South Central Ambulance Service
NHS Foundation Trust

RESUSCITATION POLICY AND RECOGNITION OF LIFE EXTINCT

South Central Ambulance Service NHS Foundation Trust
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This Policy is to be read in conjunction with Operational Policies and Procedures No 7 - SCAS Attendance at Sudden Death in Adults (Appendix 8)

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SOUTH CENTRAL AMBULANCE SERVICE NHS FOUNDATION TRUST
RESUSCITATION POLICY
and
RECOGNITION OF LIFE EXTINCT POLICY

1. INTRODUCTION

1.1. This resuscitation policy fully supports the recommendations for clinical practice and training in cardiopulmonary resuscitation published by the Resuscitation Council (UK) (2015), COVID2020 update and has been constructed to promote compliance with the Health and Social Care Act 2008 (Regulated Activities) Regulations 2014, Regulation 12 and the AACE/JRCALCGuidelines as updated.

1.2. Patients in cardiopulmonary arrest are to be actively resuscitated whenever there is any chance of survival, however remote. Nevertheless, it is possible to identify patients in whom there is absolutely no chance of survival, and where resuscitation, or continued resuscitation,would be futile and distressing for relatives, friends and healthcare professionals.

1.3. This policy is in accordance with the AACE/JRCALC Clinical Practice Guidelines as updated.

1.4. South Central Ambulance Service NHS Foundation Trust has contact with patients via severalmediums, face to face, emergency and urgent care, patient transport services, telephone triage and advice via call centres, clinical support desk and 111 services. This policy is a corporate policy and acknowledges that NHS Pathways software advises and coaches basiclife support once a cardiac arrest has been identified. This is a nationally controlled and monitored software system which the Trust ensures is up to date and has strict version control processes.

2.0 DUTIES

2.1 Accountability for the policy for the Resuscitation and Recognition of Life Extinct is ultimately with the Trusts Chief Executive; however this can be devolved within the Trust Board to the Executive Director of Patient Care & Service Transformation if appropriate.

2.2 **Director of Finance**
The Director of Finance has delegated responsibility for managing the development and implementation of procurement of equipment. Ensuring there are systems and processes for the ordering and delivering of equipment to departments.

2.3 **Chief Operating Officer**
The Chief Operating Officer has delegated responsibility for ensuring that all operational Staffand vehicles are fully trained and equipped and the operational risks associated with the provision of Emergency and Non Emergency

Ambulance Service.

2.4 **Executive Director of Patient Care & Service Transformation**
The Executive Director of Patient Care & Service Transformation has Board level responsibility for the Resuscitation Policy within South Central Ambulance Service NHS Foundation Trust. The Executive Director of Patient Care & Service Transformation also chairs the Patient Safety Group.

2.5 **Medical Director/Resuscitation Lead**
The Medical Director or Divisional Medical Directors, will act as the SCAS Resuscitation Lead. The role is to ensure that all international/national guidance/research are reviewed and recommendations presented to the Clinical Review Group to ensure that the policy remains effective to provide the best chance of survival for all patients resuscitated.

2.6 **Assistant Director of Patient Care**
The Assistant Director of Patient care has senior management responsibility for reviewing, updating and forwarding to the relevant people and committees as amendments are made. The role also has a co-ordinating function between departments to ensure the smooth review, audit and dissemination of the policy.

2.7 **Assistant Director of Education**
Assistant Director of Education has responsibility for ensuring that all mandatory training is identified and provided as required and for ensuring all education and training is delivered to a high standard. He/she will be responsible for ensuring that appropriate records are maintained of all training, both internal and external undertaken or sponsored by the Trust.

The Assistant Director of Education has senior responsibility for reviewing the training need analysis and ensuring that all appropriate grades of staff receive training in resuscitation and provide reports to the Quality and Safety Committee on the number of staff trained in year.

2.8 **Education Manager/Facilitators and Community Responder Trainers**
The Education Managers/Facilitators and Community Responder Trainers are responsible for providing the resuscitation training to staff and volunteers, keeping their knowledge and skills in line with current recommendations and guidelines.

2.9 **All Staff**
All staff have a responsibility to read and understand this policy and adhere to the Trust current resuscitation guidelines and training needs analysis.

2.10 **Quality and Safety Committee**
The Quality and Safety Committee will approve and monitor the implementation of the Resuscitation Policy. Record any rejection of relevant recommendations on the risk register, within the Trusts governance structure. The Quality and

Safety Committee will monitor the financial implication of the policy ensuring that the Trust Board is aware of any significant risksor funding associated with the implementation of the policy.

2.11 **Clinical Review Group**
The Clinical Review group, which is chaired by the Medical Director, with all Medical Directorsas membership which forms the Committee with responsibility for reviewing the Resuscitationpolicy and assessing the effectiveness of the Resuscitation Policy and co-ordinate theproduction of gap analysis and action plans for the Quality and Safety Committee to monitor should a policy review be needed. Any amendments to the policy will be forwarded to the Quality and Safety Committee for approval.

3.0 TRAINING STRATEGY

The strategy for resuscitation training shall embody the statements and guidelines published by the Resuscitation Council (UK), European Resuscitation Council and AACE/JRCLAC Guidelines, who are advised by the national cardiac leads for resuscitation on training requirements for all ambulance staff. This policy will incorporate the most recent updates to these guidelines and recommendations.

This Trust will provide sufficient and appropriate resuscitation training for each of the main staff groups. Profession specific resuscitation training will be directed by their respective functional role and the guidelines and directives issued by their professional bodies (e.g. TheHealth Care Professions Council (HCPC), General Medical Council (GMC) and Nursing & Midwifery Council (NMC)).

Resuscitation training will be provided as identified through the training needs analysis.

Patient Facing Staff

3.1 **Paramedics, Nurses and Specialist Practitioners**
Clinical qualified registered personnel (Paramedics, Nurses, and Specialist Practitioners) arequalified by registration to recognise life extinct.

3.2 **Technicians/Associate Ambulance Practitioners (AAP)**
Qualified Technicians, who have received resuscitation training, will receive further training inorder that they are permitted to diagnose and VERIFY THE FACT OF DEATH (also known as"Diagnosing Death" or "Recognition of Life Extinct") under certain conditions. Technicians andAAP's can perform basic life support and manual defibrillation and assist in clinical staff in advanced life support.

3.3 **Emergency Care Assistants**
Emergency Care Assistants are trained in Basic Life Support and to use a defibrillator in advisory mode only. They are trained to assist clinical staff in advanced life support procedures such as Cannulation, airway management and

medication administration.

3.4 **Community and Co Responders**
Community and Co Responders and volunteers who provide their time free to the Trust and are trained in basic life support, oxygen and AEDs and act as a first response for the organisation.

3.5 **Doctors**
Doctors work for SCAS both under paid contracts or voluntary honorary contracts. BASICS doctors are volunteers who respond to trauma and are called out by the Emergency Operations Centre to a set criteria. Doctors are also paid for helicopter HEMS shifts via UHS.Their resuscitation training is provided by their employing NHS organisation.

3.6 **Patient Transport Services**
Patient Transport Services include Ambulance Care Assistants and Car Drivers will receive basic life support training as per the training needs analysis. Voluntary Car drivers will be offered basic life support training but this would be on a voluntary basis only.

3.7 **Emergency Operations Centre (CCC)**
All CCC staff will have a current qualification in NHS pathways telephone CPR and a current valid qualification in Basic Life Support.

3.8 **Non Clinical Staff**

3.9 **Administration staff**
All administration staff do not deal with patients so will not be trained in resuscitation.

4.0 MONITORING

4.1 The Policy will be monitored for its effectiveness by the Assistant Director of Patient Carethrough the following:

- Responsibilities of staff will be monitored through attendance at meetings, management of systems, development of reports and the appraisal process;
- Number and percentage of staff completing mandatory training in year;
- Production of reports showing trend analysis of reporting broken down into;
  - Patients attended in Cardiac Arrest
  - Patients with a Return Of Spontaneous Circulation (ROSC) at hospital
  - Grade of staff attending
  - Divisional comparisons
  - Trust performance

4.2 These will be conducted on a six monthly basis and reports provided to the Clinical

ReviewGroup and the Quality and Safety Committee.

5.0 POST RESUSCITATION CARE (for ACQI Criteria see appendix 9)

5.1 The Trust will make provisions for safe continuity of care and where necessary, safe transferfollowing resuscitation of the patient. This may involve the following steps:

- 111 call center transfer to 999
- Front line staff referring to the ED
- PTS staff calling 999 for back up from Frontline staff
- Transfer of patient from hospital to specialist hospital
- Retrieval teams i.e. SORT teams
- Preparation of equipment, oxygen, drugs and monitoring systems;
- Full and complete hand-over of care;
- Transfer co-ordination with the assistance of CCC
- Referral to a specialist (Air Ambulance)
- Informing relatives

5.2 Good quality care following ROSC can double the patient's chances of survival and is a vital final link in the chain of survival. The quality of ambulance management of a resuscitated patient is therefore vital to improving their chances of survival

5.3 The post-arrest patient

Resuscitated cardiac arrest patients may be unstable for several reasons. Often these patients have some degree of impaired myocardial contractility due a myocardial infarct that may have caused the original cardiac arrest, a subsequent period of ischaemia, and further injury from repeated defibrillation. Neurological impairment may also result in an obstructed airway, a risk of aspiration and ineffective respiratory effort resulting potentially in hypoxia. Gastric distention from initial ventilation using a bag-vale-mask may also have caused gastric distention which further impairs ventilation and may also impair venous return.

5.4 Post-ROSC general management

- When possible, extricate and transfer a patient if tolerated in a supine position which helps achieve cardiovascular stability.
- Although 100% oxygen should be used in the resuscitation attempt, once ROSC is achieved, too much oxygen (hyperoxia) may actually harm the heart and other ischaemictissues, including the brain. Titrate the oxygen flow to maintain oxygen saturations of 94-98% (as per AACE/JRCALC as updated). In the absence of heart failure and pulmonary oedema, patients may not need any supplemental oxygen to achieve this target oxygen saturation range.
- Perform a 12–lead ECG as soon as possible after obtaining ROSC. Patients with signs ofST elevation or LBBB, should be treated in a similar manner as those presenting with anacute MI and local protocols followed with regards to activation of the pPCI pathway.
- Some patients without acute ECG changes, such as the common ST elevation or LBBB, will still have a blocked coronary artery and may also benefit from emergency angiography/pPCI – thresholds should be low for discussing these cases with pPCI centreon a case by case basis, especially if there has been a proceeding history of chest pain prior to cardiac arrest
- The pulse rate and rhythm and oxygen saturation should be closely monitored during transport to hospital. Patients who are shut down and poorly perfused may show inaccurate or no pulse oximeter readings. Some of these patients may particularly benefitfrom early expert cardiac care in a pPCI centre
- Blood pressure should be measured regularly; more often in unstable patients to detect any decline as soon as possible.
- Record the neurological status (AVPU/GCS and pupils). When examining the pupils, remember that both adrenaline and atropine cause pupillary dilation and dilated pupils (which may often appear fixed) are unreliable indicators of neurological outcome. It is essential to rule out hypoglycaemia in patients who remain unconscious after cardiac arrest. The neurological outcome in spontaneously breathing patients on arrival at hospital is often good with optimal specialist care.

5.5 Specific post-ROSC issues

- ***Therapeutic hypothermia and temperature aims***
  Several hospital studies have shown that cooling patients who remain unconscious following ROSC reduces brain damage and increases their chances of survival. It had been thought that starting aggressive cooling in the pre-hospital setting using coldintravenous fluids may also help the patient.

  In post- traumatic cardiac arrest the temperature aims should be to keep the patient warm. This is to ensure that the patient does not develop coagulopathy.

In paediatric cardiac arrest the temperature aims should be to prevent heat loss and aim for a normal temperature.

In medical cardiac arrest the aim should be to passively cool the patient. Active cooling should be avoided as a recent study has shown that cold IV fluids may actually make the patient more unstable. It is therefore recommended to initiate simple first line passive skin cooling techniques (no blankets, no vehicle heating, windows open /air-conditioning on maximum etc) but NOT to actively cool the patient with cold IV fluid.

- ***End-tidal CO2***
  Electronic end-tidal monitoring ($ETCO_2$) is now provided on all frontline SCAS vehicles. The presence of $ETCO_2$ confirms a cardiac output, and blood flowing and ventilation.

  Its use is mandatory when performing endotracheal intubation as the presence of $ETCO_2$ confirms correct placement of the tube in the trachea. CO_2 may be absent for several reasons including:

  - Little or no cardiac output
  - Unrecognised oesophageal intubation
  - Poor quality chest compressions during CPR
  - Futility of resuscitation

  In any intubated patient, the absence of chest wall movement or ETCO2 should be assumed to be due to unrecognised oesophageal intubation and the endotracheal tube must be removed immediately and replaced with either a BVM or i-Gel to achieve ventilation.

  When a patient is intubated, the ETCO2 level can be used as marker of cardiac output. During CPR, the end-tidal ETCO2 will often increase rapidly once ROSC is achieved.
  End-tidal CO_2 has also been used as a marker of futility in intubated patients. Very low levels during resuscitation are associated with poor outcome, but because the levels also depend on the quality of chest compressions, this is generally an unreliable marker in the pre-hospital setting.

  End-tidal CO2 measurements are of limited use with an i-gel in the presence of an air leak and give can give an artificially low ETCO2 reading.

- ***Ventilation***
  Following ROSC, gentle ventilation is very important to maintain haemodynamic stability. If ventilation is too fast or too forceful, blood pressure will drop rapidly and the patient may re-arrest. It is therefore vital to ventilate the patient as gently as possible at no more than 10 breaths per minute. Use of a mechanical ventilator may reduce the risk of

hyperventilation (hyperoxia and hypocarbia) for staff trained and experienced in their use and aid haemodynamic stability by improving venous return.

- ***Blood glucose***
  Blood sugar is often unstable following a cardiac arrest. Measure the blood sugar and administer 10% glucose if indicated, according to JRCALC 2019 protocols. Be careful not to give excess glucose as it is bad for an ischaemic brain and heart following cardiac arrest.

- ***Hypotension***
  Patients are often hypotensive following cardiac arrest. Make sure all reversible causes are corrected (e.g. tension pneumothorax). In adult patients who remain hypotensive (systolic BP < 80 mmHg) administer 250ml bolus of saline to achieve a systolic BP > 80 mmHg (using the same protocol for patients who are hypotensive due to a medical cause).

- ***Treatment on scene***
  There is nothing to be gained by remaining on scene longer than 10 minutes once ROSC has been achieved. Following ROSC, rapid hospital transport to the most appropriate hospital should be undertaken without delay. From 07:00 – 02:00, a doctor is usually available on one of the two air ambulances. Consider requesting medical backup from this resource early as additional intervention/critical care can be provided by this team which may help stabilise the patient and assist with onward transfer to an appropriate centre.

References:
Soar J, et al. European Resuscitation Council Guidelines for Resuscitation 2015: Section 3. Adultadvanced life support. *Resuscitation* 2015; 95: 100–147

Nolan JP, Lyon RM, Sasson C, et al. Advances in the Hospital Management of Patients Following an Out of Hospital Cardiac Arrest. Heart. 2012;98(16):1201-1206

6.0 RESUSCITATION EQUIPMENT, REPLENISHMENT AND CLEANING

6.1 All Trust vehicles frontline ambulances, Solo Response Vehicles and aircraft must be maintained in a state of readiness at all times. Vehicles should be checked by a qualified member of staff at least once every 24 hours and immediately following conclusion of a resuscitation event. The vehicles should be stocked in accordance with the standardised inventory according to organisation's vehicle checklist.

6.2 Disposable items should be replenished at the earliest opportunity from the departmental storage areas in accordance with the organisation-wide policy. Non-disposable items should be de-contaminated / cleaned in accordance with both the manufacturers' recommendations and the organisation's infection

control policy and re-instated to the vehicle as soon as is practical.

6.3 Pharmacy items must be replenished from departmental stock in accordance with the Medicines Management Policy.

6.4 Daily checks should be performed and the defibrillator must be operationally checked in accordance with the Manufactures recommendations and the Trusts Medical Devices Policy.

6.5 In some situations such as predicted prolonged resuscitation, long transfer times to hospital and rescuer fatigue the use of a LUCAS 2 device may be of benefit. Once a tracheal tube or a supraglottic airway has been inserted, ventilate the lungs at a rate of 8-10 min^{-1} and continue chest compressions using the LUCAS 2 device without pausing during ventilations. With a supraglottic airway, if there is inadequate ventilation due to gas leakage, pause compressions for ventilation using a compression-ventilation ratio of 30:2.

7.0 MANUAL HANDLING

7.1 In situations where the collapsed patient is on the floor, in a chair or in a restricted / confined space the organisational guidelines for the movement of the patient, Refer to the Health & Safety Policy (section A) Minimum Lifting Policy, must be followed to minimise the risks of manual handling related injuries to both staff and the patient. Please also refer to the Resuscitation Council (UK) statement which can be found at: http://www.resus.org.uk/pages/safehand.htm

8.0 CROSS INFECTION

8.1 While COVID 19 continues to be a risk, all resuscitation attempts potentially risk cross infection. Trust PPE guidelines, Trust Infection Prevention, Control and Decontamination Policy CSPP 2 should be followed whilst delivering resuscitation to a patient. In view of the current cross infection, mouth to mouth resuscitation is not recommended.

9.0 PROFOUNDLY HYPOTHERMIC (<30° CENTIGRADE) PATIENTS IN CARDIAC ARREST

9.1 The ACCE/JRCALC Guidelines as updated gives further advice on the practical management for profoundly hypothermic patients (less than 30 degrees centigrade) who are found in cardiac arrest in whom it is clinically appropriate to attempt resuscitation (if is not possible to measure core temperature at this level, then it is acceptable to estimate core temperature resulting from environmental conditions). There are a number of considerations and changes in practice that are important for all SCAS clinicians to be aware of that are different to when attempting the resuscitation of patients with a normal core temperature.

9.2 **Management**

- Thresholds for aggressively attempting resuscitation should be low in

patients found in unexpected cardiac arrest in cold environments unless there are features unequivocally associated with death i.e. rigor mortis, hypostasis and putrefaction, or associated injuries incompatible with survival.

- Thresholds for aggressively resuscitating small children and young adults following immersion in cold water should also be very low – there are reports of complete neurological recovery in patients completely immersed up to 90 minutes in icy water (patients are not dead until they are 'warm and dead')
- It may only be possible to establish the futility of further efforts at resuscitation following admission to an Emergency Department when arterial blood gas analysis can guide the appropriateness or otherwise at further efforts at resuscitation (i.e. severe hyperkalaemia and metabolic acidosis suggest warm asphyxia and the futility of further resuscitation).
- In severely hypothermic patients with a core temperature of less than 30 degrees C **repeated defibrillation** is unlikely to be successful and repeat shocks are damaging to the myocardium (a maximum of 3 DC shocks recommended)
- **Repeat doses of adrenaline** in severely hypothermic patients with a core temperature less than 30 degrees C is also potentially toxic to the heart and to the brain – do not administer adrenaline (or amiodarone) to patients in cardiac arrest with a core temperature less than < 30 degrees C
- In patients with moderate hypothermia (30-35 degrees C) current RC (UK) guidelines recommend doubling the adrenaline dosing interval (1 mg every 6-10 minutes).
- The SCAS tympanic thermometers have a Displayed Temperature Range = 20 – 42.2 degrees C, an Operating Ambient Temperature Range = 10 – 40 degrees C, with an accuracy of up to 0.5 degrees C in the 20-35 temperature range.
- Consider transporting all such patients directly to the nearest Emergency Department with access to on-site cardiopulmonary bypass for active central rewarming (John Radcliffe Hospital Oxford, University Hospital Southampton). Obtain decision support if required from the JR/UHS Emergency Department via their priority line.
- Consider the use of a mechanical chest compression device (e.g. LUCAS2) to support on- scene and in-transit CPR if available, and requesting early Pre-hospital Emergency Medicine support via Air Ambulance / ECRU.
- Decision support is also available from the SCAS Medical Directors and the on call duty Medical Incident Adviser

References:

1. RC (UK) Guidelines for the management of cardiac arrest.
2. ACCE/JRCALC as updated Ambulance Clinical Practice Guidelines

10.0 ANAPHYLAXIS

10.1 The management of suspected anaphylaxis / anaphylactoid reactions should be conducted inaccordance with the AACE/JRCALC Guidelines as updated. Further information can be sought from the Resuscitation Council (UK) Guidelines for the management of anaphylaxis.

10.2 Ambulance crews should carefully check their medicine doses and administration routes in the JRCALC plus App or an up to date pocket book prior to administration. These are time pressured situations where mistakescan occur unless robust checking procedures are in place.

11.0 DEFIBRILLATION

11.1 Manual defibrillators must only be operated by persons specifically trained in their use. The operation of defibrillators by all Trust staff and contracted services is subject to their compliance with the protocols within the Trusts training. Dedicated automatic external defibrillators (AED) can be used by those without specific training. For ECAs the defibrillatorswill be used in semi-automated mode, but for suitably trained clinicians they should be used inmanual mode.

11.2 Shockable rhythms in children are relatively rare and are usually due to congenital heart disease, tricyclic overdose, raised potassium levels or hypothermia. Defibrillation is a time-critical intervention, with mortality increasing approximately 10% for each minute'sdelay in defibrillation. Basic life support only slows the demise of the patient; defibrillation isa potential cure. The longer defibrillation is delayed, the less likely it is to be successful.

11.3 In all cases of shockable rhythms, even where a patient appears to be in fine ventricular fibrillation (VF), defibrillation should be delivered at the earliest opportunity.

11.4 Optimal defibrillation in children involves delivery of a proportionately smaller shock to that used in adults. In order to achieve this, defibrillators are available with smaller self-adhesive pads for use with children that reduce the electrical discharge from the defibrillator. Ideally, these paediatric pads should be used in children < 8 years age, and adult pads in older patients. However, if paediatric pads are not available and a child/infant (of any age) is in a shockable rhythm, defibrillation must still be undertaken immediately using adult pads; to delay the shock risks a less favourable outcome for the child.

Action

- When paediatric self-adhesive pads are not available, adult self-adhesive pads must be used as an alternative and defibrillation should never be delayed.
- Ensure that the pair of self-adhesive pads do not touch each other; in small children, a front- back pad position may be necessary. Once the

adult pads are inplace, defibrillate the child as per usual procedure, following the defibrillator instructions when appropriate.

References:

1. Deakin CD, Nolan JP, Soar J, et al. European Resuscitation Council Guidelines for Resuscitation 2010: Section 4. Adult advanced life support. Resuscitation 2010; 81: 1305–1352.

12.0 PROCUREMENT

12.1 All resuscitation equipment purchasing is subject to the organisation's standardisation strategy; therefore all resuscitation equipment purchased must be sanctioned by the Directorof Finance or designated / delegated person prior to ordering.

13.0 RECOGNITION OF LIFE EXTINCT (ROLE) AND DO NOT ATTEMPT RESUSCITATION (DNAR) GUIDELINES

	CFR/ Co-Responder	ACA	ECA/Student Paramedic	Technician/ AAP	Nurse	Newly Qualified Paramedic (NQP)	Paramedic	Specialist Paramedic (Critical Care)	Senior Clinical Advisor	Doctor
Conditions unequivocally associated with death	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Conditions when resuscitation can be discontinued without ALS (or not commenced at all)	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓
Conditions when resuscitation can be discontinued following ALS	✗	✗	✗	✗	✓	✓ 1	✓	✓	✓	✓
Authorising cessation outside of guidance	✗	✗	✗	✗	✓	✗	✗	✓	✓	✓

1. Newly Qualified Paramedics must seek clinical validation to discontinue ALS, as detailed in CSPP 7 Newly Qualified Paramedic, Ambulance Technician, Ambulance Practitioner Clinical Validation.

13.1 **DEFINITION**

13.1.1 SCAS personnel can only verify the "***Fact of Death***". They cannot "*Certify*" the cause ofdeath. Certification must be undertaken by a Doctor.

13.1.2 There are a number of circumstances whereby SCAS personnel may be required to considerestablishing the Fact of Death. These are:

- Death in a Private residence concurrent with existing medical treatment – colloquially an"Expected Death"
- Death in a Private residence – an "Unexpected Death"
- Death in a Public Place (i.e. not a Private residence) – an "Unexpected Death"
- Death in an Ambulance
- Death in a Major Incident situation

13.1.3 Any of these may also include "Death in Suspicious Circumstances" whereby it is likely that the Police, on behalf of HM Coroner, will be required to conduct an investigation into the circumstances of the death, to determine if a crime has been committed.

13.1.4 GPs are no longer obliged to attend a scene to confirm a death has occurred.

13.1.5 This policy applies to **all** age groups of patient

13.2 **IMMEDIATE ACTIONS** (See Appendix A)

13.2.1 Following arrival, and the recognition of a pulseless and apnoeic patient (in the presence of apatent airway), resuscitation should be commenced whilst the facts of the collapse are ascertained unless the conditions unequivocally associated with death are present (see 13.3.2) or a valid advance directive/DNACPR is confirmed to the ambulance staff. In all othercases resuscitation must be commenced and the facts pertaining to the cardiac arrest must beestablished. CCC call takers will commence telephone CPR instructions (unless the caller refuses) until a valid DNACPR/ADRT is confirmed and a healthcare professional has established that no reversible causes are present.

13.2.2 In the event of a paediatric cardiac arrest, resuscitation must be commenced immediately and continued to hospital. Transport to Hospital should be carried out at the earliest opportunity. The only circumstances in which resuscitation is not indicated are:

- Massive cranial and cerebral destruction
- Hemicorporectomy or similar massive injury
- Decomposition / Putrefaction
- Incineration
- Where there is a valid DNR in place.
- Hypostasis
- Rigor Mortis (In children this can occur rapidly so resuscitation should be

attemptedunless there is another condition unequivocally associated with death.)

- Do not be deterred in your resuscitation attempts, even if a non-medically trained individual has determined that the resuscitation attempts are futile. The child should be immediately reassessed and resuscitation attempts commenced where appropriate.
- ALL children (up to the day of their 18th birthday) **must** be taken to the nearest emergency department with onsite paediatric support, not the mortuary, irrespective of whether active resuscitation is being carried out. The only exception is where there is a Valid DNR or Advanced Care Plan (ACP) in place, or where a crime scene has already been declared. In these extreme and very rare circumstances the child may be left "at scene" if all attempts to transport to Hospital have been exhausted first. The CCC must be informed immediately.

These actions will ensure that the child, the family and all staff concerned receive the best possible support.

- Further information can be found in AACE/JRCALC 'Dealing with the Death of aChild (including SUDI).

- Some children have Advanced Care Plans which give specific information, suchas not starting cardiac compressions, but allowing ventillatory support. You should respect the requests in these medical documents.

- See the Child Death flow chart in Appendix 4

13.2.3 In the following conditions resuscitation can be discontinued:

- The presence of an up to date formal DNACPR/ACP (Do not attempt Cardiopulmonary Resuscitation) order or an Advanced Decision to Refuse Treatment (ADRT) that states thewish of the patient not to undergo attempted resuscitation.
- When the patient's death is expected due to terminal illness.
- Efforts would be futile if ALL the following exist together (see 13.3):
  - More than 15 minutes has elapsed since the onset of cardiac arrest.
  - No evidence of bystander CPR in the 15 mins before the arrival of the ambulance.
  - Exclusion factors are absent Drowning, hypothermia, poisoning/overdose, pregnancy,child/neonate).
  - Asystole for >30 seconds on the ECG monitor screen. CPR should only be paused fora 30-second asystole check if all other criteria are met.

13.3 Verification of Death and Termination of Resuscitation by Clinicians (as per the table on page 15 and AACE/JRCALC guidelines)

1. Introduction

- The challenge for clinicians is to differentiate those patients for whom cardiac arrest is their natural end of life event and for whom resuscitation is not indicated from those where there is a chance to restore life to a quality acceptable to the patient and in accordance with their wishes through provision of optimum pre-hospital care.

- Where no explicit decision about CPR has been considered and recorded in advance, there should be an initial presumption in favour of CPR.

- However, in some circumstances where there is no recorded explicit decision (for example, for a person in the advanced stages of a terminal illness where death is imminent and unavoidable and CPR would not be successful), a carefully considered decision not to commence inappropriate CPR is appropriate.

- For patients in whom there is no chance of survival, CPR is not supported; for example:

    - where resuscitation would be both futile and distressing for the patient, relatives, friends and healthcare personnel

    - where time and resources would be ineffective undertaking such measures.

- Every effort should be made to identify patients with DNACPR form, ReSPECT forms, treatment escalation plans or advanced directives.

- The views of an attending general practitioner (GP), ambulance doctor or relevant third party should be considered.

- CPR should not be attempted, or it should be abandoned if already started by the general public or CFRs if the paramedic is as certain as they can be that a person is dying as an inevitable result of underlying disease (it is therefore their natural end of life event) and CPR would not re-start the heart and breathing for a sustained period.

- Where there is uncertainty, it is acceptable to commence BLS while further information is rapidly gathered to enable the decision to be made on whether to then stop resuscitation.

2. Conditions Unequivocally Associated with Death

The following conditions are unequivocally associated with death in all patients including children, and can be used by clinicians to verify death:

- **Decapitation**
- **massive cranial and cerebral destruction**
- **hemicorporectomy**
- **decomposition/putrefaction** – where tissue damage indicates that the patient hasbeen dead for some hours, days or longer
- **incineration** – the presence of full thickness burns with charring of greater than 95%of the body surface
- **hypostasis** – the pooling of blood in congested vessels in the dependent part of thebody in the position in which it lies after death
- **rigor mortis** – the stiffness occurring after death from the post mortem breakdown ofenzymes in the muscle fibres. In children this can occur rapidly so resuscitation shouldbe attempted unless there is another condition unequivocally associated with death.
- **foetal maceration in a newborn** – when the child is stillborn and has died more thana day before birth as indicated by the skin loosening and sloughing off when touched.

- It is appropriate not to commence CPR in these cases. However, in cases of apparent rigor mortis, hypostasis and foetal maceration, take an ECG while confirming the absence of a pulseand breathing.

- In cases that do not meet these criteria, where it is thought that CPR is futile or inappropriate, donot terminate resuscitation until senior clinical advice has been sought.

- If access to the patient is restricted and it is believed that one of the conditions above may existthen a multi-Agency decision (Fire, Police, Coast Guard etc.) should be made on whether ongoing rescue should continue or the incident becomes that of body recovery. The JESIP principles should be followed and include factors such as risks posed to the Rescue teams.

- **If access to the patient is restricted, but the patient is clearly deceased, every possibleopportunity should be made to record an ECG demonstrating the presence of asystole.*

Hypostasis

- Initially, hypostatic staining may appear as small round patches looking rather like bruises, butlater these coalesce to merge as the familiar pattern. Above the hypostatic engorgement thereis obvious pallor of the skin.

- The presence of hypostasis is diagnostic of death – the appearance is not present in a livepatient. In extremely cold conditions, hypostasis may be bright red in colour, and in carbonmonoxide poisoning it is characteristically ‘cherry red’ in appearance.

Rigor mortis

- Rigor mortis occurs first in the small muscles of the face, next in the arms, then in the legs;these changes taking 30 mins to 3 hrs. Children will show a more rapid onset of rigor. The recognition of rigor mortis can be made difficult where, rarely, death has occurred from tetanus or strychnine poisoning.

- In some, rigidity never develops (infants, cachectic individuals, and the aged), while in othersit may become apparent more rapidly (in the conditions in which muscle glycogen is depleted):exertion (which includes struggling), strychnine poisoning, local heat (e.g. from a fire, hot roomor direct sunlight).

- Rigor should not be confused with cadaveric spasm (sometimes referred to as instant rigor mortis), which develops immediately after death without preceding flaccidity following intense physical and/or emotional activity. Examples include death by drowning or a fall from a height.In contrast with true rigor mortis, only one group of muscles is affected and **not** the whole body. Rigor mortis will develop subsequently.

3. Other Conditions Where Resuscitation May Be Withheld or Discontinued

- In addition to the conditions above, there are other criteria which can be used to confirm death, and which indicate that resuscitation should not be attempted, or may be discontinued:
  - The presence of a DNACPR (do not attempt cardiopulmonary resuscitation) order, anadvance directive or ReSPECT form that states the wish of the patient not to undergoattempted resuscitation.
  - If a person is known to be in the final stages of an advanced and irreversible condition, in which attempted CPR would be both inappropriate and unsuccessful, CPR should not be started. Even in the absence of a recorded DNACPR decision, paramedics may be able torecognise this situation and make an appropriate decision, based on clear evidence that they should document. Where there is doubt, it may be necessary to start CPR and to review whether or not to continue in the light of any further information received during theresuscitation attempt, or to seek senior clinical advice. The relatives/carers should be informed of this decision.

  - Submersion for longer than 90 minutes (refer to **Immersion and Drowning**).

    Final stages of an advanced and irreversible condition

    An irreversible condition may be defined as a condition, injury or illness that meets all three of the following criteria:
    1 May be treated, but can never be cured or eliminated.
    2 Leaves the person unable to care or make decisions for him or herself.
    3 Without life-sustaining treatment is fatal.

- There is no realistic chance that CPR would be successful if **ALL** the following exist together:

- More than 15 minutes has elapsed since the onset of cardiac arrest.
- No evidence of bystander CPR in the 15 mins before the arrival of the ambulance.
- Exclusion factors are absent Drowning, hypothermia, poisoning/overdose, pregnancy, child/neonate).
- Asystole for >30 seconds on the ECG monitor screen. CPR should only be paused for a 30-second asystole check if all other criteria are met.

- Whenever possible a confirmatory ECG demonstrating asystole should be documented as evidence of death. In this situation a 3- or 4-electrode system using limbs alone will cause minimum disturbance to the deceased. If a paper ECG trace cannot be taken, it is permissible to make a diagnosis of asystole from the screen alone (**NB** due caution must be applied in respect of electrode contact, gain and, where possible, using more than one ECG lead).

- It is important that in order to confirm death, the rhythm is unequivocally persistent and continuous asystole. If CPR is stopped when any other rhythm is present (i.e. agonal rhythm or PEA), it is important to wait until all cardiac electrical activity has ceased and the ECG shows asystole. Only at this stage should the patient be declared life extinct and any the family/relatives informed that this is the case. This is because there have been well- documented cases where spontaneous ROSC has occurred following termination of resuscitation.

4. Termination of Resuscitation

- If there is a realistic chance that CPR could be successful, then resuscitation should continue to establish the patient's response to ALS interventions (ALS is defined in the **Advanced Life Support** guideline) **and starts at the time of the arrival of an ALS provider.*

- *If, following 20 minutes of advance life support interventions, where all reversible causes have been identified and corrected, the patient remains in asystole then resuscitation may be discontinued except in cases listed below:
  - pregnancy
  - hypothermic patients (where hypothermia is the primary cause of the cardiac arrest)
  - suspected drugs overdose/poisoning
  - Infants, children and adolescents (i.e. all those < 18 yrs age)

- These patients should be transported to the nearest facility with on-going resuscitation, unless the circumstances would make transport futile.

4.1 Pulseless electrical activity

- Pulseless electrical activity (PEA) is a scenario that presents challenges to the decision making about the cardiac arrest management.

- Although there is ongoing myocardial electrical activity, the outcome is often

poor.

- An early decision around the need for rapid removal to hospital should be considered.

- The use of cardiac ultrasound, if available, may enable more guided therapy or decision making.

- Senior clinicians may be asked to advise on situations where the patient remains in pulseless electrical activity (PEA) following 20 minutes of resuscitation, and where paramedics on scene believe continuing the resuscitation is futile. Refer to local senior clinician guidance.

- There is limited evidence to support when one should terminate a PEA cardiac arrest; however, the following factors are important to consider when making this decision:

  – the interval of time in arrest without life support

  – the absence of reversible causes

  – the presence of co-morbidities

  – the rate/width of the QRS complexes

  – the trend and absolute value of $EtCO_2$.

- Some patients undergoing prolonged CPR can survive with good outcome.

- Young age, myocardial infarction and potentially reversible causes of cardiac arrest such as hypothermia and pulmonary emboli are associated with a better outcome, especially when the arrest is witnessed and followed by prompt and effective resuscitative efforts.

4.2 Refractory VF

- A significant number of patients may present in VF which is unresponsive to repeated defibrillation shocks and amiodarone.

- Many cases of VF are secondary to myocardial ischaemia as a result of myocardial infarction, which is potentially reversible with PPCI. Resuscitation should not therefore be stopped in cases of refractory or persistent VF.

- Where practical, transport patients with persistent/refractory VF or pulseless VT to a cardiac arrest centre with ongoing CPR, because further in-hospital treatment may occasionally be successful.

4.3 Agonal rhythm

- As resuscitation progresses, organised QRS complexes often deteriorate to wide, low amplitude, irregular complexes, known as an idioventricular or agonal rhythm. This is typically at a rate < 10bpm and is not associated with effective cardiac output.

- This rhythm is usually a prelude to asystole.

- A persistent agonal rhythm can be treated as asystole and resuscitation can be discontinued if it has persisted continuously for more than 20 mins, *despite all appropriate advanced lifesupport interventions, where all reversible causes have been identified and corrected.

5. Advance Decision to Refuse Treatment (ADRT) and Do Not Attempt Resuscitation(DNACPR)

5.1 Advance Decision to Refuse Treatment (ADRT)

- ADRTs are a form of advance decisions as defined within the Mental Capacity Act 2005(MCA).

- Providing ADRTs meet all the requirements of the MCA, they will be legally binding for health and social care professionals. This makes ADRTs quite distinct from other aspects of advancecare planning.

- The MCA and MCA Code of Practice clearly define that the responsibility for making anadvance decision lies with the person making it.

- An advance decision enables someone aged 18 and over, while still capable, to refusespecified medical treatment for a time in the future when they may lack the capacity to consent to or refuse that treatment.

- An ADRT must be valid and applicable to current circumstances. If it is, it has the same effectas a decision that is made by a person with capacity: healthcare professionals (including paramedics) must follow the decision.

- ADRT are only valid if the patient is unconscious or lacks capacity. If the patient has capacitybefore arrest and states their wishes at that time, they should be followed.

- Paramedics will be protected from liability if they:
  - stop or withhold treatment because they reasonably believe that an advance decisionexists, and that it is valid and applicable
  - treat a person because, having taken all practical and appropriate steps to find out if theperson has made an advance decision to refuse treatment, they do not know or are not satisfied that a valid and applicable advance decision exists.

- If the advance decision refuses life-sustaining treatment, it must be:
  - in writing, which includes being written on the person's behalf or recorded in their medical notes
  - signed by the maker in the presence of a witness who must also sign the document. It can also be signed on the maker's behalf at their direction if they are unable to sign it for themselves
  - verified by a specific statement made by the maker, either included in the document or a separate statement that says that the advance decision is to apply to the specified treatment even if life is at risk. If there is a separate statement this must also be signed and witnessed.

- To establish whether an advance decision is valid and applicable, paramedics must take reasonable steps to find out if the person:
  - has done anything that clearly goes against their advance decision
  - has withdrawn their decision
  - has subsequently conferred the power to make that decision on an attorney
  - would have changed their decision if they had known more about the current circumstances.

Lasting Power of Attorney (LPA)

- There are two types of LPA: property and financial affairs and personal health and welfare.

- Only a personal health and welfare LPA allows decisions to be made on the person's behalf when they lack capacity for life-sustaining treatment if detailed within Section 5. This has to be expressly provided in the document.

- The document should be viewed before basing a decision on information provided by the named individual.

- An ADRT supersedes an LPA, unless the LPA was created later and is valid and applicable to the circumstance.

- If there is any genuine doubt about the validity of an advance decision, paramedics must act in the patient's 'best interests'.

- Paramedics must consider any evidence as an expression of previous wishes when establishing the person's best interests. This may involve the provision of clinical treatment, including resuscitation.

- It is the paramedic in charge of a patient's care and treatment who must decide what is in his/her best interests.

- Ambulance clinicians should be guided by advice from those close to a patient regarding the patient's previously expressed wishes and beliefs, even though

the patient's spouse, family, friends or colleagues may not be entitled to give or withhold consent to treatment on the patient's behalf.

- Decisions must not be based on assumptions made solely on factors such as the person'sage, disability or a professional's subjective view of a person's quality of life.

- When an advance decision is not followed, the reasons must be clearly documented.

- In Scotland and Northern Ireland, ADRTs are not covered by statute but it is likely that they are binding under common law. Although no cases have been taken to court in Scotland or Northern Ireland, it is likely that the principles that emerged from consideration of cases by theEnglish courts (before the Mental Capacity Act) would also guide decision making in these jurisdictions.

- An advance refusal of CPR is likely to be legally binding in Scotland and Northern Ireland if:
  - The person was an adult at the time the decision was made (16 years old in Scotland and18 in Northern Ireland).
  - The person had capacity when the decision was made.
  - The circumstances that have arisen are those that were envisaged by the person.
  - The person was not subjected to undue influence in making the decision.

- If an ADRT does not meet these criteria but appears to set out a clear indication of theperson's wishes, it will not be legally binding but should be taken into consideration in determining the person's best interests.

5.2 Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) Order

- Currently, DNACPR decisions are made, in the main, for children and adults for whom attempting CPR is inappropriate; for example, a patient who is at the end stages of a terminalillness or is suffering from a life limiting congenital abnormality.

- In these cases, a DNACPR decision can enable the person to die with dignity and appropriatesupport.

- A DNACPR decision applies solely to cardiopulmonary resuscitation. All other treatment andcare that a patient requires is not precluded or influenced by a DNACPR decision.

- DNACPR documents should, ideally, move with patients as they are transferred from onesetting to another – particularly when death is expected (i.e. end of life patient being discharged home to die).

- In the absence of the original copy, a photocopy should be considered valid.

5.3 Validation of DNACPR

- DNACPR recommendations and similar decisions are often recorded on a form approved by the organisation providing the care for the patient. The design and content of these forms can vary significantly.

- Care planning documents (particularly for children) can often contain DNACPR sections and formal letters can also be used to communicate resuscitation instructions to other professionals. These are often communicated to ambulance control and logged against the patient's address.

- It is important to note that all of the above methods are acceptable methods for recording and communicating resuscitation decisions. Ideally a DNACPR form should:
  - explicitly identify the patient
  - explicitly identify the circumstances in which the DNACPR recommendation applies
  - identify if the patient and their family are aware of the DNACPR recommendation
  - identify by whom and when the DNACPR form was produced

- If a review date is specified, expiry of that date DOES NOT invalidate the DNACPR. A decision must be made and recorded by the paramedic (with senior clinical advice if appropriate) as to whether the document is still considered valid.

- Valid DNACPRs are applicable to patients who are in the dying phase (hours to live), peri-arrest or who have just died.
  Where a valid DNACPR exists, paramedics should support dying patients, provide appropriate comfort measures and support relatives and carers.

- Contact should be made with the patient's GP, district nursing team or equivalent, to ensure the provision of ongoing care and support and to ensure the death is managed appropriately.

- In cases where the DNACPR decision cannot be validated or is unclear, any evidence obtained should be taken into consideration in determining the person's best interests. This may require paramedics to continue to provide care and treatment (including basic life support for cardiac arrests) and seek further advice from senior clinicians.

- Paramedics will be protected from liability if they stop or withhold treatment because they reasonably believe that a DNACPR exists, and that it is valid and applicable.

5.4 Recommended Summary Plan for Emergency Care and Treatment (ReSPECT)

- A ReSPECT form summarises treatments to be considered and those that would not be wanted or would not work for the patient in an emergency. It might include recommendations of when transfer to hospital would be desirable or not.

- ReSPECT is a summary of recommendations to help the paramedic to make immediate decisions about the patient's care and treatment. It contains recommendations about whether CPR should be attempted.

- A ReSPECT form contains more than a CPR decision: it is not just a replacement for a DNACPR form; it is to promote recording an emergency care plan by many people, and may recommend active treatment, **including attempted CPR** if it should be needed.

- Like a DNACPR form, it is not legally binding; clinical judgment must still be applied and paramedics may decide not to follow the recommendations on a ReSPECT form.

- Paramedics should be prepared to justify valid reasons for overriding the recommendations on a ReSPECT form. For example, a decision to treat an immediately reversible cause such as a choking person would be reasonable if it was believed that this was not the circumstance envisaged when the person decided that they did not want CPR.

- The ReSPECT form should be with the person and be readily available. (In some areas it may be accessed electronically.)

6. Deaths During a Major Incident (further detail in section 13.10)

- In a major incident scenario, deceased patients **MUST** have a mass casualty assessment/triage card attached to them with the following details recorded:
  - the patient identified as dead.
  - the time that the patient was identified as deceased
  - the identity of the paramedic making the decision.

- Deceased patients should only be moved if they are blocking an evacuation route for other casualties, as the location is to be treated as a crime scene. Follow major incident protocols.

7. Action to Be Taken after Death Has Been Established

- Following termination of a resuscitation attempt, removal of advanced airways and/or indwelling cannulas should be in accordance with local protocol. **For SCAS local protocol see section 13.5.2 below.*

- Complete documentation – including all decisions regarding do not attempt resuscitation DNARCPR/advance decision to refuse treatment/ReSPECT form.

- It is not necessary for a medical practitioner to attend to confirm the fact of death. Moreover, there is no obligation for a GP to do so when requested to attend by ambulance control.

- Services should be encouraged, in conjunction with their Coroner's service (or Procurator Fiscal in Scotland), to develop a local procedure for handling the body once death has been verified by ambulance personnel.

- A locally approved leaflet should be adopted for handing to bereaved relatives.

- Any consideration for organ donation should not influence resuscitation attempt decision making:
  - If there is no ROSC, it is unlikely organ donation will occur.
  - If there is ROSC but the patient is not suitable for critical care, they are unlikely to be admitted solely for donation purposes.
  - A long downtime usually makes organs unsuitable for donation.
  - Tissue donation occurs the next day in the mortuary not in the hospital, so transport to hospital does not change the chance of tissue donation.

8. Supporting Bystanders Witnessing Cardiac Arrest

- In many cases of OHCA a close relative or friend may have performed CPR before ambulance service help arriving.

- Relatives may find it more distressing to be separated from their family member during the resuscitation attempt, and there may be advantages to them being present.

- However, it is also important to acknowledge that these are distressing events, and so there can be disadvantages to the relative being present.

- There are a number of key principles, actions and safeguards that ambulance professionals should be aware of, and adopt, to support relatives through the witnessing of a resuscitation attempt:
  - Always acknowledge the difficulty of the situation.
  - When possible try to ensure that one member of the team is with the relative at all times. This can be challenging to achieve with limited numbers of people on scene, but will ensure the relative is supported as much as possible during the event.
  - Ensure the bystander understands they have a choice of whether or not to be present.
  - Ensure that introductions are made and names known.
  - Give clear, simple and honest explanations of what is happening.
  - Ask the relative, in a sensitive manner, not to interfere with the resuscitation process, but allow them to touch the patient when it is safe to do so should they so wish.
  - Explain the procedures in simple terms.

- If the patient dies, explain that there will be a period where actions will need to be taken forexample, that equipment will need to be removed.

- Best attempts should be made to ensure that any member of the public who has deliveredCPR is supported at scene and given welfare advice. Bystanders should be signposted totheir GP in the first instance.

8.1 Breaking Bad News

- Breaking bad news is best done with a well-prepared, honest and simple approach.

- Relatives will often not remember the details of what was said, but they will remember how they were made to feel.

- Paramedics should try to:
  - Take time to prepare personal appearance; check and tidy uniform/clothing, remove glovesand, if necessary, wash hands.
  - Confirm the name of the deceased before speaking to the relatives, establish their relationship and confirm the correct relatives where there are multiple patients.
  - Adopt a position at the same level as the relative.
  - Use simple language and avoid medical jargon.
  - Avoid long preamble such as asking about the patient's pre-morbid health.
  - Ensure the word 'dead' or 'died' is introduced early in the conversation.
  - Use periods of silence to enable the relatives to absorb and understand what they arebeing told.

- Remember to anticipate the types of reaction or emotional response to the bad news and beready to support the relatives as much as possible.

8.2 Children and Young People Witnessing Cardiac Arrest

- Children and young people that witness and are present at a cardiac arrest, particularly of aclose relative, may need additional support.

- Before leaving the scene, consider making a referral to their GP **and or a Safeguardingreferral*

- Consider signposting parents/carers to organisations that provide specific support forbereaved children, as per local procedures.

KEY POINTS!

- **Paramedics are increasingly being called upon to diagnose death and initiate theappropriate clinical response.**

- After cardiac arrest, resuscitation efforts including ALS must be made whenever thereis a chance of survival, unless the person has made an advance directive refusing CPR in these circumstances.

- Some conditions are incompatible with recovery and in these cases resuscitation should not be attempted.

- **In some situations, once the facts of the patient and situation are known, resuscitation efforts can be discontinued.**

- Patients can and do make anticipatory decisions NOT to be resuscitated.' An advance directive must be respected and a DNACPR recommendation should be used to guide decision making on whether or not to attempt CPR.

- **These guidelines should be read in conjunction with local policies and procedures.**

- Rigor mortis can appear quickly following a child death and resuscitation should always be attempted unless there is a condition unequivocally associated with death.

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* Items in Italic with an asterisk are SCAS additions to the AACE/JRCALC Guideline.

13.4 PROCEDURE FOLLOWING VERIFICATION OF THE FACT OF DEATH

13.4.1 Patients in cardio-pulmonary arrest are to be actively resuscitated whenever there is any chance of survival. Nevertheless, it is possible to identify patients in whom there is absolutely no chance of survival and where resuscitation, or continued resuscitation, would be futile and distressing for relatives, friends and healthcare professionals.

This policy is in accordance with the AACE/JRCALC Guidelines as updated.

All SCAS personnel may discontinue/withhold resuscitation attempts if any of the following is in place:-

- Advance Care Plan (ACP)
- Advance Decision to Refuse Treatment (ADRT)
- Do Not Attempt Cardiopulmonary (DNACPR) is in place.

- There must be a statement of some sort that the ADRT/DNARCPR stands **"even iflife is at risk"** this must be in writing, signed, and witnessed and within the review date.

A DNACPR decision does not include immediately reversible life-threatening clinical emergencies such as choking, attempted suicide or anaphylaxis, when appropriate emergency interventions, including CPR should be attempted.

Crew will obtain patient information from

- Patient care notes
- "Message in the bottle" in the person's refrigerator.
- Electronic Alert placed on the CCC computer aided dispatch database.

Suspicious circumstances or reason to suspect neglect, or mistreatment

Police to be informed via CCC, safeguarding referral made and crew remains withthe deceased until Police arrive.

13.4.2 Patient in a Private residence – Expected Death

1. Where the death is expected, or the patient has been seen by his/her GP within the last 14days, the GP (or OOH, the GP's representative) should be informed. This can be achieved by contacting:

   - the GP Surgery (in hours)
   - the Out of Hours Call Centre. The OOH service will contact the Surgery and inform theGP on the next working day
   - CCC

2. If there are any suspicious circumstances or reason to suspect neglect or mistreatment then the Police should be informed as per (OPP No7 – SCAS Attendance at Sudden Death in Adults) and a safeguarding referral made as per the CSPP 1 Safeguarding Policy.

3. Relatives can make arrangements with local Funeral Directors of their choice or the on duty funeral Directors out of hours to have the body removed.

4. If the patient has been seen by a Doctor in the last 14 days and that Doctor knows the cause of death, s/he can issue the Death Certificate. There is no requirement for the GP to visit, but they (the GP) may do so for humanitarian/social reasons. The OoH GP service is unlikely to be in a position to issue a Death Certificate.

5. The documentation process is completed.

6. Ambulance personnel are under no obligation to remain if relatives are present and may leave the scene once documentation is completed.

However under the holistic patient- care principal, SCAS personnel may decide to remain until they are satisfied that friends and / or relatives in attendance can care for the next of kin, especially where elderly infirm relatives or parents of young children are involved. Relatives should be given every possible support when dealing with this traumatic event.

Summary:

- Inform GP of death via surgery telephone or OOH representative
- Suggest relatives/carer could inform other family members for support.
- Suggest relatives/carer could contact Funeral Directors for further advice to conform to faith/beliefs and to have the deceased taken to a chapel of rest.
- If relatives/carer do not have preferred Funeral Director, CCC to ask Police to provide "on call" Funeral Director for location, clearly define **expected death no requirementfor Police to attend, deceased information (Ambulance incident number, name, age/date of birth, address, GP details state DNACPR or ACP in situ patient detail with GP).**
- Provide "What to do when someone dies leaflet".
- If there are concerns that cannot be reconciled within this process, discuss the situation with Clinical Support Desk. The decision-making process is then recorded for the Coroner.

After the documentation process is fully completed and a copy of the CAS 101 and ROLE form ePR or paper is left with the responsible person, ambulance personnel are under no obligation to remain with the relative/carer.

13.4.3 Patient in a Private residence – Unexpected Death

1. Where the death is unexpected and of apparent Natural Causes, contact the patient's GP(procedure as above), and the police, **MUST** be informed, as per (OPP No7 – SCAS Attendance at Sudden Death in Adults) via CCC.

The following information will be required:

- Name and contact number of the attending crew
- Time, Address and location of the deceased within the address
- Name, DOB and address of the person that found the deceased and their relationshipto the deceased
- The Patient's name
- The Patient's age and / or date of birth
- The Patient's home address
- The Patient's GP, Surgery and telephone number (if possible)
- Next of Kin details (if possible)

(This information may be contained in the “Message in a Bottle” scheme in the fridge if no relatives are present)

2. The documentation process is completed CAS 101 and ROLE form ePR or paper and copies left at scene with the responsible person.

3. Ambulance personnel are under no obligation to remain if relatives are present and may leave the scene once documentation is completed. However, under the holistic patient- care principal, SCAS personnel may decide to remain until they are satisfied that friends and / or relatives in attendance can care for the next of kin, especially where elderly infirm relatives or parents of young children are involved. Relatives should be given every possible support when dealing with this traumatic event.

4. More than one body at a location is immediately “suspicious circumstances” and the Policemust be informed by the CCC.

Summary:

Inform GP of death via surgery telephone or OOH representative

If GP is able to support cause of death:-

- Suggest relatives/carer could inform other family members for support.
- Suggest relatives/carer could contact Funeral Directors for further advice to conform to faith/beliefs and to have the deceased taken to a chapel of rest.
- Should there be any concerns that cannot be reconciled within this process, discuss the situation with Clinical Support Desk. (Decision making process isthen recorded for the Coroner)
- If relatives/carer do not have preferred Funeral Director, the Ambulance Service CCC will ask the Police to provide an “on call” Funeral Director for your location, they will berequired to provide the Ambulance incident number, name, age/date of birth, address, GP details and will clearly state the situation to the Police who are acting in the capacity of the Coroner’s Officer.
- Provide “What to do when someone dies leaflet”
- The documentation process should be fully completed CAS 101 and ROLE formePR or paper and copies left at scene with the responsible person. No obligation for crew to remain, however if no relative/carer present, the attending crew mustremain with deceased until Police arrive.

If GP is unavailable or is not able to support cause of death:-

- Suggest relatives/carer could inform other family members for support.
- Should there be any concerns that cannot be reconciled within this process, discuss the situation with Clinical Support Desk. (Decision making process isthen recorded for the Coroner)
- Police to be informed via CCC as they may wish to dispatch Forensic

Medical Examiner. Deceased information (Ambulance incident number, name, age/date ofbirth, address, GP details, state the situation and further clinical information with GP or OOH representative)

- The documentation process should be fully completed CAS 101 and ROLE form ePR or paper and copies left at scene with the responsible person and relativesadvised that Police/Coroner's Officer will or will not be attending. There is no obligation for the ambulance crew to remain, however if no relative/carer present, the attending crew must remain with deceased until Police arrive.
- Provide "What to do when someone dies leaflet"

13.4.4 Patient in a Public Place (hereby defined as any place other than a patient's private residence) – Unexpected Death

1. Under most circumstances, establishing the Fact of Death in a public place is not an option. All patients should be resuscitated and removed to hospital, with resuscitation continuing until the ED personnel decide to cease efforts. The exceptions to this are (seealso 13.3):
   - Where "ROLE" criteria apply
   - Where suspicious circumstances surrounding the death or the need to conduct an investigation exists. These may include, for example, industrial accidents, as well aspossible criminal activity. **(However it must be stressed that the Preservation ofLife, including attempted resuscitation and removal where appropriate, comes before scene preservation)**
   - Where timely removal of the patient is not possible and following completion of full ALSprotocols, or where full ALS is not possible due to a patient being trapped with ROLE criteria (i.e. in a serious road traffic incident)

2. In **any** circumstance of a possible death in a Public place (verified or otherwise), the Police **MUST** be informed, as per (OPP No7 – SCAS Attendance at Sudden Death in Adults) via CCC.

Summary:

- Suspicious circumstances or reason to suspect neglect, or mistreatment. Police to be informed via CCC, safeguarding referral made and crew remains with the deceased until Police arrive.
- Police to be informed via CCC as they may wish to dispatch Forensic Medical Examiner. Where possible the deceased' information should be supplied (i.e. Ambulance incident number, name, age/date of birth, address, GP details)
- Should there be any concerns that cannot be reconciled within this process discuss the situation with Clinical Support Desk. (Decision making process is then recorded for the Coroner).

The documentation process should be fully completed; relatives advised that Police/ Coroner's Officer will or will not be attending. Attending crew must remain with deceased

until Police arrive.

13.4.5 This process will ensure that the needs of the patient, their relatives/carers, GP's and Police/Coroners are all meet by SCAS. These situations are dealt with by SCAS staff regularly and there have been in comparison very few concerns, but the ones that have been received need to be acted upon to ensure that we are able to improve the service we provide.

13.5 IMMEDIATE ACTIONS AFTER VERIFICATION OF THE FACT OF DEATH FOLLOWING RESUSCITATIVE EFFORT

13.5.1 Ambulance personnel will always ensure the dignity of the deceased patient is maintained.

13.5.2 To aid in any subsequent investigation (and to reduce the possibility of body fluid spillage) a Patient who has been aggressively resuscitated with ALS techniques should NOT have the ET/LMA, cannulae and defibrillator pads and electrode pads removed. Where relatives are present, Ambulance personnel should explain that medical equipment used on the patient must remain in situ.

SCAS has a standardised post resuscitation procedure for all unexpected adult deaths in thecommunity, where attempts have been made to resuscitate the patient and, the death has been confirmed at the scene.

This mirrors existing procedures in the Emergency Departments following unsuccessful attempted resuscitation in hospital, and has been introduced after consultation with Coronerswithin the South Central region. It has also been discussed at the SCAS Clinical Review Group.

- All intravenous lines, oral and nasal airways, laryngeal mask airways and endotracheal tubes should be left in place following any attempt at cardiopulmonary resuscitation in patients who have died unexpectedly to facilitate investigation of that death by the coroner and to protect SCAS clinical staff.

- These devices must NOT be removed by SCAS clinical personnel in the event of unsuccessful resuscitation attempt prior to transfer to the mortuary.

13.5.3 Where possible patients should be positioned to allow on-scene relatives to view the body should they request this. The patient will normally be placed in a "neutral straight line" position, either in bed, or where necessary on the floor, utilising pillows and blankets. Patientsshould not be carried upstairs even if this is requested by relatives.

13.5.4 <u>Patient in an Ambulance</u>

1. **Whilst this will not usually be undertaken**, where a patient has

undergone full ALS protocols but is unresponsive (as in 13.3 above), the Fact of Death may be verified en route to ED. The **only** justifiable reason for taking this action is:

- The patient will not survive further resuscitation attempts
- The continued journey to ED will be protracted (time/distance) in excess of 20 minutesremaining
- There is an increased risk to the crew and members of the public by continuing to convey under emergency indications (heavy traffic, adverse weather conditions etc).

2. As technicians / AAPs, ECAs and PTS crews are unable to perform full ALS level resuscitation, crews should make a decision as to whether to wait for paramedic / nurse back-up, or perform BLS to hospital. If a crew feels that the quickest option is to go to hospital then BLS should be continued until arrival at hospital.
3. In general, once a decision has been made to start resuscitation, efforts will not normally be terminated in the ambulance unless the criteria in section 1 (above) apply.
4. Where this occurs, CCC must be informed. CCC must inform the Police (to inform the Coroner) and the ED staff Resuscitation Team. If resuscitation is ceased in the ambulanceon route to hospital, the place of death is the address of the receiving hospital.
5. Ambulance personnel who take this course of action will be required to comply with the provisions in 13.8.5 below.
6. Should a patient deteriorate and go into cardiac arrest while being conveyed on a PatientTransport vehicle (or on an E&U vehicle) with a non-emergency crew the crew should immediately call for a frontline crew.

The non-qualified staff members should render immediate basic first aid and ensure a patent airway and commence BLS if appropriate. If the patient has a valid DNACPR in place the crew should follow the above procedure but withhold CPR and await the arrival of the frontline crew. The frontline crew will then take responsibility for the patient and transport to the most appropriate receiving unit or the mortuary in line with section 13.8.5 of this policy.

13.6 PATIENTS WHERE DEATH IS VERIFIED IN A PUBLIC PLACE – REMOVAL OF BODIES

13.6.1 When the Coroner needs to be involved, the Police or Coroner's Officer must see the body atthe place where the Fact of Death is established. The Police may elect to dispatch a Police Forensic Medical Examiner.

13.6.2 Therefore, as far as practically possible, the body must not be moved or removed from scene.

13.6.3 CCC must be kept fully informed of the situation at all times and appropriate notes made on the patient report form.

13.6.4 However, there are circumstances which may dictate a need for the body to

be moved, primarily the removal of a body from public view.

13.6.5 If not on scene, the Police must be informed of the situation and their advice sought.

In such circumstances, and subject to Police approval, SCAS personnel may convey the bodyto the nearest Mortuary via the Emergency Department. CCC must be made aware of the details of the patient as far as is known and the destination. This must be passed to the Police. The Attendant will travel in the patient compartment with the patient, as with any othertransfer.

13.7 ACCEPTANCE PROCEDURE FOR BODIES AT HOSPITALS

It is beyond the scope of this document to outline individual hospital trust guidelines on the admittance of bodies to the mortuary. All SCAS personnel must adhere to local guidelines and practice relevant to the trust. The following is a generic guide only.

13.7.1 When Relatives are **NOT** accompanying patient or following Ambulance to hospital:

1. The Ambulance Crew will inform CCC of the situation. CCC must inform Police (to informthe Coroner) and ED that a body is inbound. During the Mortuary quiet hours ED will arrange for the mortuary to be opened and staffed, via internal hospital procedures.
2. The Doctor's attendance in the Ambulance is no longer required, nor is the Doctor's signature on the Disposal form. The Driver will ensure that the Patient is booked on to EDcomputer system (PAS) under:
   - name if known (and confirmed at scene by relative)
   - "unknown male/female – believed to be **" - if identity not confirmed
   - "unknown male/female" if identity unknown
3. The Ambulance crew will then remove the Patient to the mortuary. SCAS personnel will assist the mortuary staff with removal of the body from the Ambulance trolley cot only.
4. Ambulance crew and mortuary staff will complete relevant documentation as appropriate.
5. Further involvement with relatives is undertaken by hospital staff / Police.

13.7.2 When Relatives **ARE** accompanying patient or following Ambulance to hospital:

1. The Ambulance Crew will inform CCC of the situation. CCC must inform Police (to informthe Coroner) and ED that a body is inbound with relatives accompanying / following the deceased.
2. The Patient will be unloaded from Ambulance and removed to ED Cubicle or side room inthe normal way.
3. The Patient will be booked on to ED computer system (PAS) in the normal way.
4. Where death is verified in an Ambulance en route to hospital, and relatives are following, the Ambulance crew will remain at the ED and, together with the ED staff, will inform the relatives of their decision to terminate resuscitation.

13.8 THE MAJOR INCIDENT SITUATION

The procedures for dealing with deceased patients in a major incident will be outlined in themajor incident plan produced by the Emergency Planning Officers of SCAS and their divisional leads; the following is only a guide. If SCAS personnel find themselves in a situation where there are more than 1 casualty the principle of doing the most for the most should apply until additional resources arrive on scene.

13.8.1 The priority of the Major Incident situation is to “do the most for the most”. During the TriageSieve process it is vital that rapid assessment takes place. This does not allow enough timefor full assessment as described above and is limited to opening airway and establishing respiratory effort. Absence of respiratory effort, at that stage, is sufficient to Verify the Factof Death, along with any of the “Not Compatible With Life” criteria.

13.8.2 Appropriately trained SCAS personnel can verify the Fact of Death. A Doctor will confirm this and a record made of the time and name of the Doctor certifying on the Triage Card andPatient Report Form, if applicable. This would normally take place at one of three locations:

- Scene
- Casualty Clearing Station
- Receiving Hospital

13.8.3 Other than to gain access to the live or injured to effect rescue, deceased casualties or remains should not be moved without the authority of the Police. This will assist theinvestigation that will undoubtedly take place and avoid possible disturbance or destructionof Forensic Evidence.

13.8.4 Any movement of the deceased must be undertaken with care, to assist in subsequent Forensic investigations, and be carried out in a sympathetic and respectful manner. Bodiesshould not be covered with blankets or sheets, which could contaminate the body or immediate scene in Forensic Evidence terms, without (where possible), the approval of a Scenes of Crime Officer (SoCO) or other Police Officer.

13.8.5 As soon as practical, the Police will establish a Body Holding Area to which deceased casualties or remains will be taken. This will only occur upon authorisation by the Policeand under their supervision, prior to removal to a Temporary Mortuary.

13.8.6 Body Recovery may not take place until all live casualties have been removed, or e.g. until daylight hours, which will assist the gathering of Forensic Evidence. SCAS personnel will not normally be involved in this process, which will be carried out by specialist Police units with, where required, the assistance of the Fire Service.

13.8.7 Patients found to be dead on arrival at the Receiving Hospital will be dealt

with in the normalmanner and then transferred to the Temporary Mortuary, when established, by the Police inconjunction with the local authorities.

13.8.8 Where many fatalities are exposed to public view, SCAS will assist the Police in transportingbodies to Temporary Mortuaries if resources allow, thereby avoiding the arrival of many mortuary / hearse vehicles at the scene of the incident and assisting in continuity. (*Note: Transportation of the deceased must however, be viewed as a low priority and will only be undertaken when the evacuation of live casualties has been achieved.)*

13.9 BODIES IN PUBLIC PLACES (particularly transportation accidents etc)

13.9.1 Bodies in public places are likely to be treated as a crime scene until proven otherwise andtherefore are not generally the responsibility of the Ambulance Service. The Police have arrangements with (usually) local undertaking firms to remove from the scene. However, inexceptional circumstances, e.g. to assist the rapid removal of a body from the public gaze, SCAS personnel may be required to transport a body to the mortuary. In these cases, a Police Officer **MUST** travel in the Ambulance with the body, for continuity of evidence purposes, on behalf of the Coroner. Failure to do so may require the Ambulance crew beingsummoned at a later date to formally identify the body as that which they conveyed.

13.9.2 In general, all fatalities on the railway line will be treated as suspicious until evidence suggests otherwise, which means that the area will be treated as a crime scene. The BritishTransport Police will attend the incident, even though the County police service may be thefirst on scene.

13.9.3 SCAS personnel will treat bodies on the line in accordance with current SCAS clinical protocols regarding establishing the fact of death (bearing in mind the possible mechanismof injury and likelihood of resulting “Not Compatible with Life” circumstances) in conjunctionwith the Police Incident Officer and Rail Incident Officer, if present.

13.9.4 It is not an Ambulance Service function to collect or remove bodies or body parts from the railway. Network Rail has especially approved contractors for this purpose.

13.10 INFORMING NEXT OF KIN OF A DEATH

13.10.1 This is not a function of the Ambulance Service where tracing or contacting of relatives is required. This should be carried out either by the GP, Hospital, Police and / or Coroner’s Officer.

13.10.2 However, in the case of a death occurring in a Private residence, with relatives in attendance whilst resuscitation or other treatments are being performed, Ambulance personnel must keep them informed of the situation.

13.10.3 Where the Fact of Death has been established on scene, relatives present

should be informed of what has happened, and what will happen next (see Appendix 3). When informing relatives, SCAS personnel should be sympathetic, but use plain language, to ensure that there is no misunderstanding of the situation.

13.10.4 Where death is verified in an Ambulance en route to hospital, and relatives are following, the Ambulance crew will remain at the ED and, together with the ED staff, will inform the relatives of their decision to terminate resuscitation

13.10.5 When providing handover information (written or verbal) to receiving agencies, Ambulance staff must ensure that there is clear understanding that arrangements for informing the next-of-kin are to be made by that agency.

13.11 DOCUMENTATION

13.11.1 CCC must be kept fully informed of the situation at all times and appropriate notes made on the relevant reporting forms.

13.11.2 Relatives, if present, must be given a copy of the Trusts leaflet "*What to do when someone has died*" and given every assistance when dealing with this traumatic event.

13.11.3 The SCAS patient report forms or Electronic Patient Report form (ePR) must be completed by the person verifying the Fact of Death, not to be delegated and distributed as appropriate, which would require printing of the ePR on scene with Police officer signature if in attendance as per (OPP No7 – SCAS Attendance at Sudden Death in Adults):

- Patient Report Form (CAS101) or ePR complete with ECG strips (if available).
- The medical model should be completed on the continuation sheet (CAS 102) or as part of the ePR report.
- Recognition of Life Extinct form (CAS64), or the relevant sections of the ePR

13.11.4 Where copy forms are not required by agencies, these should be attached, with the top copy, to the Patient Report Form.

13.11.5 Where printing facilities on defibrillators are not available (e.g. Officers' AED's), the Recognition of Life Extinct may still be established, without the printout of the ECG, but this fact **must** be recorded on the Patient Report Form.

13.11.6 Where more than one body is at a location, Police assistance must be sought. It is vital that documentation is completed for each patient individually and can be identified uniquely for that patient. The Unknown patient name button on the ePR should be used for each patient to randomly

generate a phonetic alphabet patient name as per the NHSE Patient Safety Alert NHS/PSA/RE/2018/008 this should be shared with all other agencies on scene.

13.11.7 The documentation will be audited at least six monthly to monitor compliance with thispolicy. Audits will be presented to the Clinical Review Group and the Clinical Quality andSafety Committee. Any actions required will be implemented at Operational level by the Area Managers.

13.11.8 The Learning from Deaths Group review all cardiac arrests that occur after the arrival of a SCAS resource and specific groups of patients such as Learning Disabilities and Mental Health patients.

13.11.9 When SCAS staff re-attend a patient in Cardiac Arrest which has been reviewed by SCAS 999 or 111 service within the previous 24hrs, a datix incident report should be submitted. The circumstances of the Cardiac Arrest will be reviewed on a case by case basis by seniorclinical SCAS management.

13.12 AMBULANCE PERSONNEL SUPPORT MECHANISMS

13.12.1 Where required, and particularly in the case of incidents involving injuries "Not Compatible With Life" or death of paediatrics/children, SCAS personnel should be offered support via the Trust's arrangements for defusing/debriefing. This will be arranged by CCC and/or the Duty Officer.

REMINDERS - IF IN ANY DOUBT… **ROLE**

R **RESUSCITATE** on scene, RESUSCITATE in Ambulance, RESUSCITATE into ED

O **Only** declare in Ambulance if you are <u>sure</u> nothing else can be done and you are +20 mins from ED

L **Let** CCC know what's happening, so that Police / Coroner/ ED can be informed

E **Ensure** that Relatives are cared for.

13.13 PATIENT TRANSPORT SERVICES CONVEYING END OF LIFE PATIENTS

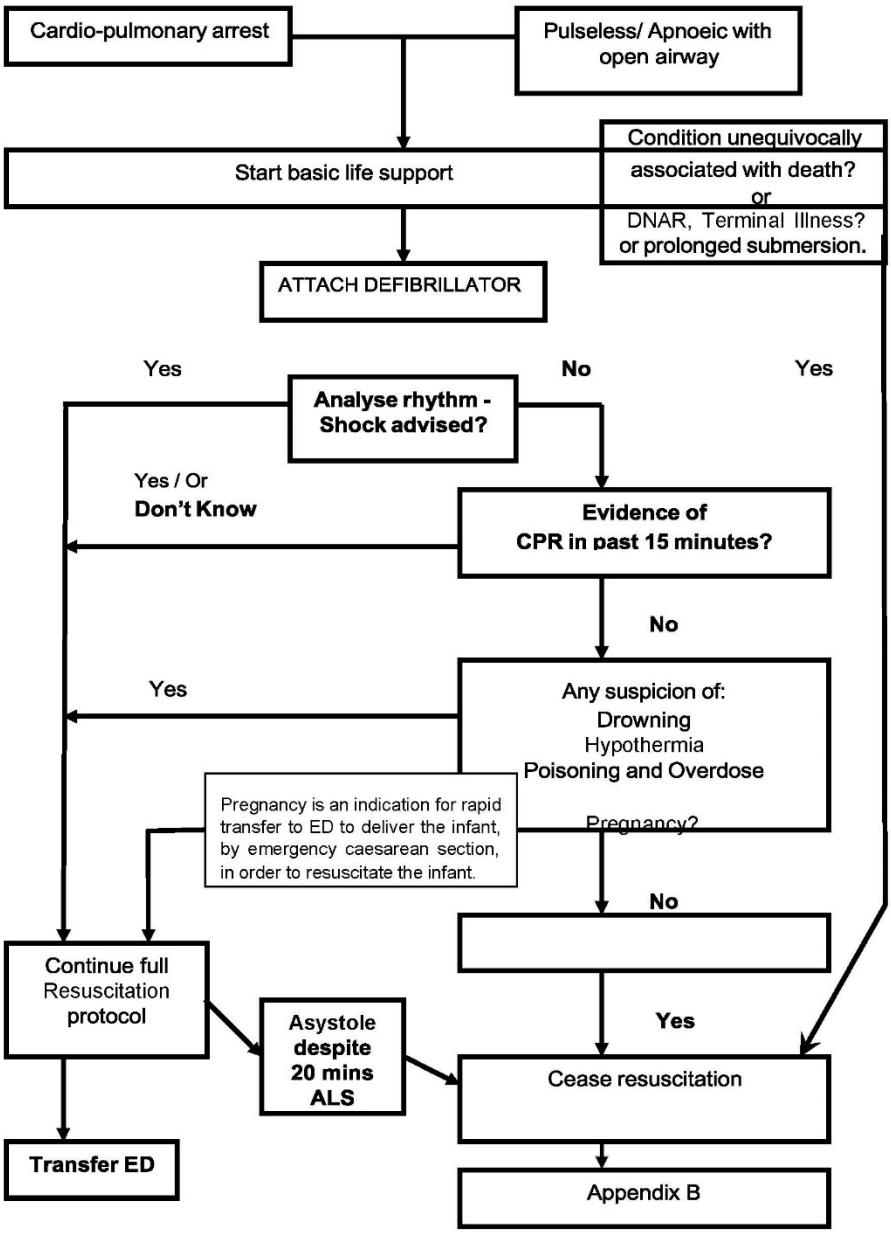
- DNACPR / End of Life Care Packages / ADRT to be recorded by either the Discharge Lounge or the Dispatchers on the Patients Journey record. To be recorded: the date theDNACPR / End of Life Care Packages / ADRT was signed and Dr's name.
- The operational staff attending need to confirm the DNACPR / End of Life Care Packages / ADRT is still current preferably via the lilac form, however Wessex and ReSPECT formsor the old style form or Dr's Letter (if in date) can be accepted. (See Appendix for examples)
- Before the patient is conveyed from the location of 'pick-up', the crew must

inform the Dispatchers or Discharge Lounge they are ‘going mobile’. The crew then needs to confirmwhen they have completed the patient journey.

- It is perfectly acceptable for an escort / family member to accompany the patient duringthe journey. We do not need a formal written confirmation of this.
- The reason the escort / family member may wish to travel with the patient may be that the patient may not survive for the journey itself or long after.
- End of Life Care Package patients must travel singularly on a double manned ambulance.(Many of these patients are likely to be going home or to a hospice for palliation or to die)

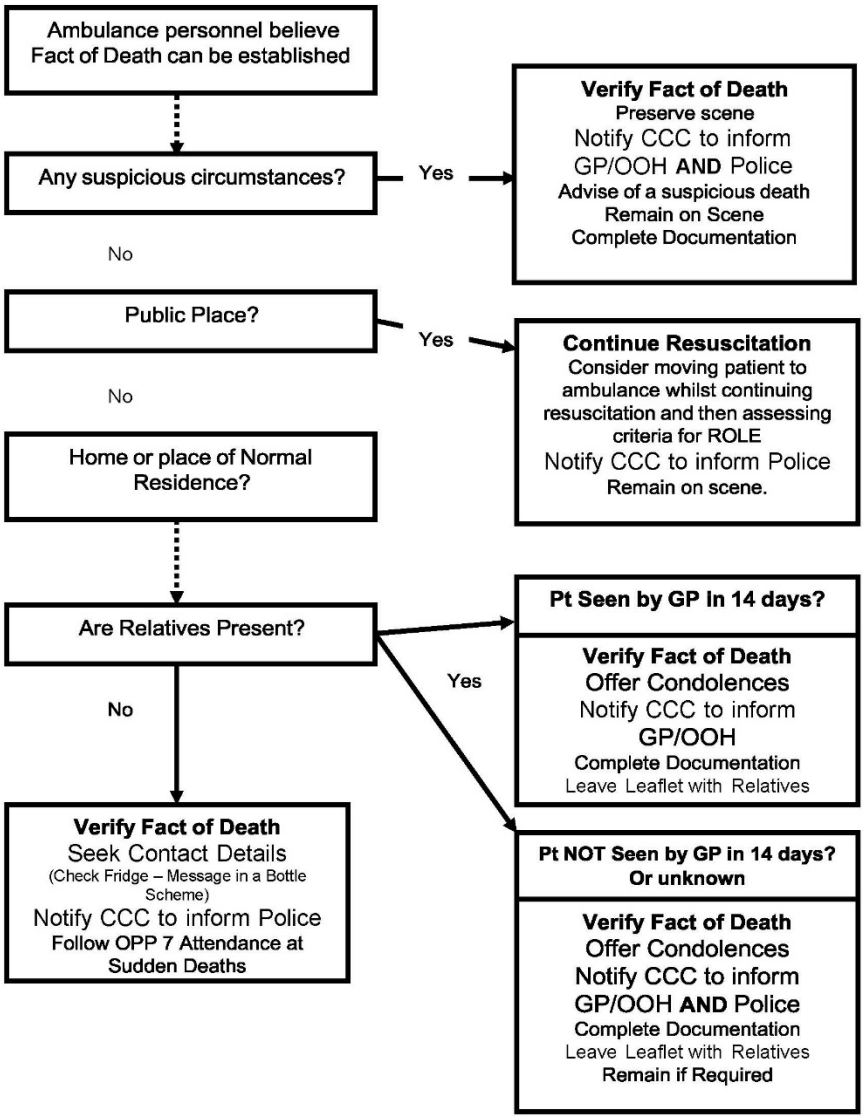
APPENDIX 1 - SEQUENCE OF CLINICAL EVENTS

(Reference section 3.1 for staff competencies)



APPENDIX 2 - ACTIONS TO ESTABLISH FACT OF DEATH

(Reference section 3.1 for staff competencies)



APPENDIX 3 - WHEN SOMEONE DIES – WHAT HAPPENS NEXT

(Reference section 3.1 for staff competencies)

Please accept our sincere condolences at the loss of the person you care for. The death of someone you care for is a devastating experience and can bring about stronger emotions than most people have ever felt before. You will want to ensure that the individual's beliefs and faith is fully considered and acted upon.

The role of the ambulance crew – Expected Death

The ambulance crew will recognise and document the fact of death.

The crew will:-

- Inform GP of death via surgery telephone or OOH representative.
- Suggest relatives/carer could inform other family members for support.
- Suggest relatives/carer could contact Funeral Directors for further advice to conform to faith/beliefs and to have the deceased taken to a chapel of rest.
- If relatives/carer do not have preferred Funeral Director, the Ambulance Service Emergency Operations Centre will ask the Police to provide an "on call" Funeral Director for your location, they will be required to provide the Ambulance incident number, name, age/date of birth, address, GP details and will clearly state the situation to the Police. Acting in the capacity of the Coroner's Officer the Police may wish to attend.

When the crew have fully documented the situation and are assured that the relative/carer is able to progress the situation by informing relatives and instructing a Funeral Director, they will leave.

Should you need further assistance please contact the GP via the surgery number.

The role of the ambulance crew – Unexpected Death

The ambulance crew will recognise and document the fact of death.

The crew will undertake to inform GP of death via surgery telephone or OOH representative. If GP is able to support cause of death the crew will:-

- Suggest relatives/carer could inform other family members for support.
- Suggest relatives/carer could contact Funeral Directors for further advice to conform to faith/beliefs and to have the deceased taken to a chapel of rest.
- If relatives/carer do not have preferred Funeral Director, the Ambulance Service Emergency Operations Centre will ask the Police to provide an "on call" Funeral Director for your location, they will be required to provide the Ambulance incident number, name, age/date of birth, address, GP details of the deceased and will clearly state the situation to the Police. Acting in the capacity of the Coroner's Officer the Police may wish to attend.

When the crew have fully documented the situation and are assured that the relative/carer is able to progress the situation by informing relatives and instructing a Funeral Director, they will leave.

If GP is unavailable or is not able to support cause of death the crew will:-

- Suggest relatives/carer could inform other family members for support.
- The Ambulance Service Emergency Operations Centre will inform the Police as they may wishto dispatch Forensic Medical Examiner. They will be required to provide the Ambulance incident number, name, age/date of birth, address, GP details of the deceased and state the situation and further clinical information with GP or OOH representative)
- Advise relatives/carer that Police/Coroner's Officer will be attending.

When the crew have fully documented the situation, there is no obligation for them to remain onscene. However, if no relative/carer present, the attending crew will remain on scene until Police/Coroner's Officer arrives.

Should you need further assistance please contact the GP via the surgery number.

Funeral Director

You will find the funeral director invaluable during the early stages of your bereavement and there is alist of them in the yellow pages or in your local paper. Reputable directors are committed to the highest professional standards and will explain clearly all options available and will provide a clear estimate of possible charges. In circumstances of hardship it may be possible to apply for a funeral payment towards the expenses of a simple ceremony. Once you have appointed a funeral director you will find that they can advise on faith, beliefs and the details of registering the death.

Support agencies

There are many organisations that may be able to provide you with help and support.

CRUSE National number 0844 477 9400 www.crusebereavementcare.org.uk

SAMARITANS National number 08457 90 90 90www.samaritans.org

CITIZENS ADVICE BUREAU www.citizensadvice.org.uk

Or you can phone your local branch. A complete list can be found in the *Useful Telephone Numbers* section of your local telephone directory.

SOUTH CENTRAL AMBULANCE SERVICE PATIENT EXPERIENCE TEAM

The Patient Experience Team is on hand to offer you guidance and advice on any matter relating tothe service we provide. The team will work on your behalf to provide answers and understanding should you have a need to discuss any aspect of our care or treatment to you or a close relative or friend.

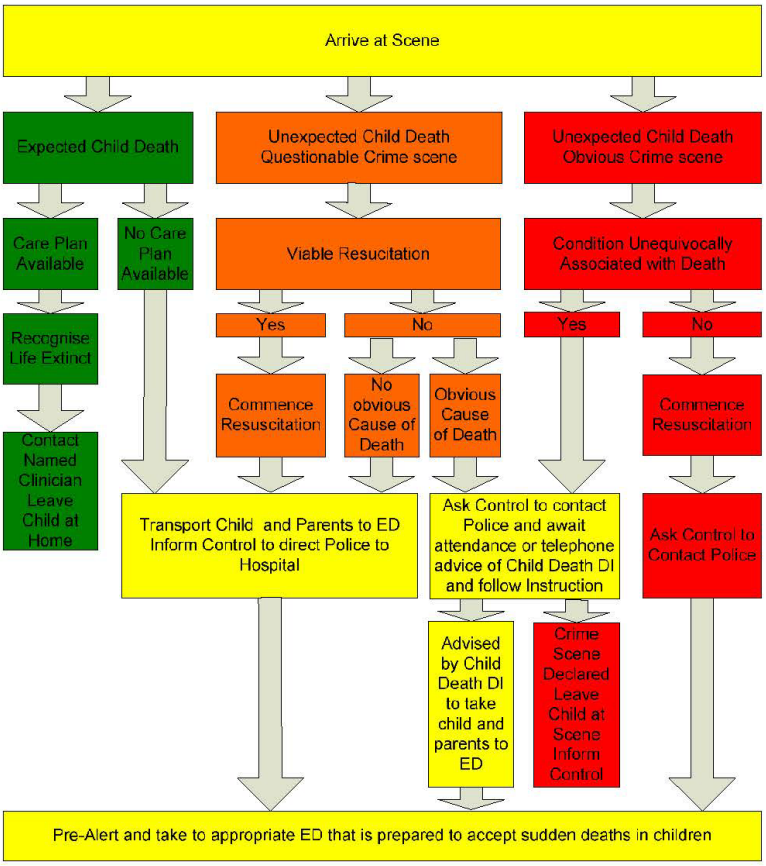
If you think we can help you in any way, please contact us:

Telephone: 0300 123 9280 or email patientexperience@scas.nhs.uk

APPENDIX 4 - CHILD DEATH PROCEDURE

(Reference section 3.1 for staff competencies)

Collaborative Procedure between South Central Ambulance Service, Hampshire Police and Thames Valley Police



Conditions Unequivocally Associated with Death in Children less than 18 years –

1. Massive cranial and cerebral destruction
2. Hemicorporectomy
3. Massive truncal injury incompatible with life including decapitation
4. Decomposition / Putrefaction
5. Incineration
6. Hypostasis
7. Rigor mortis (In children this can occur rapidly so resuscitation should be attempted unlessthere is another condition unequivocally associated with death)

Child Death Detective Inspector - A Detective Inspector that is trained in the management of childdeath incidents to ensure the multi-agency investigation is commenced and evidence gathered to ascertain the full facts of the child's death.

APPENDIX 5 - INTERNAL STAFF FORMS

Many of our policies have an ‘Internal staff form’ attached that is relevant to the document.

This policy contains the Unified do not attempt cardiopulmonary resuscitation form, The Wessex DNACPR Form. The ReSPECT Recommended Summary Care Plan and the OPP No 7. SCAS attendance at sudden death in adults form.

For security and accessibility reasons they are only available on our Staff Intranet.

South Central Ambulance Service
NHS Foundation Trust

SCAS ATTENDANCE AT SUDDEN (UNEXPECTED) DEATHS

South Central Ambulance Service NHS Foundation Trust
Unit 7 & 8, Talisman Business Centre, Talisman Road,
Bicester, Oxfordshire, OX26 6HR

Thames Valley Constabulary Area (Adults < 50 unless pre-existing condition)
Hampshire Constabulary Area (Adults < 30 unless pre-existing condition)

DOCUMENT INFORMATION

Directorate: Number	Procedure No.7
Operations	Lead Director: Mark Ainsworth Director of Operations
Author:	Dan Holliday Senior Operations Manager
This document replaces:	**New Document**
Date of Issue:	Thames Valley June 2018 Hants Constabulary May 2019
Next Review date:	June 2021
Version:	16

Contents

1.0 Outline

The attendance and management of deaths in the community is a key role for the Police and Ambulance service and has a considerable demand for resources. Managing this demand against the needs for investigative assessment, support for the public and the need to provide information for HM Coroner is the key principle to this procedure.

2.0 Purpose of the Procedure

This procedure seeks to provide a proportionate response to deaths in the community, allowing the most appropriate resource to attend, assess and manage such incidents.

A large proportion of deaths in the community are as a result of natural causes, but may not have been expected. Generally the ambulance service attends these as a first response, pronouncing life extinct and obtaining background details from family and others present to make a clinical decision.

By providing a clear framework to identify what the Police and South Central Ambulance Service (SCAS) will attend, including support around risk and intelligence assessment from the Police.

This will allow SCAS to deal with the majority of natural deaths in the community from initial attendance to reporting to the deceased's General Practitioner or the Out of Hours provider.

This in turn will allow the Police service to focus on unnatural deaths that may be suspicious or have a criminal nature.

3.0 Implications of the Policy

There are no significant implications in respect of Risk, Health and Safety, Equalities and Legal considerations. In specified circumstances it will remove the need for Police and SCAS attendance at certain types of sudden deaths. Staff mustfollow the Death of a Child procedure when dealing with deaths in the Under 18's

4.0 Consultation

Consultation has been undertaken externally with Thames Valley and Hants Police and other services such as the Coroner(s) and Coroner's officers within the SCAS footprint. This procedure has also been scrutinised by the relevant policy/procedure review groups.

5.0 Definitions

Deaths can be classified as the following: -

Suspicious Deaths

Those deaths where another person suspects another person has, or may be involved in the death and criminal offences have, or may have been committed (eg. Murder, Manslaughter including neglect etc), Violent or Unnatural Deaths. Deaths that may have initially been treated as suspicious at the time of initial attendance, but have been seen to be not so, or where the mechanics of death involves trauma or accident (e.g. suicide, hanging, drowning, overdoses, neglect, Health & Safety issues etc.).

Natural Deaths

Where a doctor may issue a death certificate as the cause of death is natural or following post mortem, the death has been established as being due to natural

causes.

The following terms are also important: -

Certified Deaths
A doctor has certified the medical cause of death.

Confirmation of Death / Recognition of Life Extinct
Only Doctors can certify death. Ambulance Nurses, Paramedics, T echnicians and AAPs (in set circumstances), undertake the recognition of life extinct but cannot record the medical cause of death.

6.0 Police Attendance at reported Death

The Police will attend reports of death that fall within the following categories: -

- Homicide and all reported 'suspicious deaths', where criminality may be a factor
- All reported violent and unnatural deaths.
- Fatal accidents of all types (e.g. road traffic collision, industrial/workplace incidents)
- Suspected suicide or assisted suicide
- Death with suspected drug abuse a cause.
- Sudden & Unexpected Deaths in Infants & Children (SUDIC)
- Death of a person aged 50 (years) or younger (Thames Valley) or 30 (years) or younger (Hampshire), unless there is an obvious medical reason.
- Persons found dead after forced entry (either by Police Officers or others) into premises. This includes reports of 'Concern for Welfare' to Police, even if the deathappears to be from natural causes.
- Death in a public place
- Deaths in private premises where the next of kin, or responsible adult is inattendance, will not take responsibility for the deceased.
- Deaths on/in premises occupied by the Ministry of Defense.
- Where a person's identity is not known or suspected to be false.
- Deaths where the person is not registered with a GP.
- Deaths where the person is registered with a GP **but not** in the Thames Valley orHampshire Constabulary area.
- Where the reported death is at a care or nursing home and there are potentiallysuspicious circumstances.

Suspicious deaths involving suspected criminality. Ensure that the body is not disturbed and that the scene is kept intact to preserve evidence.

7.0 Apparent death by natural causes: Private Residential Premises

The Police **WILL NOT** attend scenes of routine presumed natural deaths in a private residential premises for circumstances reported from Doctors, hospitals, families or responsible adults, which **DO NOT**, fall into the above category. (See 6.0 Police attendanceat reported death).

Reports of deaths from apparent natural causes to the Police will be shared with SCAS who will be the primary response and will attend the scene. If the deceased is inside

private premises, a Paramedic/Nurse/Technician/AAP may confirm death following a strict protocol.A form ROLE (Recognition of Life Extinct) and patient report form will be left with the immediate next of kin or responsible adult.

SCAS will be responsible for informing the deceased's GP of the death. This needs to be verbally in hours and via the Out of Hours providers during those times. The ePR record will automatically emailed to a secure email address at the GP practice and printed copies need to be left with the responsible adult/next of kin to the deceased.

For natural / expected deaths the GP is expected to certify the death and provide the Medical Certificate of Cause of Death (MCCD) to deceased's relatives / person taking responsibility. If, however the death is reportable to the coroner for any other reason, thenit is the responsibility of the GP to complete an electronic referral and submit to the coroner's office at the earliest opportunity.

If the GP is unwilling/unable to issue a MCCD then it is acceptable to remove the deceasedto a Chapel of Rest by Undertakers of the family/responsible person's choice **without** Police attendance. Although the GP may say they haven't seen the patient during the last14 days, if the death is seen to be natural it's likely the Coroner will support the GP issuing
the MCCD. If after the Coroners Officer speaks with the GP there is still an issue theCoroner would arrange to move the body for Post Mortem at that point.

SCAS will inform the Police that death has been confirmed in accordance with the SCASprotocol.

SCAS staff will provide Police with information from the scene regarding the apparent natureof the incident. This is to include but not exclusive to: -

- Name and contact number for the attending crew
- Time, address & location within the address the deceased person was found by theperson who found the deceased
- Circumstances of Death – Based on the initial circumstances, what do you think hashappened?
- Name, DOB & address of deceased person
- Person who called the ambulance - Name, DOB, address & relationship to deceased.

And the following information to be provided by the attending crew to enable relevantintelligence checks to be completed and a decision on attendance to be made:

- Time, address & location within the address the deceased person was found by theperson who found the deceased
- Circumstances of Death – Based on the initial circumstances, what do you think hashappened?
- What was the position of the body when you arrived? Have you observed or been told anything that makes you suspicious about the circumstances? Are there any suspicious marks on the body? Where have you looked?
- Do you have any information about the general health of the deceased? Have SCAShad any prior calls relating to the deceased?
- Name, DOB & address of deceased person
- Who is in attendance

- Person who found the deceased - Name, DOB, address & relationship to deceased
- Person who called the ambulance if different - Name, DOB, address & relationship to deceased.

Once an assessment of the incident has been made by Police and it is deemed that Police **WILL NOT** attend, the SCAS crew at the scene will inform the next of kin/family;

- To use the undertaker of their choice and they must contact them.
- A copy of the ePR/PCR (CAS 101) will be left with the person taking responsibility.
- To contact the patients GP/ OoHs to report the death and provide the GP with thePatient Report Form (CAS 101) or ePR record.

The Police **WILL NOT** attend presumed Death by natural causes in home circumstances merely to act in a counselling role or to assist in the removal of the body from the scene.

A flow chart of this process is provided in Appendix A. It is presumed within the flow chartthat a responsible adult will take responsibility for dealing with the deceased. If this is notthe case, then Police **WILL** attend the deceased location.

8.0 Do Not Attempt Cardiopulmonary Resuscitation (DNACPR)

Please refer to CSPP 3 Resuscitation Policy (ROLE) for full details on DNACPR and associated directives around the deceased patient. The below definitions have been takendirectly from CSPP 3.

Definition

SCAS personnel can only verify the "Fact of Death". They cannot "Certify" the cause ofdeath. This must be undertaken by a Doctor.
There are a number of circumstances whereby SCAS personnel may be required toconsider establishing the Fact of Death. These are:

- Death in a Private residence concurrent with existing medical treatment - colloquially an"Expected Death"
- Death in a Private residence - an "Unexpected Death"
- Death in a Public Place (i.e. not a Private residence) - an unexpected Death"
- Death in an Ambulance
- Death in a Major Incident situation

SCAS policy CSPP 3 applies to all age groups of patient

Adult DNACPR I ADRT

All SCAS personnel may discontinue/withhold resuscitation attempt if:

A Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) order is in place, on the DNACPR form (usually Lilac but can be photocopied or printed on white paper) or a DNACPR notice which has the correct patient details, is completed and signed by a healthprofessional involved in the patients care and is in date:

The form will stay with the person. It will be located in the following places:

- Hospitals, nursing homes, hospices - in the front of person's notes
- **In the home** - The tear off slip should be completed and placed in the 'message in the bottle" in the person's refrigerator. The location of the DNACPR form needs to be clearly stated. If the "message in a bottle" is not available, a system needs to be put in place to ensure effective communication of the DNACPR form's location to all relevant parties including South Central Ambulance Service
- **GP surgeries** - In the notes either paper or electronic an 'Alert" should be set up on electronic notes, usually in the 'reminder section.'

9.0 Deaths in the Workplace

Deaths in the workplace will include all instances where death in any workplace occurs.Whilst initially appearing to be accidental, such incidents should not be presumed to be so and the following action, scene preservation, will be taken in order to prevent loss ofevidence or information, should the incident subsequently justify investigation as possible manslaughter.

10.0 SCAS Non-Attendance at Obviously Deceased Patients

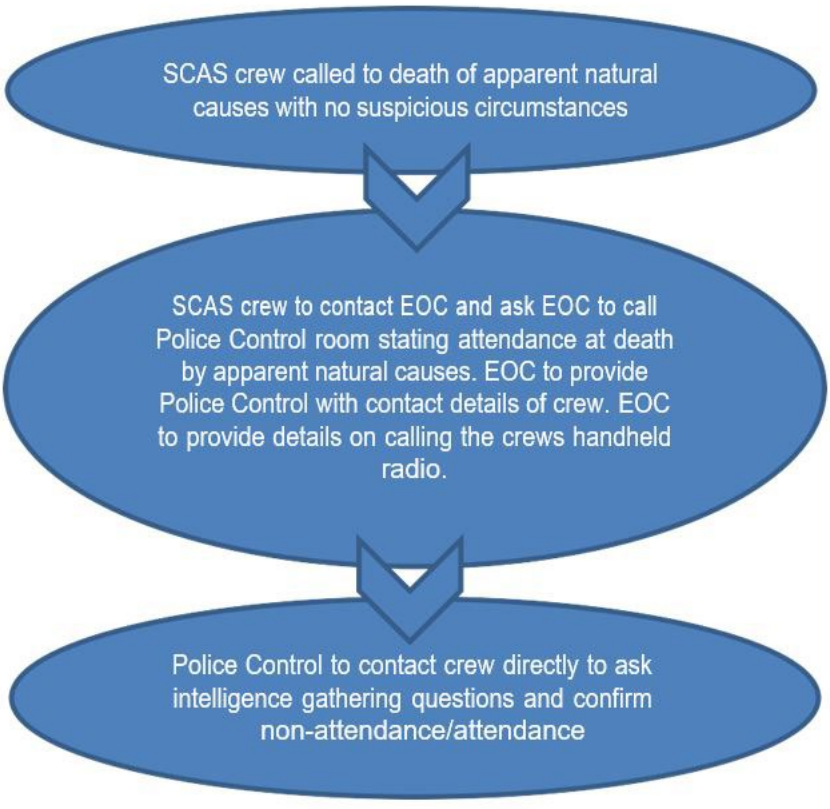
Incidents that are reported to SCAS from Police or Transport Police control rooms, wheresignificant traumatic injuries are likely to have occurred such as railways/motorways, SCASwill not be routinely required to attend where there are obvious un-survivable injuries.

The criteria for injuries not compatible with life are: -

- Hypostasis (pooling of blood by gravity)
- Injury which is obviously not compatible with life:
- Decapitation
- Decerebration (including massive cranial / cerebral destruction)
- Incineration
- Hemicorporectomy (or similar massive injury)
- Decomposition / Putrification

Appendix A: Flow Chart for Police Attendance at Sudden Death

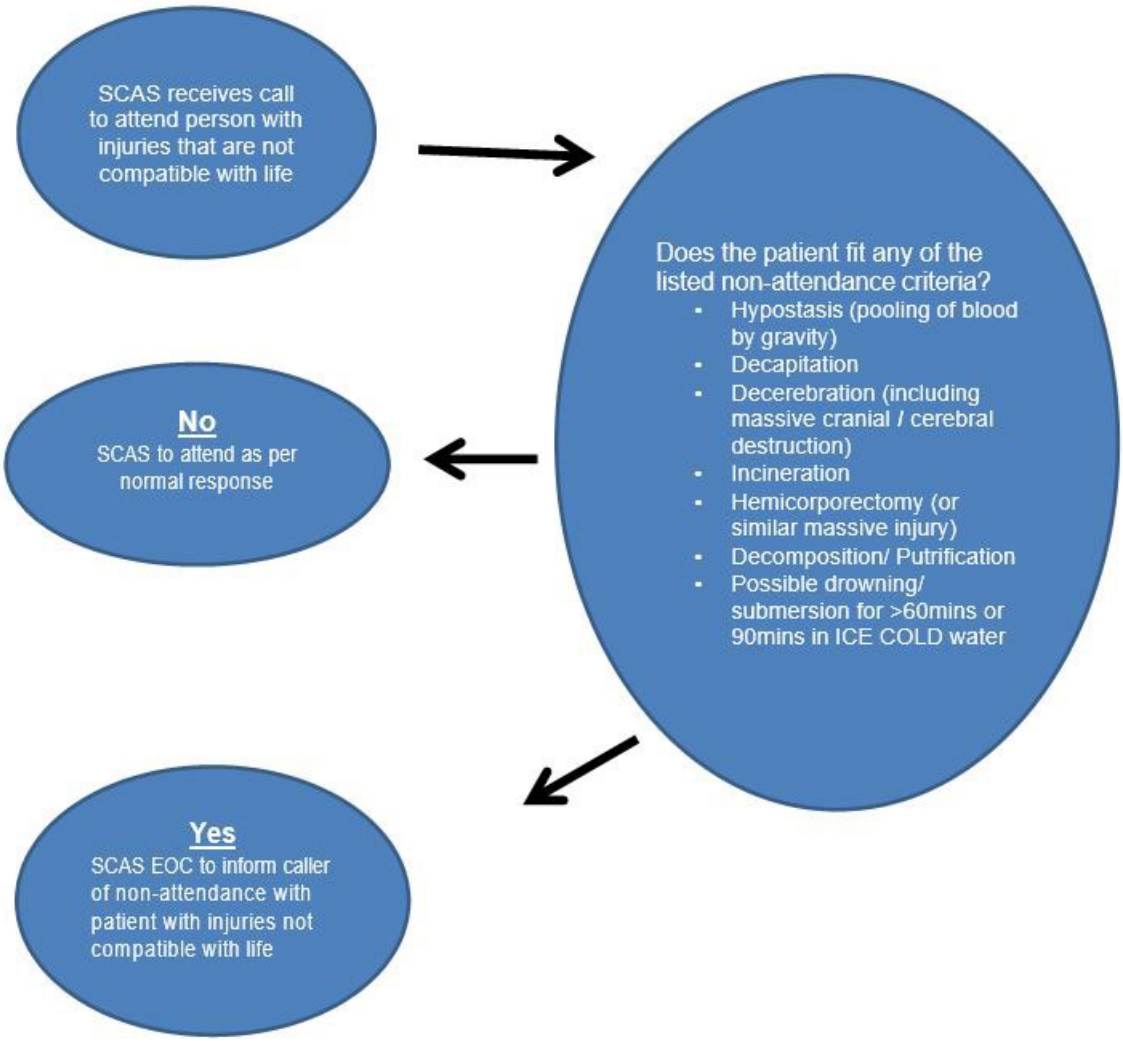
Appendix B: Process for Informing Police



** SCAS staff will provide Police with information from the scene regarding the apparent nature of the incident. This is to include but not exclusive to the questions below. The answers to these will mean the relevant intelligence checks can be completed and a decision on attendance can be made:

- Name and contact number for the attending crew. This needs to a SCAS number from your handheld radio and not a personal number. Should the Police require a number for future reference then provide either the number for Northern House **01869 36500** or Southern House**01962 898000.**
- Time, address & location within the address the deceased person was found by the person whofound the deceased
- Circumstances of Death – Based on the initial circumstances, what do you think has happened?
- What was the position of the body when you arrived? Have you observed or been told anythingthat makes you suspicious about the circumstances? Are there any suspicious marks on the body? Where have you looked?
- Do you have any information about the general health of the deceased? Have SCAS had anyprior calls relating to the deceased? (EOC will be able to give you that information)
- Name, DOB & address of deceased person
- Who is in attendance
- Person who found the deceased - Name, DOB, address & relationship to deceased
- Person who called the ambulance if different - Name, DOB, address & relationship to deceased
- Person who called the ambulance - Name, DOB, address & relationship to deceased.

Appendix C: SCAS Non-Attendance at Obvious Death



Appendix D: Funeral Directors

If the family do not know of a local Funeral Director they can be directed to one of the following Trade Association web sites where they can search for a local Funeral Director:

National Association of Funeral Directors (NAFD) - http://nafd.org.uk/
Society of Allied and Independent Funeral Directors (SAIF) - https://saif.org.uk/

These web-sites also contain other information which the family member may find useful.

Paupers Funerals/Government Social Fund- If the family do not believe they or the deceased have sufficient funds to pay for this service or a funeral, they maybe entitled to help. This should not prevent them from contacting a Funeral Director and arranging for the body to be removed and transported to the Chapel of Rest as the issue of payment will be addressed at a later date.

NAFD
(+44) 0121 711 1343 09.00am and 5.00pm Monday to Friday.

SAIF
Office open hours: Monday to Friday 9am to 5pm
Tel: 0345 230 6777 or 01279 726 777
Fax: 01279 726 300
Email: info@saif.org.uk

SAIF Business Centre, 3 Bullfields, Sawbridgeworth, Herts CM21 9DB

Appendix E: Post ROSC Ambulance Clinical Quality Indicator (ACQI) Criteria

Metrics	Exceptions
• **12 lead ECG taken post-ROSC?** • *For patients where a cardiac cause is suspected or cardiac drug overdose*	• Patient refusal • Patient re-arrested/ROSC < 10 minutes in duration
• **Blood glucose recorded?** • *Blood glucose reading recorded at any time pre-post arrest*	• Patient refusal • Patient re-arrested/ROSC < 10 minutes in duration • Blood glucose measured prior to ROSC and within normal range.
• **End-tidal CO2 recorded?** • *ETC02 reading/waveform recorded post- ROSC/continuously during arrest*	• Patient refusal • Patient re-arrested/ROSC < 10 minutes in duration • Not required: no advanced airway in situ
• **Oxygen administered?** • *Oxygen administered post- ROSC/continuously during arrest*	• Patient refusal • Patient re-arrested/ROSC < 10 minutes in duration • Not required: oxygen saturations were >94% (>88% if COPD).
• **Blood pressure recorded?** • *Systolic blood pressure reading recorded post- ROSC or if unobtainable presence of radial pulse documented*	• Patient refusal • Patient re-arrested/ROSC < 10 minutes in duration
• **Fluids administered?** • *Administration of a bolus of saline fluids post- ROSC (10ml flush not considered as fluids administered).*	• Patient refusal • Patient re-arrested/ROSC < 10 minutes in duration • Not required: systolic blood pressure > 90 or presence of radial pulse where blood pressure is unobtainable, all cannulation attempts are unsuccessful, evidence of significant heart failure or hypervolemia clearly documented • Unable to gain vascular access.
Care bundle met if Yes or Exceptions to all of the Six metrics	