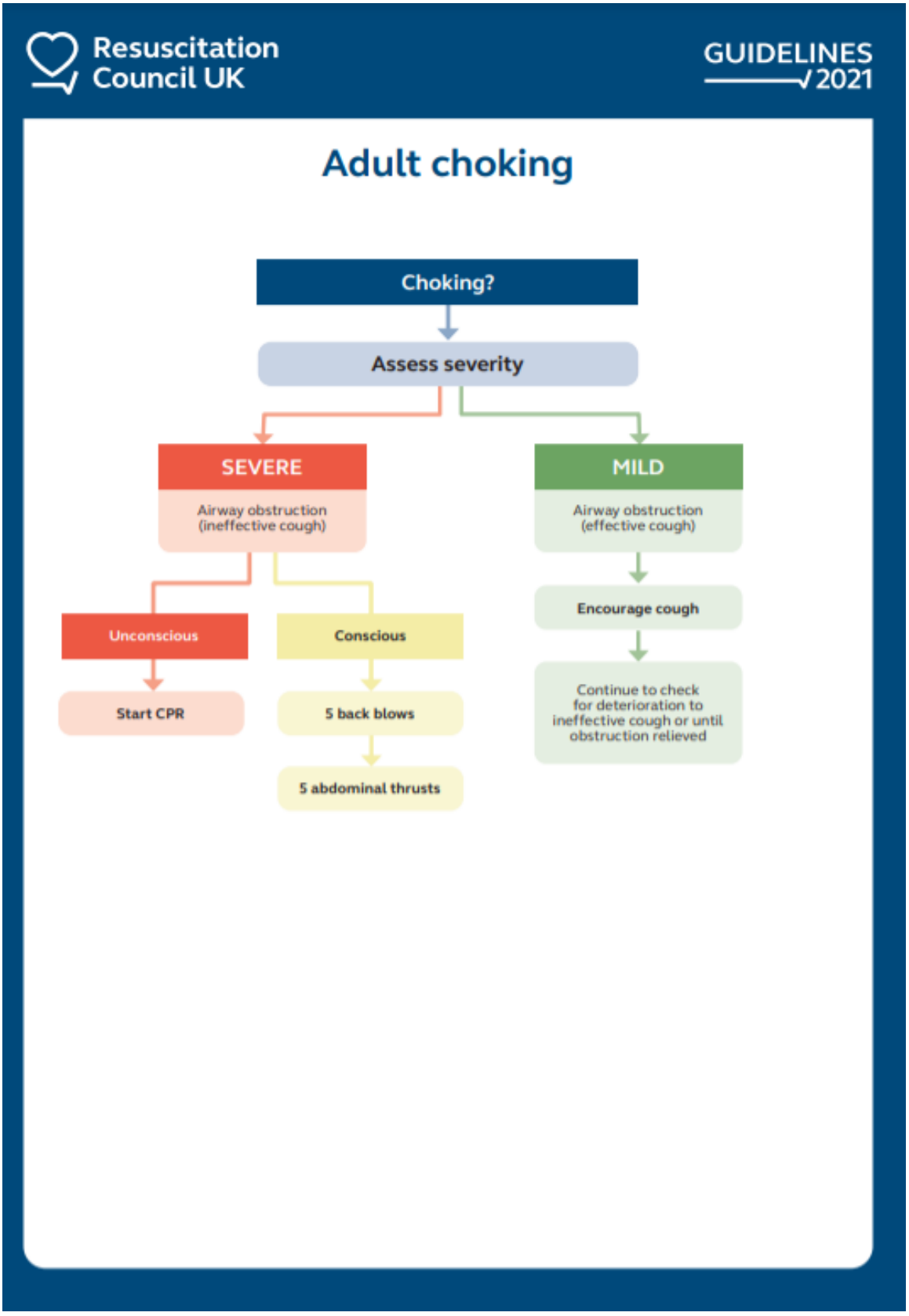
Appendix 2: **Adult ALS Algorithm -for areas with AEDs**

(Community Hospitals, DAARTs and MIUs for use by appropriately ILS trained staff)



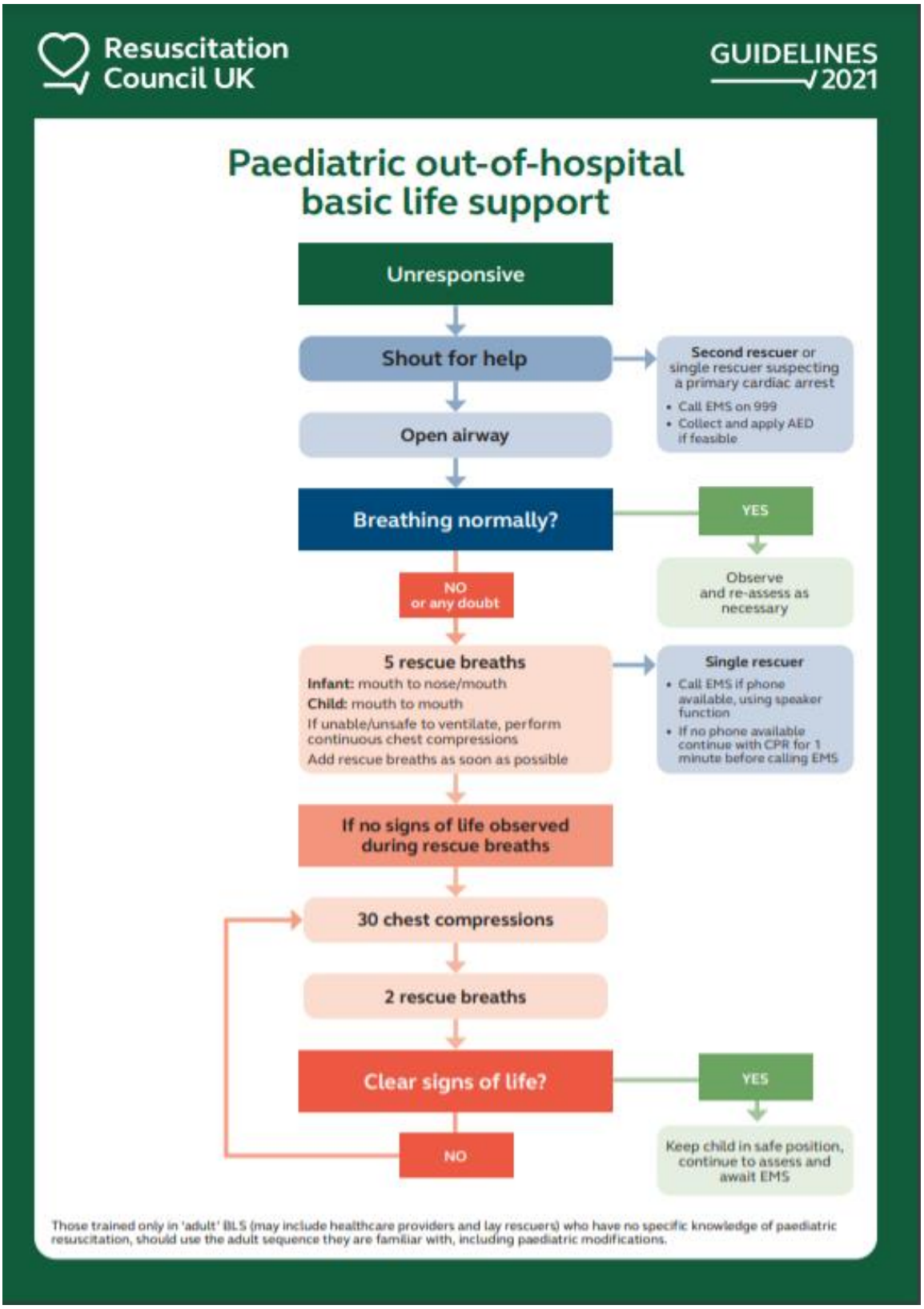
Appendix 3

Adult Choking Treatment (Resuscitation Council 2021)



Appendix 4

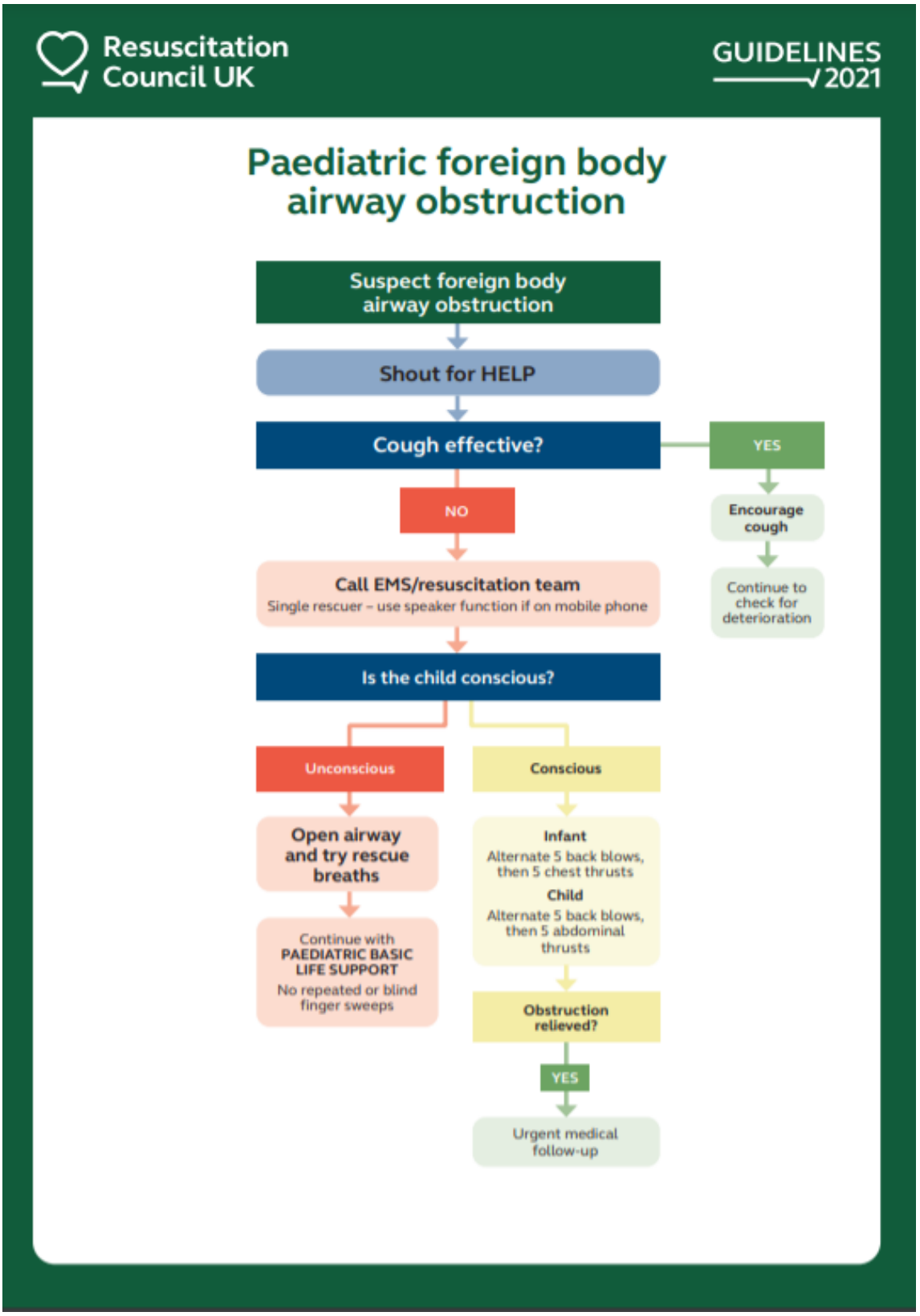
Paediatric Basic Life Support (Resuscitation Council 2021)



CALL 999 FOR HELP

Appendix 5

Paediatric Choking Treatment Algorithm (Resuscitation Council 2021)

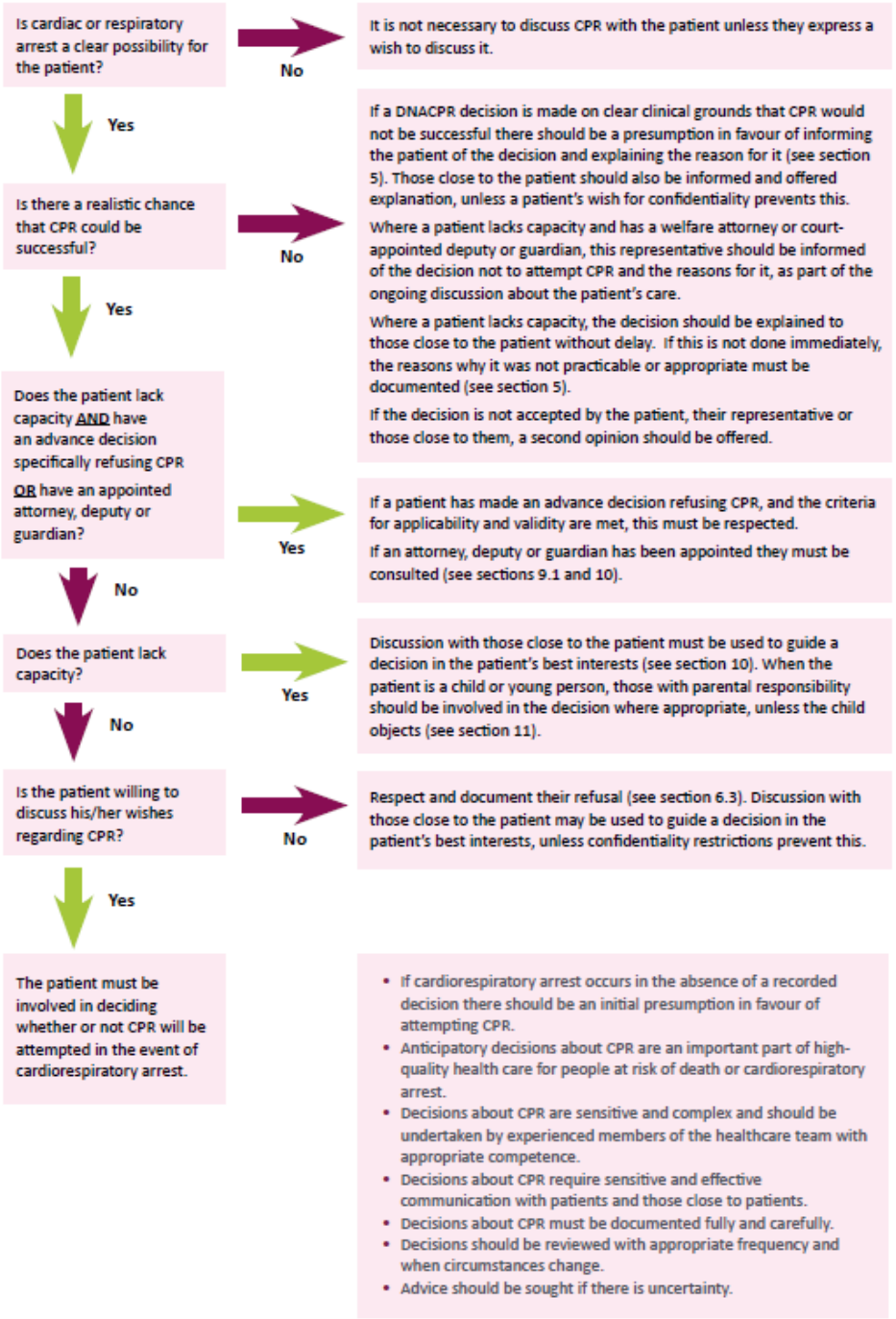


Appendix 6

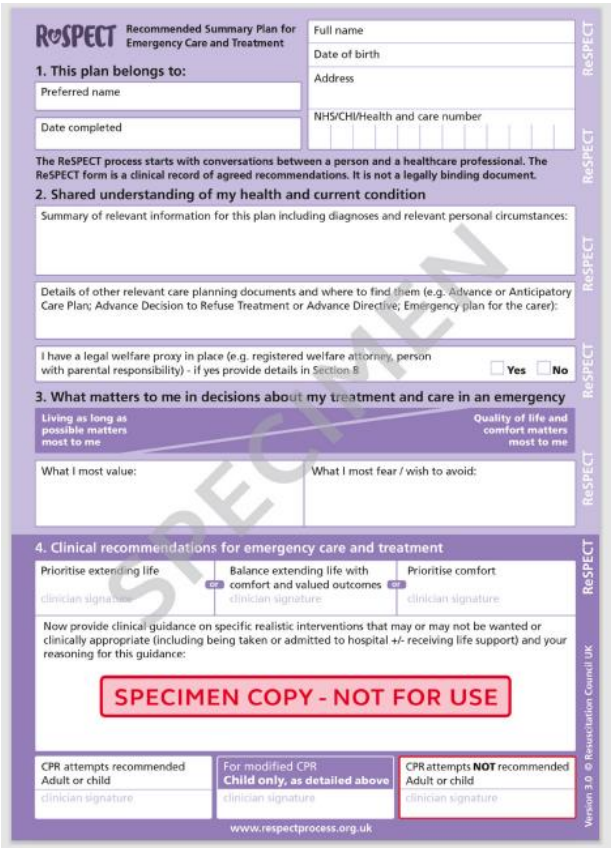
Decision Making Framework

Sections referred to in the chart below refer to the Joint Statement of the British Medical Association, the Resuscitation Council UK and the Royal College of Nursing (2016) "Decisions Relating to Cardiopulmonary Resuscitation".
Publication: Decisions relating to cardiopulmonary resuscitation (3rd edition - 1st revision) | Resuscitation Council UK

Decision-making framework



Appendix 7: Example ReSPECT form



ReSPECT Recommended Summary Plan for Emergency Care and Treatment

1. This plan belongs to:

Preferred name | Full name | Date of birth | Address | NHS/CHI/Health and care number | Date completed

The ReSPECT process starts with conversations between a person and a healthcare professional. The ReSPECT form is a clinical record of agreed recommendations. It is not a legally binding document.

2. Shared understanding of my health and current condition

Summary of relevant information for this plan including diagnoses and relevant personal circumstances:

Details of other relevant care planning documents and where to find them (e.g. Advance or Anticipatory Care Plan; Advance Decision to Refuse Treatment or Advance Directive; Emergency plan for the carer):

I have a legal welfare proxy in place (e.g. registered welfare attorney, person with parental responsibility) - if yes provide details in Section 8 ☐ Yes ☐ No

3. What matters to me in decisions about my treatment and care in an emergency

Living as long as possible matters most to me — Quality of life and comfort matters most to me

What I most value: | What I most fear / wish to avoid:

4. Clinical recommendations for emergency care and treatment

Prioritise extending life | Balance extending life with comfort and valued outcomes | Prioritise comfort

clinician signature

Now provide clinical guidance on specific realistic interventions that may or may not be wanted or clinically appropriate (including being taken or admitted to hospital +/- receiving life support) and your reasoning for this guidance:

SPECIMEN COPY - NOT FOR USE

CPR attempts recommended Adult or child | For modified CPR **Child only, as detailed above** | CPR attempts **NOT** recommended Adult or child

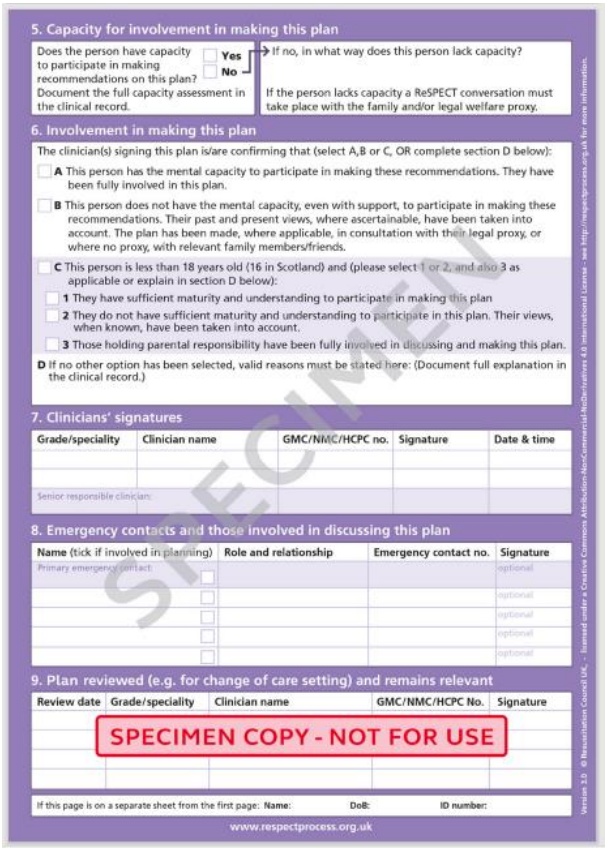
clinician signature

www.respectprocess.org.uk

ReSPECT

Version 3.0 © Resuscitation Council UK

SPECIMEN



5. Capacity for involvement in making this plan

Does the person have capacity to participate in making recommendations on this plan? ☐ Yes ☐ No → If no, in what way does this person lack capacity?

Document the full capacity assessment in the clinical record.

If the person lacks capacity a ReSPECT conversation must take place with the family and/or legal welfare proxy.

6. Involvement in making this plan

The clinician(s) signing this plan is/are confirming that (select A,B or C, OR complete section D below):

☐ **A** This person has the mental capacity to participate in making these recommendations. They have been fully involved in this plan.

☐ **B** This person does not have the mental capacity, even with support, to participate in making these recommendations. Their past and present views, where ascertainable, have been taken into account. The plan has been made, where applicable, in consultation with their legal proxy, or where no proxy, with relevant family members/friends.

☐ **C** This person is less than 18 years old (16 in Scotland) and (please select 1 or 2, and also 3 as applicable or explain in section D below):

☐ **1** They have sufficient maturity and understanding to participate in making this plan

☐ **2** They do not have sufficient maturity and understanding to participate in this plan. Their views, when known, have been taken into account.

☐ **3** Those holding parental responsibility have been fully involved in discussing and making this plan.

D If no other option has been selected, valid reasons must be stated here: (Document full explanation in the clinical record.)

7. Clinicians' signatures

Grade/speciality	Clinician name	GMC/NMC/HCPC no.	Signature	Date & time
Senior responsible clinician:				

8. Emergency contacts and those involved in discussing this plan

Name (tick if involved in planning)	Role and relationship	Emergency contact no.	Signature
Primary emergency contact			optional
			optional
			optional
			optional
			optional

9. Plan reviewed (e.g. for change of care setting) and remains relevant

Review date	Grade/speciality	Clinician name	GMC/NMC/HCPC No.	Signature

SPECIMEN COPY - NOT FOR USE

If this page is on a separate sheet from the first page: Name: DoB: ID number:

www.respectprocess.org.uk

Version 3.0 © Resuscitation Council UK, – licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License – see http://respectprocess.org.uk for more information.

SPECIMEN

Appendix 8: Resuscitation Assembly worksheets:

Worksheets :

- **MM002 Resuscitation Trolley Assembly Worksheet**
- **MM003 Anaphylaxis Drug Box Assembly Worksheet (Green Wallet)**
- **MM004 Cardiac Arrest Drug Box Assembly Worksheet (Blue Box)**

Please refer to the following SOPs for resuscitation trolley checks:

Standard Operating Procedure SOP 5.05	**Daily Check of Resuscitation Trolley**
Standard Operating Procedure SOP 5.04	**Assembly and Replenishment of the Resuscitation trolley**

Form MM002

Shropshire Community Health NHS Trust

Resuscitation Trolley Assembly Worksheet

Summary of requirements:
1. Complete one of these sheets **EVERY TIME** the trolley is opened. Retain for future reference.
2. The trolley should only be opened for replacing expired stock, cleaning or clinical use.
3. Refer to SOP 05.04 Resuscitation Trolley - Assembly and Replenishment Shropshire Community Health Trust for further guidance.

Name of staff responsible for assembling the trolley (PRINT):	
Signature:	
Date assembled:	
Date of item expiring first (expiry date of trolley) **Record this date on expiry date label and fix to the trolley where is can be easily seen for the daily check**	
Tamper evident tag applied to trolley	**Y / N**
Documentation completed and tamper evident sleeves attached to cardiac box / anaphylaxis wallet	**Y / N**
Tag number	
Expiry date of trolley sticker applied to trolley	**Y / N**

Only staff currently qualified to ALS, Paramedics and Doctors are permitted to administer intravenous cardiac arrest medicines and such staff must be kept up to date in cannulation skills and acting within their competence. Other staff will not be expected to administer these drugs.

PLEASE TURN OVER

	Top / side of Trolley	No.	Batch no.	Expiry date
	AED with pads connected	1		
	Oxygen cylinder with flow meter	1		
	Suction machine, tubing & Yankauer	1		
	Glucometer / Lancets	1		
Top Drawer (Label " Anaphylaxis and AED Spares")	Spare defibrillator pads	1 set		
	Razor	1	N/A	N/A
	Absorbent cloth	1	N/A	N/A
	Tough cut scissors	1 pair	N/A	N/A
	Anaphylaxis Drug Box (Green Wallet)	1		
	Pen torch (in working order & spare batteries)	1	N/A	N/A
	Stethoscope	1	N/A	N/A
	Ampoule breakers	4	N/A	N/A
2nd Drawer (Label " Airway")	Magills Forceps Adult	1 pair		
	Magills Forceps Child (MIU Only)	1 pair		
	Oropharyngeal airway size 00 (ISO size 5 blue) (MIU Only)	1		
	Oropharyngeal airway size 0 (ISO size 5.5 grey) (MIU Only)	1		
	Oropharyngeal airway size 1 (ISO size 6.5 brown) (MIU Only)	1		
	Oropharyngeal airway size 2 (ISO size 8 green)	1		
	Oropharyngeal airway size 3 (ISO size 9 yellow)	1		
	Oropharyngeal airway size 4 (ISO size 10 red)	1		
	Tongue depressor	1		
	Nasopharyngeal airway size 6	1		
	Nasopharyngeal airway size 7	1		
	iGel size 3	1		
	iGel size 4	1		
	Lubricant sachets	2		
3rd Drawer (Label " Breathing")	Bag valve mask adult	1		
	Bag valve mask child	1		
	Bag valve mask infant **(MIU only)**	1		
	Clear face mask for BVM size 0	1		
	Clear face mask for BVM size 1	1		
	Clear face mask for BVM size 2	1		
	Clear face mask for BVM size 3	1		
	Clear face mask for BVM size 4	1		
	Adult non-rebreath 15L oxygen mask and tubing	1		
4th Drawer (Label " Circulation")	Cardiac Arrest Drug Box (Blue) **Hospital and MIU only**	1		
	Sodium Chloride 0.9% Intravenous 500ml Infusion bag x 1	1		
	IV Giving Set	1		
	Skin sterilisation swabs	2		
	22G (blue) Cannulas	2		
	18G (green) Cannulas	2		
	Cannula dressing pack	2		
	Gauze swabs	1 packet		
	Tape	1 roll		
	Small Sharps Box	1		
	Venous Cannulation Tourniquets	2		
5th Drawer (Label " PPE and Spares")	Gloves size medium	1 box		
	Gloves size large	1 box		
	Goggles	2 pair		
	Apron large	4		
	Oxygen tubing	1		
	Suction tubing (spare)	1		
	Yankauer suction (spare)	1		
	Yankauer suction child (MIU only)	1		
	Suction catheter size 10 foley	1		

Form: MM004

Cardiac Arrest Drug Box Assembly Worksheet (Blue Box)

Summary of requirements:
1. Complete one of these sheets **EVERY TIME** the box is opened. Retain for future reference.
2. The box should only be opened for replacing expired stock or clinical use.
3. Refer to SOP 05.04 Resuscitation Trolley - Assembly and Replenishment Shropshire Community Health Trust for further guidance.

Name of staff responsible for assembling the box (PRINT):	
Signature:	
Date assembled:	
Date of item expiring first (expiry date of box) **Record this date onto the tamper evident card sleeve and attach to the box where it can be easily seen for the daily check**	
Tamper evident sleeve attached to box	**Y / N**
"Cardiac" Label added to tamper proof sleeve	**Y / N**
"Expiry date of box" completed on tamper evident card sleeve	**Y / N**

PLEASE TURN OVER

Only staff currently qualified to RCUK ALS, Paramedics and doctors are permitted to administer intravenous cardiac arrest medicines and such staff must be kept up to date in cannulation skills and acting within their competence. Other staff will not be expected to administer these drugs.

Item	Number	Batch number	Expiry date
Adrenaline (Epinephrine) 1mg in 10ml (1:10,000) Pre-filled syringe x 3	3		
Amiodarone 30mg in 1ml (300mg) Pre-filled syringe x 1	1		
Venflon: Green x 2 Blue x 2 Pink x 2	2 2 2		
Cannula dressings x 4	4		
Resuscitation Council Advanced Algorithm **Adult**	1		**Tick that algorithm is present:**

Anaphylaxis Drug Box Assembly Worksheet (Green Wallet)

Summary of requirements:
1. Complete one of these sheets **EVERY TIME** the box is opened. Retain for future reference.
2. The box should only be opened for replacing expired stock or clinical use.
3. Refer to SOP 05.04 Resuscitation Trolley - Assembly and Replenishment Shropshire Community Health Trust for further guidance.

Name of staff responsible for assembling the box (PRINT):	
Signature:	
Date assembled:	
Date of item expiring first (expiry date of box) **Record this date onto the tamper evident card sleeve and attach to the box where is can be easily seen for the daily check**	
Tamper evident sleeve attached to box	**Y / N**
"Anaphylaxis" Label added to tamper proof sleeve	**Y / N**
"Expiry date of box" completed on tamper evident card sleeve	**Y / N**

PLEASE TURN OVER

Anaphylaxis Drug Box Assembly Worksheet (Green Wallet)

Only staff trained to BLS or greater are able to administer medication. Staff have a responsibility to undertake training on an annual basis to maintain their competence. Other staff will not be expected to administer these drugs.

Item	Dental Only	Batch number	Expiry date
Adrenaline (Epinephrine) 1mg in 1ml (1:1,000) Ampoules x 10 **Intramuscular Only (Ensure a minimum 3 amps are held)**	Adrenaline (Epinephrine) 1mg in 1ml (1:1,000) Pre-filled syringe x 2 **Intramuscular Only**		
1mL Luer-Lock Syringe x 2			
Blue IM Needle 23G x 2			
Green IM Needle 21G x 2			
Clinell Swab x 1			
Resus Council Anaphylaxis Algorithm			**Tick that algorithm is present:**

Appendix 9

Post Resuscitation event and 'near miss' Rapid Learning Tool

To be completed as soon as possible after the event/ incident, and **in addition to a DATIX report. Please** email immediately to our Resuscitation Officer shropcom.resus@nhs.net or complete online at https://forms.office.com/e/My0wqffKuy

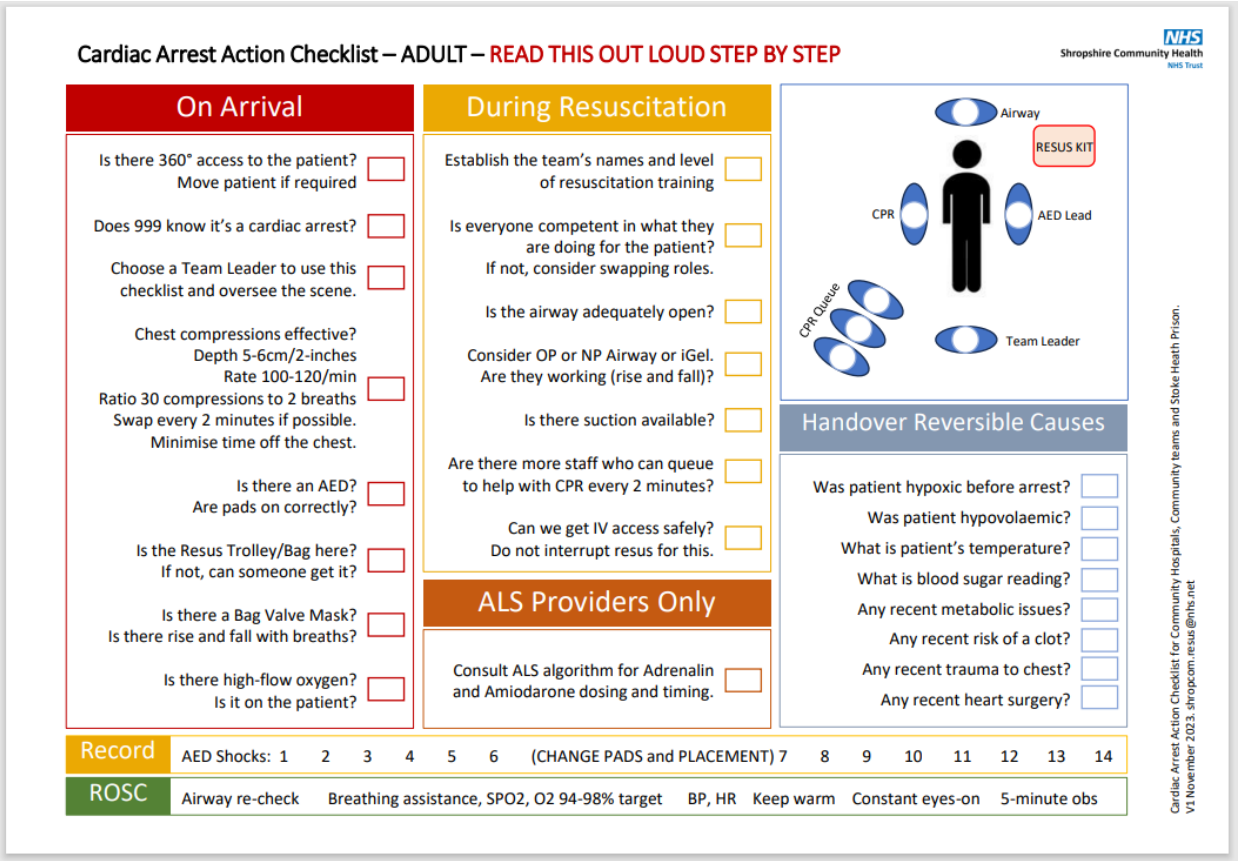
This form is developed from examples provided by the Resuscitation Council UK and will help us improve the quality of our resuscitation and deteriorating patient training so we can improve patient safety and quality of care. Thank you for completing.

Staff completing form:		Date:	
DATIX reference:			
SCHT Site/ base:		Tel:	
Site of event :		Date/Time of event:	
Staff present at event:			

Briefly, what happened?	
Was there a clearly documented physiological observations/ NEWScores monitoring plan stating type and frequency of observations in the 12 hours preceding the arrest (this may have been standard daily observations if the patients had been well) and were these undertaken as per request?	
What were the patients NEWScores in the 12 hours preceding the arrest?	
If the patients NEWScores at any time in that 12 hour period were elevated to 'trigger level', as per the local escalation policy, was the correct escalation undertaken?	
Were there other reasons for escalating care (e.g. symptoms [chest pain], signs [clammy], laboratory results, or staff or patient/relative concern)?	
If there were other reasons for escalating care was the correct escalation undertaken?	

Did the patient receive appropriate assessment and/or treatment in response to a clearly identified reason for escalation?	
If the patient received treatment, did his condition improve in response to that treatment?	
If the patient did not improve, was the patient escalated to a more senior level in a timely manner?	
Did the patient have documented and discussed ceilings of care/ ReSPECT /DNACPR status?	
Has the review identified any other issues (e.g. missing equipment or drugs, equipment failures, problems with team performance or communication)?	
If any of the above raises concern we will ensure this is investigated and share an action plan to address any issues, learn from this event and improve the training of our staff and quality of care for our patients.	

Appendix 10: Cardiac Arrest Action Checklist



To be provided for reference on all resuscitation trollies and bags as a laminated copy.

Additional non-laminated copies should be available for staff to check/write on during an arrest, where circumstances may allow this.