SOP number	**58.001**	Version	**3.0**
Title	**CRIF QEUH Adult Emergency Resuscitation Procedures**		

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SOP category	58 NHS GG&C Clinical Research Imaging Facility

Staff category

Staff Category	**R**	**A**	**C**	**I**
Clinical Research Imaging Facility (CRIF) staff		X		
Radiologists	X			
Principal Investigator	X			
Clinical Research Fellow	X			
Clinical Physicist	X			
CRIF Authorised Users	X			

1. Scope

This procedure applies to all staff working within Glasgow Clinical Research Imaging Facility (CRIF).

2. Purpose

The purpose of this Standard Operating Procedure (SOP) is to define the responsibilities and procedure to be followed for the emergency resuscitation of an adult in the Clinical Research Imaging Facility (CRIF), Queen Elizabeth University Hospital (QEUH).

3. Procedures

All imaging staff must familiarise themselves with the location and content of the Emergency Trolleys and the location of the emergency drugs and telephones in all clinical areas. For routine examinations a minimum of 2 authorised persons will be present in the department. For more high risk examinations additional appropriate personnel will be identified as required to be present e.g. epilepsy nurse specialist.

3.1. Emergency Trolley

CRIF has a fully stocked and maintained emergency trolley located in the MRI unit, ground floor, Institute of Neurosciences (IoN).

3.2. Designation of roles

Authorised person scanning at the time of the incident will be designated lead and will be in charge of coordinating the imaging team members until the resus team arrives. This includes coordinating who is responsible for call for emergency team, evacuation of participant and facilitation of entry to the unit for the emergency response team.

3.3. Resuscitation - Immediate Response

In the event of a clinical emergency:

- Immediately call out for help and dial 2222.
- State emergency team required (resus team 3)
- State exact location, including hospital site as stated on red labels by telephones in control room
- Break glass on all emergency door release points to allow access
- Concurrently the second authorised person will evacuate the participant
- If the emergency is in the magnet room, immediately remove the participant from the scanner using the available MRI compatible trolley and Patslide and lock the MRI scan room door. Only then can resuscitation safely commence in the foyer of the research MRI facility
- Ensure personal safety – observe for sharps, body fluid spillage and electrical equipment in operation.

Follow Adult Life Support algorithm (appendix 1 Advanced Life Support; appendix 2 adult in-hospital resuscitation)

3.4. Enable emergency support services

For all areas:

- Ensure all door entry systems are disabled to allow resuscitation team access.
- A member of the imaging team should direct the resuscitation team to the clinical situation.
- Ensure safety of other participants or visitors and remove them from area wherever possible.

3.5. Arrival of resuscitation team

- Imaging team should continue to support the resuscitation following arrival of the resuscitation team.
- The resuscitation team should be given a clear verbal history including nature of the research study and patient's medical condition by the Imaging team lead.
- Health Records should be available electronically; if not they should be located as soon as possible.
- Research study documentation should be present at any participant visit; if not present they should be located as soon as possible.
- The Principal Investigator or appropriate research nurse, if not present, should be notified as soon as possible about the event.
- A senior member of CRIF team should be notified as soon as possible about the event, if not already involved.
- Where possible, the radiographer or doctor must ensure the next of kin is contacted as soon as possible. If the next of kin is present at the time of the incident, they should be kept informed and supported by imaging team.

3.6. Participant transfer

Transfer from the CRIF will be directed by the resuscitation team to an acute setting. The attending medical staff/PI/research nurse will provide relevant clinical and research handover on transfer.

3.7. Documentation

The attending medical staff must clearly record the events associated with the clinical emergency in the participant's health records as soon as possible after the event.

Imaging research staff:

- Must record event in NHS Datix System
- Complete all relevant study documentation
- Inform GCRF QA Lead of the event
- Complete NHS GG&C Resuscitation Form – scan top copy into participant's health record and send carbon copy to site Resuscitation Officer.

4. Referenced documents

- Resuscitation Council (UK) Life Support Algorithm
- NHS GG&C Resuscitation Treatment Record

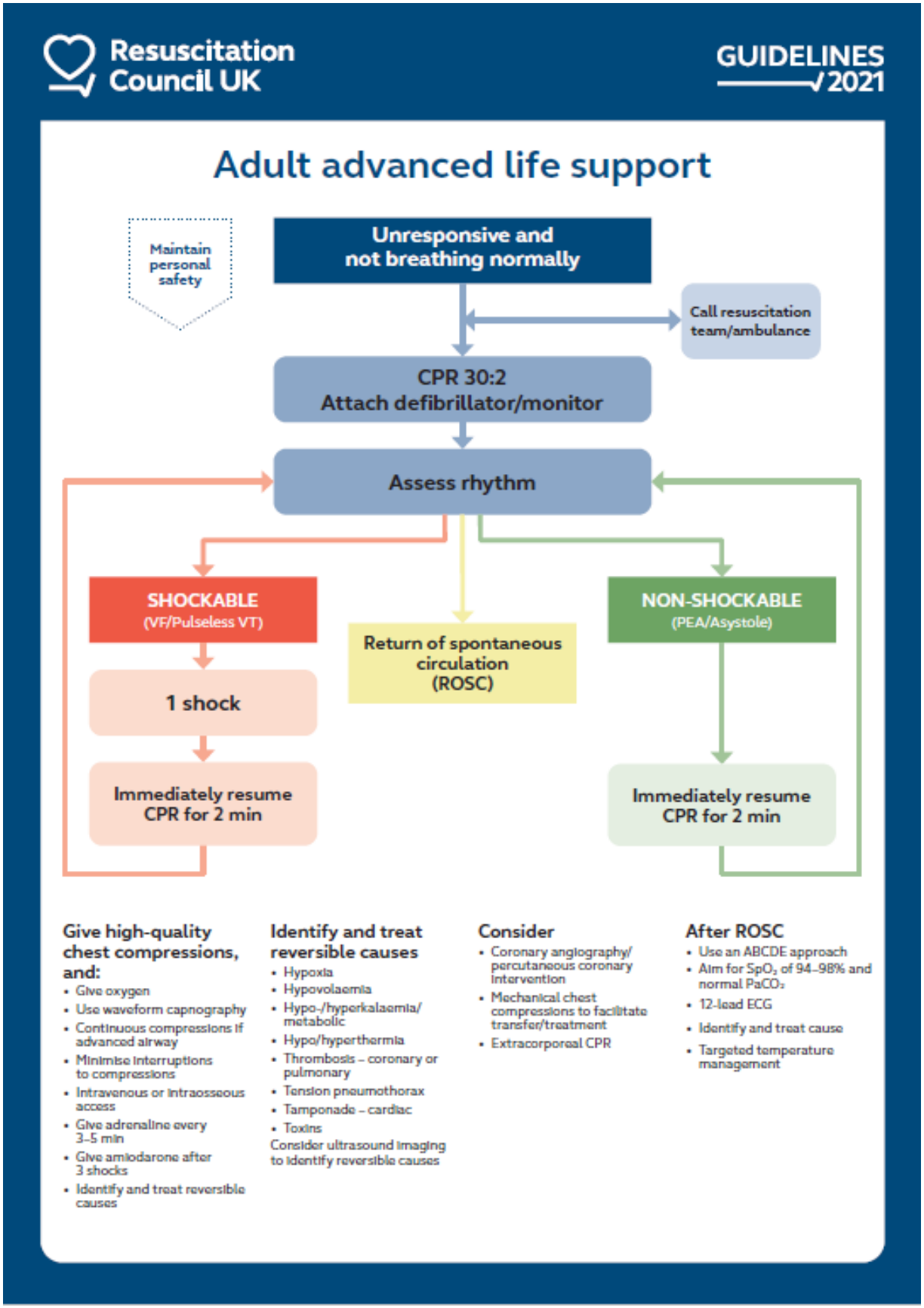
5. Related documents

- Form 58.001A – CRIF Emergency Trolley Checklist
- Form 58.001B – CRIF Emergency Trolley Signoff
- GUI 17.001A – Emergency Trolley Checks
- Resuscitation Council (UK) Guidelines
- NHS Greater Glasgow & Clyde Resuscitation Policies

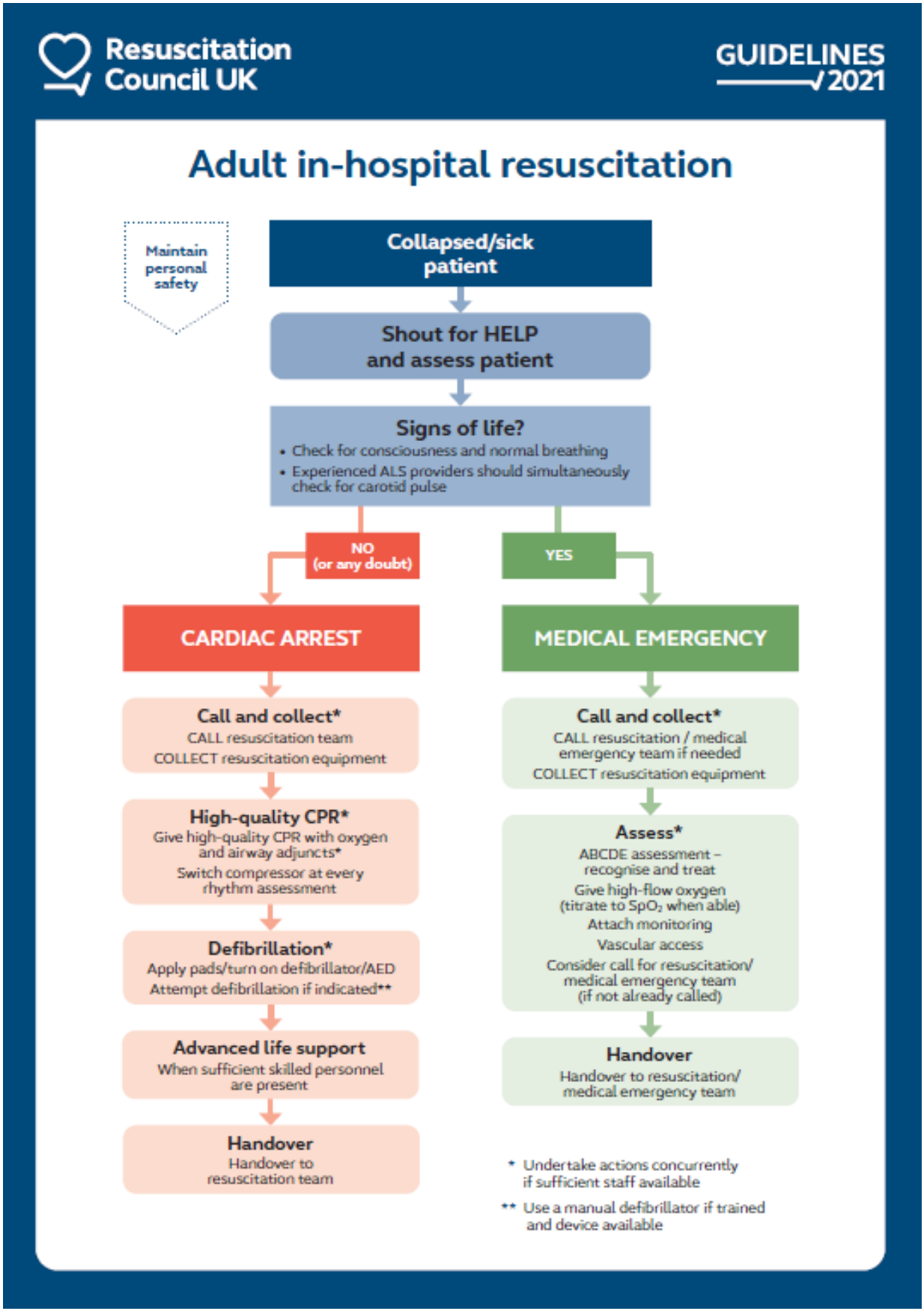
6. Document history

Version	Date	Description
1.0	17/10/16	First release
2.0	13/01/2020	Updated to include staff category: University of Glasgow staff/students. Use of 'participant' in place of 'patient'
3.0	23/11/2023	Update to SOP template v2.0 Addition of RACI matrix Update algorithms

Appendix 1


Resuscitation Council UK
GUIDELINES 2021
Adult advanced life support
Maintain personal safety
Unresponsive and not breathing normally
Call resuscitation team/ambulance
CPR 30:2
Attach defibrillator/monitor
Assess rhythm
SHOCKABLE
(VF/Pulseless VT)
1 shock
Immediately resume CPR for 2 min
Return of spontaneous circulation (ROSC)
NON-SHOCKABLE
(PEA/Asystole)
Immediately resume CPR for 2 min
Give high-quality chest compressions, and:
• Give oxygen
• Use waveform capnography
• Continuous compressions if advanced airway
• Minimise interruptions to compressions
• Intravenous or intraosseous access
• Give adrenaline every 3–5 min
• Give amiodarone after 3 shocks
• Identify and treat reversible causes
Identify and treat reversible causes
• Hypoxia
• Hypovolaemia
• Hypo-/hyperkalaemia/ metabolic
• Hypo/hyperthermia
• Thrombosis – coronary or pulmonary
• Tension pneumothorax
• Tamponade – cardiac
• Toxins
Consider ultrasound imaging to identify reversible causes
Consider
• Coronary angiography/ percutaneous coronary intervention
• Mechanical chest compressions to facilitate transfer/treatment
• Extracorporeal CPR
After ROSC
• Use an ABCDE approach
• Aim for SpO2 of 94–98% and normal PaCO2
• 12-lead ECG
• Identify and treat cause
• Targeted temperature management

Appendix 2


Resuscitation Council UK
GUIDELINES 2021
Adult in-hospital resuscitation
Maintain personal safety
Collapsed/sick patient
Shout for HELP and assess patient
Signs of life?
• Check for consciousness and normal breathing
• Experienced ALS providers should simultaneously check for carotid pulse
NO (or any doubt)
YES
CARDIAC ARREST
Call and collect*
CALL resuscitation team
COLLECT resuscitation equipment
High-quality CPR*
Give high-quality CPR with oxygen and airway adjuncts*
Switch compressor at every rhythm assessment
Defibrillation*
Apply pads/turn on defibrillator/AED
Attempt defibrillation if indicated**
Advanced life support
When sufficient skilled personnel are present
Handover
Handover to resuscitation team
MEDICAL EMERGENCY
Call and collect*
CALL resuscitation / medical emergency team if needed
COLLECT resuscitation equipment
Assess*
ABCDE assessment – recognise and treat
Give high-flow oxygen (titrate to SpO2 when able)
Attach monitoring
Vascular access
Consider call for resuscitation/ medical emergency team (if not already called)
Handover
Handover to resuscitation/ medical emergency team
* Undertake actions concurrently if sufficient staff available
** Use a manual defibrillator if trained and device available