

Medical Emergencies and Resuscitation Policy and Procedure (M-004)

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Author (name & job title)	John Sands, Resuscitation Officer
Executive Lead (name & job title):	Hilary Gledhill, Director of Nursing, Allied Health Professionals & Social Care.
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Policies should be accessed via the Trust intranet to ensure the current version is used

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1. INTRODUCTION

Humber Teaching NHS Foundation Trust recognises that as a provider of healthcare they have a duty to ensure that anyone suffering a cardiopulmonary arrest whilst in receipt of care or on the Trust's premises will receive resuscitation care from appropriately trained clinical staff until emergency services are in attendance.

Sudden cardiac arrest, particularly from coronary heart disease remains one of the most common causes of death in the United Kingdom, many such deaths occurring outside secondary care hospitals. All healthcare staff may be required to resuscitate a victim of cardiopulmonary arrest.

The Trust will take steps to provide the initial first response for medical emergencies and in all instances refer for subsequent specialist treatment and care. It is imperative that medical assistance is sought immediately.

The Trust will provide a resuscitation service for patients, service users, visitors and staff on all its' sites. The aim is that all relevant staff must be able to provide cardiopulmonary resuscitation (CPR) at a level appropriate to their role and healthcare environment in which they are working. As a minimum this is Basic Life Support (BLS).

Decisions about CPR must comply with the Human Rights Act 1998, ensuring decisions are compatible with the human rights set out in the Articles of Convention.

2. BACKGROUND

People with physical illness, mental health problems and/or learning disability can be vulnerable to cardiac or respiratory arrest, choking through dysphagia and a risk of suffering an anaphylactic reaction. This may be through undiagnosed or diagnosed medical conditions. Susceptibility to cardiopulmonary arrest is increased through acute or chronic physical illness, trauma, self-harm, effects of medication, use of rapid tranquilisation, physical interventions or seclusion in the short-term management of disturbed or violent behaviour. The National Early Warning Score2 (NEWS2) should be utilised to assess and monitor an adult patient's physical health and the paediatric advanced warning score (PAWS) used for children aged 8+. The Situation, Background, Assessment, Recommendation and Decision (SBARD) should always be utilised to relay information between professionals. Further information regarding this is available on the Trust intranet and in the Physical Health Policy & Procedure Incorporating Care of the Deteriorating Patient.

3. SCOPE

This policy applies to all employees of the Trust, contract and agency staff and all staff working in partnership arrangements and identifies the:

- Accountabilities, responsibilities and duties of staff.
- Process for procuring, storing, replenishing, maintaining emergency and resuscitation equipment.
- Procedure in relation to the initiation of resuscitation including obtaining emergency assistance.
- Post incident reporting, recording, reviewing and support procedures in relation to resuscitation events.
- Process for monitoring compliance with the policy.

4. POLICY STATEMENT

The Trust has a duty of care to ensure that identified staff working in Trust buildings, in-patient areas, community teams and those visiting patients in their own homes, have the appropriate level of training and access to the correct equipment to carry out resuscitation as well as be able to assess and monitor a patients' physical health needs. All patients (adult and paediatric) will be presumed to be for resuscitation in the event of a sudden collapse due to cardiac arrest/respiratory arrest unless the patient is an adult of 18 years and over who has made a valid and applicable Do Not Attempt Cardiopulmonary Resuscitation (DNACPR), or Recommended Summary Plan for Emergency Care and Treatment (ReSPECT) in which case this must be reviewed carefully and acted on as appropriate.

5. DUTIES AND RESPONSIBILITIES

Chief Executive

Is responsible for ensuring that resources and mechanisms are in place for the overall implementation, monitoring and review of this policy.

Medical Director and Director of Nursing

Are responsible for ensuring that the policy is reviewed, approved and monitored by the appropriate Trust-wide group. The Director of Nursing and Medical Director are the executive leads for this policy. They are responsible for:

- Ensuring all medical and nursing staff are aware of this and other policies and guidance which relate to this policy.
- Assuring the Board that the policy is acted upon through delegation to the appropriate directorates and committees.

Resuscitation Officer/Physical Health and Medical Devices Group

Will report, give advice and provide assurance to the board on all matters relating to any resuscitation activities undertaken within the Trust.

Care Group Directors are required to:

- Ensure that all medical and nursing staff are aware of this and other policies and guidance which relate to this policy.
- Ensure that adequate training is given to allow medical and nursing staff to safely implement the policy.
- Staff have access to equipment as identified in the policy

Will ensure the dissemination and implementation of the policy within their area of responsibility, also will ensure that staff have access to training.

Modern Matrons

Will ensure that they monitor the compliance of this policy in all areas of their responsibility and ensure equipment is monitored with evidence from daily checks with assurance from the agreed auditing process.

Charge Nurses/Team Managers/Ward Sisters

Will ensure:

- That mechanisms are in place and operational for the training and updating of all qualified/unqualified clinical staff.
- That equipment is checked and maintained to the required standard.
- All staff have the competencies to be able to use the equipment.

All Staff

Including support services and non-clinical areas should familiarise themselves with this policy and attend the relevant training as specified in the mandatory training needs analysis and that equipment is checked and maintained to the required standard.

All Consultants and Clinicians in charge of patient's care

- Will attend appropriate training and maintain the required skills.
- Retain overall responsibility for decisions relating to resuscitation of that patient and Do Not Attempt Cardiopulmonary Resuscitation (DNACPR) or Recommended Summary Plan for Emergency Care and Treatment (ReSPECT) orders.
- Ensure that they are aware of the contents of this policy and supporting policies.

Chief Pharmacist

Will be responsible for ensuring all appropriate services are provided with the agreed medications.

6. STAFF TRAINING REQUIREMENTS

Any setting where rapid tranquilisation, physical intervention or seclusion is used must have access to staff trained in Immediate Life Support (ILS) as well as access to appropriate medications (NICE 2015).

Training is provided by the Trust and is identified within the Mandatory Training Needs Analysis in conjunction with the Trust Resuscitation Officer.

All clinical staff will have access to BLS/ILS training based upon the Resuscitation Council (UK) standards that includes the management of choking.

- All registered clinical in-patient staff and Minor Injury Nurse Practitioners will be trained in Immediate Life Support (ILS) annually.
- All non-registered clinical inpatient staff will be trained in Basic Life Support (BLS) adult and
 paediatric, including the use of an automated external defibrillator annually. Non-registered
 staff will act as a first responder and should utilise an Automated External Defibrillator
 including delivering a shock if indicated until further support arrives either from an ILS
 trained member of staff or the Ambulance Service.
- Registered clinical in-patient staff working with children will receive additional training in Paediatric Immediate Life Support (PILS) where appropriate to their services need.

Individual teams outside of inpatient services will assess their areas such as General Practice and addictions services as to the level of training required and what equipment they will need access to, based on a local risk assessment.

Advice should be sought from the Resuscitation Officer regarding this.

All staff expected to recognise and treat an anaphylactic reaction as part of their normal practice will undertake relevant anaphylaxis training and have access to appropriate equipment (Resuscitation Council, 2021). This is supported by the Trust's Anaphylaxis Guidance.

7. EQUIPMENT

All units will have emergency drugs, with service specific contents. All in-patient units and GP surgeries will have an emergency grab bag and Whitby, Malton and the ECT suite at Miranda House will have a resuscitation trolley which will be stocked and checked in accordance with this policy or the standard operating procedure (SOP 17-006) Checking, Restocking and Management of Resuscitation Grab bag.

Inpatient

- Equipment required for emergency resuscitation will be available. The seal on the bag/trolley, defibrillator and oxygen contents will be checked daily and recorded using the appropriate method and checklist..
- A sealed bag/trolley will be opened and checked monthly. The bag/trolley will then be resealed, and the tag number documented on the checklist. These equipment checks must be recorded, dated, and signed on the appropriate checklist.
- If equipment is used, then the bag will be reviewed and all necessary pieces of equipment replaced. This will be recorded on the appropriate checklist and kept for audit purposes.

Equipment Replacement

- Replacement equipment can be ordered using the Trusts' resuscitation consumables order form contained within the standard operating procedure for checking restocking and management of resuscitation grab bags.
- When equipment is used out of normal office hours and replacements are required urgently
 a supply of essential items is held at Miranda house reception, within the ECT suite & the
 Humber Centre reception for immediate access by staff. Staff taking replacement
 consumables should inform the resuscitation officer by email to enable replenishment of the
 stocks.

Faulty equipment

If a problem is identified with equipment the issue should be rectified immediately. Replacement equipment may be obtained by following the instructions within the Standard Operating Procedure (SOP 17-006) Checking, Restocking and Management of Resuscitation Grab bag.

- Should a problem occur with the Automated External Defibrillator during office hours the Resuscitation Officer should be immediately informed and if required, medical physics should be requested to attend to rectify the issue by contacting them on 01482 461846.
- Should a catastrophic problem occur (i.e. a complete failure of the machine) out of hours, standalone units should borrow a machine from an area such as ECT or reception at Townend Court until a repair can be carried out. In the event that one of these machines is borrowed staff must make the department and the Resuscitation Officer aware and make provision for returning the machine at the earliest opportunity by informing the Resuscitation Officer or if the Resuscitation Officer is unavailable a member of the Training team at the Learning Centre.

8. DNACPR/ReSPECT

- If a person lacks capacity, ensure that this decision is made in best interests and is legal prior to not using CPR in line with the Mental Capacity Act and Best Interest Decision Making Policy M001.
- A DNACPR decision does not override clinical judgement in the unlikely event of a
 reversible being the cause of the patients' respiratory or cardiac arrest, that does not match
 the circumstances documented Resuscitation should be immediately initiated e.g. a patient
 is choking For further advice read the Trust policy on DNACPR: N-012or the ReSPECT
 document.

9. RECOGNISING THE DETERIORATING PATIENT

Early Warning Scores

All patients when admitted to an adult in-patient area will have their baseline observations monitored using the National Early Warning Score (NEWS2) tool within one hour of admission. For patients between age eight to adulthood the Paediatric Advanced Warning Score (PAWS) should

be utilised. This can be used as a baseline for all other observations if there are concerns regarding the deterioration of the patient.

Where concerns for a patient's physical health are raised, the Early/Advanced Warning Score will be used to assess and monitor the patient's physical health see Deteriorating Patient Policy (including the Recognition and Escalation of Suspected Sepsis) (N-062).

Following concerns for a patient's physical health and after completing clinical observation on an early/advanced warning chart, a documented plan of care will be implemented specifying the agreed treatment and escalate the plan and the frequency of monitoring.

10. PROCEDURE

If a patient's condition should deteriorate, this will be recognised and acted upon. This applies to all health and social care staff that work directly with patients in all areas of the Trust.

All non-clinical support staff that work indirectly with patients in patient areas as outlined above are expected to be able to recognise patients in distress, call for help and assist staff as required. This may consist of fetching equipment or contacting the emergency services.

Accessing help in a medical emergency:

Millview site – contact the Hospital Cardiac Arrest Team by calling 876342. An Ambulance should also be called on 999. Life support should continue until the emergency services arrive and take over the patient's care.

Gladstone Street – Call the crash team by dialing 2222. Life support should continue until the emergency services arrive and take over the patient's care.

All other units and clinical areas – dial 999 for the Ambulance service. Life support should continue until the emergency services arrive and take over the patients care. This should include utilising the nearest AED.

Community settings – dial 999 for the Ambulance service. Life support should continue until the emergency services arrive and take over the patients care. When/where possible utilise the nearest AED.

10.1. The ABCDE approach

Adapted from The Resuscitation Guidelines 2021: https://www.resus.org.uk/resuscitation-guidelines/abcde-approach/

Underlying principles

The approach to all deteriorating or critically ill patients is the same. The underlying principles are:

- 1. Use the Airway, Breathing, Circulation, Disability, Exposure (ABCDE) approach to assess and treat the patient.
- 2. Do a complete initial assessment and re-assess regularly.
- 3. Treat life-threatening problems before moving to the next part of assessment.
- 4. Assess the effects of treatment.
- 5. Recognise when you will need extra help. Call for appropriate help early.
- 6. Use all members of the team. This enables interventions to be undertaken simultaneously.
- 7. Communicate effectively use the Situation, Background, Assessment, Recommendation and Decision (SBARD).
- 8. The aim of the initial treatment is to keep the patient alive and achieve some clinical improvement. This will buy time for further treatment and making a diagnosis.

9. Remember – it can take a few minutes for treatments to work, so wait a short while before reassessing the patient after an intervention.

First steps

- 1. Ensure personal safety. Wear personal protective equipment (PPE) as appropriate.
- 2. First, look at the patient in general to assess if the patient appears unwell part of this initial assessment should include a Face Arms Speech Time (FAST) test.
- 3. 'Soft Signs' recognition: It is now increasingly understood the 'soft signs' of deterioration may be more helpful in recognition of sepsis than previously acknowledged. Of particular note in current literature is the interest being paid to signs such as:
 - Changes in mood or outlook
 - Changes in behaviour
 - Altered sleeping patterns
 - Appetite changes
 - Sudden decline or apparent increase in medication effectiveness
- 4. If the patient is awake, ask "how are you?", "do you have any pain?" If the patient appears unconscious or has collapsed, gently shake them and ask, "are you alright?" If they respond normally, they have a patent airway, are breathing and have brain perfusion. If they speak only in short sentences, they may have breathing problems. Failure of the patient to respond is a clear marker of critical illness.
- 5. This first rapid 'Look, Listen and Feel" of the patient should take about 30 seconds and will often indicate a patient is critically ill and there is a need for urgent help. Ask a colleague to ensure appropriate help is coming. Dial 999.
- 6. If the patient is unconscious, unresponsive and is not breathing normally (occasional gasps are not normal) start CPR according to the resuscitation guidelines. If you are confident and trained to do so, feel for a carotid pulse to determine if the patient has a respiratory arrest. If there are any doubts about the presence of a pulse start CPR.
- 7. A member of staff should be immediately instructed to retrieve the emergency grab bag (which includes the AED, oxygen and emergency equipment) or resuscitation trolley and the emergency drug box/bag.

The Trust provides Automated External Defibrillator (AED) training via its' ILS and BLS training courses but does acknowledge the following statement:

"The Resuscitation Council (UK) advises that NHS Trusts should ensure that no restriction is placed on the use of an AED by an untrained NHS employee confronted with a patient in cardiac arrest when no more highly trained individual is present. The administration of a defibrillatory shock should not be delayed waiting for more highly trained personnel to arrive. The same principle should apply to individuals whose period of qualification has expired."

Defibrillators must be checked every day by ensuring the display on the automated external defibrillator indicates a rescue ready machine. HTFT uses all Lifepak 1000 AED's & the visual indicator should display an OK message. Individual staff should ensure they are familiar with the machine and its location.

Further information on the checking of defibrillators in non in patient areas can be found in Standard Operating Procedure Automated External Defibrillator Checking In Non-Inpatient Areas SOP23-037

Airway (A)

Airway obstruction is an emergency. Dial 999 immediately.

- 1. Look for the signs of airway obstruction:
 - Airway obstruction causes paradoxical chest and abdominal movements ('see-saw' respirations) and the use of the accessory muscles of respiration. Central cyanosis is a late sign of airway obstruction. In complete airway obstruction, there are no breath

- sounds at the mouth or nose. In partial obstruction, air entry is diminished and often noisv.
- In the critically ill patient, depressed consciousness often leads to airway obstruction.
- 2. Treat airway obstruction as a medical emergency:
 - Obtain expert help immediately. Untreated, airway obstruction causes hypoxaemia (low PaO2) with the risk of hypoxic injury to the brain, kidneys and heart, cardiac arrest and even death.
 - In most cases, only simple methods of airway clearance are required (e.g. airway opening manoeuvres, airways suction, insertion of an oropharyngeal or nasopharyngeal airway).
- 3. Give oxygen at high concentration:
 - Provide high-concentration oxygen (where available) using a mask with an oxygen reservoir. Ensure that the oxygen flow is sufficient (usually 15 L min) to prevent collapse of the reservoir during inspiration.

In acute respiratory failure, aim to maintain an oxygen saturation of 94-98%. In patients at risk of hypercapnic respiratory failure (see below), aim for an oxygen saturation of 88-92%.

Any Health Professional can commence oxygen therapy in an emergency situation until the patient can be appropriately reviewed (i.e. medical, clinical or paramedic).

In the emergency situation an oxygen prescription **is not** required, however a record of what oxygen was administered including the administration device should be documented later in the patient's record.

Breathing (B)

- 1. Look, listen and feel for the general signs of respiratory distress: sweating, central cyanosis, use of the accessory muscles of respiration and abdominal breathing.
- 2. Count the respiratory rate. The normal rate for an adult is 12–20 breaths min-1. A high (> 25 min-1) or increasing respiratory rate is a marker of illness and a warning that the patient may deteriorate suddenly. The normal respiratory rates for children are as in the table below:

Respiratory Rates by Age		
Age (years) Respiratory Rate (Breathes per minute)		
<1	30-40	
1-2	26-34	
2-5	24-30	
5-12	20-24	
>12	12-20	

- 3. Assess the depth of each breath, the pattern (rhythm) of respiration and whether chest expansion is equal on both sides.
- 4. Note any chest deformity.
- 5. Record the inspired oxygen concentration (%) and the SpO2 reading of the pulse oximeter as soon as one is available. The pulse oximeter does not detect hypercapnia. If the patient

- is receiving supplemental oxygen, the SpO2 may be normal in the presence of a very high PaCO2.
- 6. Listen to the patient's breath sounds: rattling airway noises indicate the presence of airway secretions, usually caused by the inability of the patient to cough sufficiently or to take a deep breath. Stridor or wheeze suggests partial, but significant airway obstruction.

The specific treatment of respiratory disorders depends upon the cause. Nevertheless, all critically ill patients should be given oxygen. In a subgroup of patients with COPD, high concentrations of oxygen may depress breathing (i.e. they are at risk of hypercapnic respiratory failure - often referred to as type 2 respiratory failure). Nevertheless, these patients will also sustain end-organ damage or cardiac arrest if their blood oxygen saturations are allowed to decrease. In this group, aim for a lower than normal PaO2 and oxygen saturation. Give oxygen via a Nasal Cannula (2 L min 28%) or (4L min 36%) or a 24% Venturi mask (2 L min) initially and reassess. Aim for target SpO2 range of 88–92% in most COPD patients. Some patients with chronic lung disease carry an oxygen alert card (that documents their target saturation) and their own appropriate Venturi mask. Patients receiving nebuliser therapy via oxygen should be nebulised at 6 litres per minute. In an emergency situation for COPD patients, oxygen driven nebulisers may be used in the absence of an air driven compressor system. If oxygen is used it should be limited to 6 minutes for patients with known COPD. This will deliver most of the nebulised drug dose but limit the risk of hypercapnic respiratory failure.

Circulation (C)

- 1. Look at the colour of the hands and digits: are they blue, pink, pale or mottled?
- 2. Assess the limb temperature by feeling the patient's hands: are they cool or warm?
- 3. Measure the capillary refill time (CRT). Apply cutaneous pressure for 5 seconds on a fingertip held at heart level (or just above) with enough pressure to cause blanching. Time how long it takes for the skin to return to the colour of the surrounding skin after releasing the pressure. The normal value for CRT is usually < 2s. A prolonged CRT suggests poor peripheral perfusion. Other factors (e.g. cold surroundings, poor lighting, old age) can prolong CRT.</p>
- 4. Assess the state of the veins: they may be under filled or collapsed when hypovolaemia is present.
- 5. Count the patient's pulse rate (or preferably heart rate by listening to the heart with a stethoscope).
- Palpate peripheral and central pulses, assessing for presence, rate, quality, regularity and equality. Barely palpable central pulses suggest a poor cardiac output, whilst a bounding pulse may indicate sepsis.
- 7. Measure the patient's blood pressure. Even in shock, the blood pressure may be normal, because compensatory mechanisms increase peripheral resistance in response to reduced cardiac output. A low diastolic blood pressure suggests arterial vasodilation (as in anaphylaxis or sepsis). A narrowed pulse pressure (difference between systolic and diastolic pressures; normally 35–45 mmHg) suggests arterial vasoconstriction (cardiogenic shock or hypovolaemia) and may occur with rapid tachyarrhythmia.
- 8. Look thoroughly for external haemorrhage from wounds or evidence of concealed haemorrhage (e.g. thoracic, intra-peritoneal, retroperitoneal or into gut).
- 9. When appropriate trained and competent staff are present, they may insert one or more large (16 G) intravenous cannulae. Use short, wide-bore cannulae, because they enable the highest flow.
- 10. When appropriate, trained and competent staff are present give a bolus of 500 mL of crystalloid solution (e.g. 0.9% sodium chloride) over less than 15 min if the patient is hypotensive. Use smaller volumes (e.g. 250 mL) for patients with known cardiac failure or trauma and use closer monitoring (listen to the chest for crackles after each bolus).
- 11. Reassess the heart rate and BP regularly (every 5 min), aiming for the patient's normal BP or, if this is unknown, a target > 100 mmHg systolic.

Disability (D)

Common causes of unconsciousness include profound hypoxia, hypercapnia, cerebral hypoperfusion, or the recent administration of sedatives or analgesic drugs.

- 1. Review and treat (if possible) the ABCs: exclude or treat hypoxia and hypotension.
- 2. Check the patient's drug chart for reversible drug-induced causes of depressed consciousness. Give an antagonist where appropriate (e.g. naloxone for opioid toxicity).
- 3. Examine the pupils (size, equality and reaction to light).
- 4. Make a rapid initial assessment of the patient's conscious level using the ACVPU method: Alert, Confusion (new), responds to Vocal stimuli, responds to Painful stimuli or Unresponsive to all stimuli.
- 5. Measure the blood glucose to exclude hypoglycaemia using a rapid finger-prick bedside testing method. Follow local protocols/Patient Group Directions for management of hypoglycaemia.
- 6. Nurse unconscious patients in the lateral position if their airway is not protected.

Exposure (E)

To examine the patient properly, full exposure of the body may be necessary. Respect the patient's dignity and minimise heat loss.

Additional information

- 1. Take a full clinical history from the patient, any relatives or friends and other staff.
- 2. Review the patient's notes and charts:
 - Study both absolute and trended values of vital signs.
 - Check that important routine medications are prescribed and are being administered.

Make complete entries in the patient's notes of your findings, assessment and treatment. Provide a full and comprehensive hand over to the emergency services.

It is essential that following a successful resuscitation all patients will be immediately transferred by emergency ambulance to the nearest Secondary Care Emergency department for on-going post resuscitation care.

10.2. Standard Cardiopulmonary Arrest Procedures

Inpatient unit – No arrest team on site.

- Call 999 to summon an emergency ambulance.
- Commence chest compressions.
- Defibrillation if indicated by an AED should be carried out as soon as possible.
- Immediate Life Support should be initiated

Inpatient Hospital on a co-located site (Castle Hill Hospital)

- Call 876342and state cardiac arrest and the location.
- Staff are advised to speak clearly and inform the operator they require the cardiac arrest team and give their location.
- The switchboard will then activate the cardiac arrest bleeps.
- Call 999 for an Ambulance response
- Defibrillation if indicated by an AED should be carried out as soon as possible.
- Immediate Life Support should be initiated

Infant and paediatric arrest

- In the event of an infant or paediatric cardiac arrest dial (9)999 and state that it is an infant (under one year of age) or paediatric cardiac arrest.
- They should follow the appropriate algorithm

Community setting - Clinic or patient's home

- Call 999 to summon and emergency ambulance state 'cardiac arrest'
- · Commence CPR.
- If available apply a defibrillator to the patient bare chest and follow the voice prompts.
- Defibrillation if indicated by an AED should be carried out as soon as possible. Rescuers should follow the most recent RCUK BLS algorithm appropriate for age.

10.3. Cardiopulmonary Resuscitation for patients who are or may be suffering from a transmissible infectious disease such as Severe Acute Respiratory Syndrome

Adults

If there is not a completed ReSPECT form indicating do not attempt resuscitation staff should:

Recognise cardiac arrest by looking for the absence of signs of life and normal breathing. Feel for a carotid pulse (if trained to do so). **Do not listen or feel for breathing by placing your ear and cheek close to the patient's mouth**. If not in situ, but one is readily available, put an oxygen mask or surgical mask on the patient's face, this may limit aerosol spread.

If the patient is in cardiac arrest:

- Call 999 advising the call handler of cardiac arrest and COVID status (suspected or confirmed).
- 2. A defibrillator should be applied quickly. Defibrillate shockable rhythms rapidly the early restoration of circulation may prevent the need for airway and ventilatory support.
- 3. Chest compression only CPR is acceptable until further help arrives.
- 4. Airway interventions should be performed by trained individuals only. When performing bag mask ventilation use two-person Bag Valve Mask (BVM) ventilation with a good seal if possible (see Appendix 3).

Paediatrics

Paediatric cardiac arrest is unlikely to be caused by a cardiac problem and is more likely to be a respiratory one, making ventilations crucial to the child's chances of survival. However, for those not trained in paediatric resuscitation, the most important thing is to act quickly to ensure the child gets the treatment they need in the critical situation.

For out-of-hospital cardiac arrest, the importance of calling an ambulance and taking immediate action cannot be stressed highly enough. If a child is not breathing normally and no actions are taken, their heart will stop and full cardiac arrest will occur. It is likely that the child/infant having an out-of-hospital cardiac arrest will be known to you. We accept that doing rescue breaths will increase the risk of transmitting the COVID virus, either to the rescuer or the child/infant. However, this risk is small compared to the risk of taking no action as this will result in certain cardiac arrest and the death of the child.

10.4. Choking and Aspiration

The recognition and treatment of choking is covered in both Adults and Paediatric Basic and Immediate life support.

Symptoms and Signs

- The patient may cough and splutter and complain of difficulty breathing.
- Breathing may become noisy with wheeze (usually aspiration) or stridor (usually upper airway obstruction).
- They may develop 'paradoxical' chest or abdominal movements.
- They may become cyanosed and lose consciousness.

Treatment

- The Resuscitation Council's choking algorithm (See Appendix 2 for link) should be followed
 in the first instance
- The treatment of the choking patient involves removing any visible foreign bodies from the mouth and pharynx.
- Suction, if available, is of value for semi solids or liquids but has no immediate value in the management of solid particle obstruction.
- An ambulance and/or cardiac arrest team should be called. Be aware that following the successful management of choking the patient may require supplemental oxygen to regain normal oxygen saturations,
- It is recommended that a patient who has had abdominal thrusts is referred to the nearest Emergency Department for post procedure assessment to exclude bleeding, fractures or aspiration.
- If the choking episode was related to eating a swallowing assessment may be indicated.
- If the patient loses consciousness during a choking episode, CPR must be started in the absence of normal breathing and obvious signs of life.

10.5. Post Incident Support

Ward/team managers should consider the support required by staff and/or service users following resuscitation interventions. Where there has been a resuscitation incident the Resuscitation Officer must be informed and involved in the review process to provide feedback, learning and support for the staff involved. Staff requiring additional support can contact the Occupational Health department if required.

10.6 Recording and reporting

In all instances where a person suffers a respiratory failure, cardiac arrest, choking or anaphylactic reaction, a Datix form and a Resuscitation Outcome Report form will be completed and forwarded to the appropriate manager for investigation. The completed forms must be forwarded to the Resuscitation Officer for review and logging.

11. EQUALITY AND DIVERSITY

An Equality and Diversity Impact Assessment has been carried out on this document using the Trust-approved EIA.

12. MENTAL CAPACITY

The following principles must be taken into account within the implementation of this policy:

- Presumption of capacity.
- Support to make own decisions.
- Right to make seemingly eccentric or unwise decisions.
- Best interests.
- Least restrictive intervention.

13. IMPLEMENTATION

This policy will be disseminated by the method described in the Policy for the Development and Management of Procedural Documents.

Implementation of this policy will be overseen by the Physical Health Group which is a sub group of Trust's Quality and Patient Safety Group.

14. MONITORING AND AUDIT

A Resuscitation Report form (Appendix 1) must be completed after any resuscitation, choking or anaphylactic incident regardless of outcome and submitted to the Risk Management department. Incidents should also be recorded by submitting an incident report via Datix.

Resuscitation events will be audited using the Resuscitation Report form to maintain and improve standards of practice. Cardiopulmonary arrest is an appropriate subject for 'critical incident debriefing' within any area of practice within the organisation.

Monitoring of compliance with equipment checking will be achieved by a six-monthly audit carried out by the Resuscitation Officer and this will be reported back to the Physical Health and Medical Devices Group. Deficiencies identified will require the formation of an action plan to be reviewed and monitored through the Governance Committee. NEWS2 and the care of the deteriorating patient will be monitored through the Trust annual audit of patient records.

The Clinical Risk Management Group (CRMG) will review all deaths that have followed Cardiopulmonary Resuscitation whether or not a DNACPR order was in place. Families will be asked if they have any questions about the care and treatment of their loved one.

15. REFERENCES/EVIDENCE/GLOSSARY/DEFINITIONS

- A Joint Statement from the Resuscitation Council and the Royal College of Nursing, 'Decisions Relating to Cardiopulmonary Resuscitation', March 2001.
- CG50 Acutely ill patients in hospital: (NICE guidance 2007)
- Competencies for Recognising and Responding to Acutely III Patients in Hospital document (DH 2009)
- CPR & ECC Guidelines | American Heart Association CPR & First Aid
- Department of Health (2008). Code of Practice: Mental Health Act 1983 revised. London. The Stationary Office.
- ERC | Bringing resuscitation to the world
- HSC 2000/028-Resuscitation Policy (DH 2000)
- International Liaison Committee on Resuscitation (ilcor.org)
- Mental Capacity Act (2005) Code of Practice. London. The Stationary Office.
- National Institute for Clinical Excellence (NICE 2015). Clinical Guideline 25 Violence The Short Term Management of Disturbed/Violent Behaviour in Psychiatric In-Patient Settings and Emergency Departments. London. NICE.
- National Institute of Clinical Excellence (NICE) 2011. CG134 Anaphylaxis.
- National Patient Safety Agency (NPSA) (2007). Recognising and responding appropriately to early signs of deterioration in hospitalised patients. London. Department of Health.
- NHS Institute for Innovation and Improvement (2006). Safer care-Situation, Background, Assessment and Recommendation (SBAR). Warwick. NHS Institute for Innovation and Improvement.
- NPSA (2008). Rapid Response Report, Resuscitation in mental health and learning disability settings. NPSA/2008/RRR010.
- Resuscitation Council (2007). Decisions relating to cardiopulmonary resuscitation; a joint statement from the BMA, the Resuscitation Council (UK) and the Royal College of Nursing. London, BMA.
- Resuscitation Council (2015). 2015 Resuscitation Guidelines. London. Resuscitation Council.
- Resuscitation Guidelines (UK Resuscitation Council 2005)
- <u>Statements and resources on COVID-19 (Coronavirus), CPR and Resuscitation |</u>
 Resuscitation Council UK (Accessed February 2021)
- NHS East Riding of Yorkshire. Guidelines for the management of emergency equipment used in resuscitation (2010)

- Mental Capacity Act (2005). Department of Health
- BRITISH MEDICAL ASSOCIATION, (2000). The impact of the Human Rights Act 1998 on medical decision making. London, BMA Books
- ROYAL COLLEGE OF NURSING (2008) Decisions about cardiopulmonary resuscitation-model patient information leaflet
- Resuscitation Council (2017). Minimum Equipment and Drug Lists for Cardiopulmonary Resuscitation. Mental Health-Inpatient Care. London.
- Royal College of Physicians (2018) National Early Warning Score 2 NEWS2

16. RELEVANT POLICIES/PROCEDURES/PROTOCOLS/GUIDELINES

- Anaphylaxis Guidance
- Do Not Attempt Cardiopulmonary Resuscitation Policy
- Emergency Medicines Contents Lists and Checklists on the Trust Intranet
- Mental Capacity Act and Best Interests Decision Making Policy
- Physical Health Policy & Procedure Incorporating Care of the Deteriorating Patient
- Standard Operating Procedures Checking, Restocking and Management of Resuscitation Grab Bag
- Standard Operating Procedures Checking, Restocking and Management of Emergency Drugs Bag

Appendix 1: Resuscitation Outcome Report Form

A completed form (Electronic or Paper) must be sent to the Risk Management Department, along with a Datix form.

Patient Details
NHS Number
Name
Location of Incident:
Date of Event: / / Time of Event (24 hr clock):: Witnessed? YES □ NO □ Incident Details
Type of Event:
Anaphylaxis
Arrest
Choking
Irauma
Other (please specify)
Type of arrest: Respiratory only □ Cardiac □ Time of Arrest (if different from above)::
Location of the Event
Precipitating event i.e. chest pain, head injury etc
Ambulance Called: YES NO If no state reason
Time Ambulance Called:: Time Ambulance Arrived::
Time Ambulance Departed::
Management
AIRWAY MANAGEMENT:
Head Tilt Chin Lift □ Jaw Thrust □ Suction □
Airway Adjunct (please indicate size in box)
iGel
BREATHING:
Breathing spontaneously Yes No
Mouth to Mouth □ Face Shield □ Pocket mask □ Bag Valve Mask □
Oxygen (If yes State device and flow rate used)
CAY 9611 - (ii yes state device and now rate used)
Defibrillation
Time Defibrillator with Patient:: Type of Defibrillator: AED Manual
Time of 4ct Analysis Initial Dhythm Olysters 20 10 10 10
Time of 1st Analysis:: Initial Rhythm: Shockable Non-Shockable
No. of Shocks Delivered

Advanced Interventi	ons			
Cannulation Time:	_/_ Site	Size	Drug Therapy	y Fluid Therapy
Time	Drug/Fluid	Dose	Route	Comments
		•		
Deat Front				
Post Event				
Patient deceased	Return of spontane	ous circulation		
Patient transferred	If patient was tran	sferred, was Cl	PR in progress Y	ES D NO D
If patient transferred	, where was the pat	ient transferred	d to:	
If patient transferred	, what was the outc	ome : Dead on ar	rival □ Admitted □	Unknown □
Other □ (please state):.				
Any other supportin	g information			
	<u>g</u>			
Persons present				
Name of person com	npleting the form:			
Designation of the p	erson completing th	ne form:		
Signature of the pers	_			
Who else was prese	_			
NAME:				
NAME:	POSITI	ON:		
NAME:				
NAME:	POSITI	ON:		
DATE://_ Time	e::_ Signed:		Positio	on:

Appendix 2: Links to Resuscitation Flowcharts

Adult Basic Life Support: Adult Basic Life Support Algorithm 2021.pdf (resus.org.uk)

Paediatric Basic Life Support: Paediatric Basic Life Support Algorithm 2021_0.pdf (resus.org.uk)

Adult Choking: Adult Choking Algorithm 2021.pdf (resus.org.uk)

Paediatric Choking: Paediatric Choking Algorithm 2021.pdf (resus.org.uk)

Adult Advanced Life Support: Adult Advanced Life Support Algorithm 2021.pdf (resus.org.uk)

Paediatric Advanced Life Support: Paediatric ALS Algorithm 2021.pdf (resus.org.uk)

Anaphylaxis: Anaphylaxis algorithm 2021.pdf

Appendix 3: Technique for Two-Person Bag Valve Mask Ventilation

 A tight seal between the mask and the patients face should be achieved by using either of the illustrated handgrips and an appropriately sized face mask.



2. The second person should compress the bag in order to ventilate the patient.



Further information on this and other Airway/Ventilation techniques can be found in the Immediate Life Support Manual.

Appendix 4: Document Control Sheet Template

Document Type and Title:	Policy – Medical Emergencies and	Resuscitation Po	licy & Procedure
Document Purpose:	Humber Teaching NHS Foundation Trust recognises that as a provider of healthcare they have a duty to ensure that anyone suffering a cardiopulmonary arrest whilst in receipt of care or on the Trust's premises will receive resuscitation care from appropriately trained clinical staff until emergency services are in attendance.		
Consultation/ Peer Review	Date		oup / Individual
	July 2024		Clinical Trainer/ALS Instructor
list in right hand columns	Aug 2024	Drug and Therap	peutics Group
consultation groups and dates			
Approving Body:	Quality and Patient Safety Group (minor amends)	Date of Approval:	8 August 2024
NB All new policies and policies subject to significant amendments require approval at EMT and Board ratification.		amendments an	change history below for minor d dates)
Ratified at:	Trust Board	Date of Ratification:	N/A
Training Needs Analysis: (please indicate training required and the timescale for providing assurance to EMT as the approving body that this has been delivered)	Ongoing training in BLS adult and paediatric as well as ILS, Anaphylaxis, Oxygen therapy and PGD Emergency medication	Financial Resource Impact:	May be financial impact as requires BLS trainer to assist in improving compliance.
Equality Impact Assessment	Yes [√]	No []	N/A []
undertaken?	If N/A, state rationale:		
Publication and Dissemination	Intranet [√]	Internet []	Staff Email [√]
Master version held by:	Policy Management Team [\[\] Author to send final document to \(\text{HNF-TR.PolicyManagement@nhs.net} \)		
Implementation:	Describe implementation plans below - to be delivered by the author: Implementation will consist of: Dissemination to staff via Global email Teams responsible for ensuring policy read and understood		
Monitoring and Compliance:	Audits relating to resuscitation equofficer yearly.	ipment will be und	dertaken by the resuscitation

Document Change Hi	Document Change History:			
Version Number / Name of procedural document this supersedes	Type of Change i.e. Review / Legislation	Date	Details of Change and approving group or Executive Lead (if done outside of the formal revision process)	
4.02	Review	Feb 13	Additional paragraph to Early Warning Score page 6 Changes to Appendix 1 contents of Anaphylaxis and Emergency Boxes	
4.03	Change in practice	May 13	Change – one standard Emergency Box across HFT- Emergency Box will contain Posiflush and Amiodarone (as requested by the OOH)	
4.04	Change in practice	June 13	Addition of 'completed form to be returned to risk managemer with an adverse incident form', on Resuscitation Outcome Report Form.	
4.05	Change in practice	Sept 13	Updated contents list for Anaphylaxis and Emergency boxes – Appendix 1	
4.06	Change in practice	June 14	Updated Appendix 1- Anaphylaxis & Cardiopulmonary Resus Kits	
4.07	Change in national Guidance	May 15	Updated re new Resuscitation Guidance for Mental Health.	
4.10	Change in guidance	April 16	Minor amends following new Resuscitation Council Guidance October 15	

5.00	Review	April 17	Amendments follow Resuscitation structure implementation
			Feb 18 – following contulation
			Procedure for CPR and assessment of patient added
5.1	Reviewed change in	August 21	Minor amends in line with new guidelines.
	international		
	guidelines		
5.2	Reviewed	August 24	Full review with minor amends. Approved at Quality and Patient
			Safety Group (QPaS) on 8 August 2024.

Appendix 5: Equality Impact Assessment (EIA)

For strategies, policies, procedures, processes, guidelines, protocols, tenders, services

- Document or Process or Service Name: Medical Emergencies and Resuscitation Policy and procedure.
- EIA Reviewer (name, job title, base and contact details). John Sands, Resuscitation Officer, East Riding Community Hospital. 2.
- Is it a Policy, Strategy, Procedure, Process, Tender, Service or Other? Policy

Main Aims of the Document, Process or Service

To outline the type of response required by staff on various sites and details the procedures that should be followed with regards to resuscitation attempts and medical emergencies.

Please indicate in the table that follows whether the document or process has the potential to impact adversely,

intentionally or unwittingly on the equality target groups contained in the pro forma				
Equality Target Group	Is the document or process likely to have a	How have you arrived at the		
1. Age	potential or actual differential impact with regards	equality impact score?		
2. Disability	to the equality target groups listed?	 who have you consulted with 		
3. Sex		what have they said		
Marriage/Civil Partnership	Equality Impact Score	what information or data have you		
Pregnancy/Maternity	Low = Little or No evidence or concern (Green)	used		
6. Race	Medium = some evidence or concern(Amber)	4. where are the gaps in your analysis		
7. Religion/Belief	High = significant evidence or concern (Red)	how will your document/process or		
Sexual Orientation		service promote equality and		
Gender re-assignment		diversity good practice		

Equality Target Group	Definitions	Equality Impact Score	Evidence to support Equality Impact Score
Age	Including specific ages and age groups: Older people, Young people, Children, Early years	Low	Covers all age groups
Disability	Where the impairment has a substantial and long term adverse effect on the ability of the person to carry out their day to day activities: Sensory, Physical, Learning, Mental Health (and including cancer, HIV, multiple sclerosis)	Low	Applicable to all
Sex	Men/Male, Women/Female	Low	Applicable to all
Married/Civil Partnership		Low	Applicable to all
Pregnancy/ Maternity		Low	Applicable to all
Race	Colour, Nationality, Ethnic/national origins	Low	Applicable to all
Religion or Belief	All Religions Including lack of religion or belief and where belief includes any religious or philosophical belief	Medium	Personal beliefs and preferences around medical interventions should be considered as part of holistic assessment.
Sexual Orientation	Lesbian, Gay Men, Bisexual	Low	Applicable to all
Gender Re-assignment	Where people are proposing to undergo, or have undergone a process (or part of a process) for the purpose of reassigning the person's sex by changing physiological or other attribute of sex	Low	Applicable to all

Summarv

Please describe the	main points/actions arisin	g from your assessment that supports your decision above
		encies are applicable to all regardless of race, gender, etc. If known, personal ventions should be considered as part of holistic assessment.
EIA Reviewer	John Sands	
Date completed;	13/08/24	Signature 9 Sands