Resuscitation Council UK

Quality standards: Mental health inpatient care equipment and drug lists

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Introduction

Healthcare organisations have an obligation to provide a high-quality resuscitation service, and to ensure that staff are trained and updated regularly to a level of proficiency appropriate to each individual's expected role.

As part of the quality standards for cardiopulmonary resuscitation practice and training, this document provides lists of the minimum equipment and drugs required for cardiopulmonary resuscitation in settings that deliver mental health inpatient care. These lists are categorised according to the clinical setting.

The equipment and drug lists on this page are in reference to the Mental Health: Inpatient Care Quality Standards.

The core standards for the provision of cardiopulmonary resuscitation across all healthcare settings are described in the Introduction and Overview to Quality Standards.

Drug tables for cardiac arrest are highlighted in the text with the symbol !

General points

1. All clinical service providers must ensure that their staff have immediate access to appropriate resuscitation equipment and drugs to facilitate rapid resuscitation of the patient in cardiorespiratory arrest. The standard

defibrillator sign should be used in order to reduce delay in locating a defibrillator in an emergency

2. All settings must have a means of calling for help (e.g. landline telephone [internal or external], mobile telephone with reliable signal, or alarm bell).
3. Standardisation of the equipment used for cardiopulmonary resuscitation (including defibrillators and emergency suctioning equipment), and the layout of equipment and drugs throughout an organisation is recommended.
4. It is recognised that planning for every eventuality is complex; therefore, organisations must undertake a risk assessment to determine what resources are required given their local circumstances. Risk factors to consider include patient group (e.g. adults, children), incidence of cardiac arrest, training of staff, and access to expert help.
    - For example, in secondary or tertiary care specific locations may need special provisions (e.g. for failed intubation, tracheostomy care, cardiac arrest in pregnancy etc.).
    - Some settings need a wide range of equipment immediately available (e.g. resuscitation room in emergency department). Suggested options include having basic equipment (and possibly drugs) available immediately (on a resuscitation trolley), and further equipment and drugs arriving with a resuscitation team (in a ‘grab-bag’), or in some settings as part of an ambulance response.
    - Staff should be trained to use the available equipment according to their expected roles.
5. Depending on the organisation, this risk assessment must be overseen by a Resuscitation Service Structure or a designated resuscitation lead. Expert advice should also be sought locally from those involved frequently in resuscitation (e.g. resuscitation officers, emergency physicians, cardiac care unit staff, intensivists, anaesthetists, prehospital care physicians).
6. Resuscitation equipment should be single-patient-use and latex-free, whenever possible and appropriate. Where non-disposable equipment is used, a clear policy for decontamination after each use must be available and must be followed.
7. Personal protective equipment (e.g. gloves, aprons, eye protection) and sharps boxes must be available, based on a local risk assessment and local policies.
8. A reliable system of equipment checks and replacement must be in place to ensure that equipment and drugs are always available for use in a cardiac arrest. The frequency of checks should be determined locally.
9. It is recommended that equipment and drugs are presented in a clear and logical manner to enable easier use during an emergency.

10. The manufacturer’s instructions must be followed regarding use, storage, servicing and expiry of equipment and drugs.
11. Further equipment and drugs may be needed to manage other types of emergencies that are likely to be encountered in a particular setting; this may include:
    - monitoring equipment (e.g. blood pressure, pulse oximetry, 3-lead electrocardiogram [ECG], temperature, waveform capnography);
    - 12-lead ECG recorder;
    - near-patient tests (e.g. blood glucose, blood gas analysis).
12. A formal procurement process that includes trialling of equipment before purchase is recommended. Trialling of resuscitation equipment can take place in actual care settings or in simulated patient scenarios.
13. The precise availability of equipment and drugs should be determined locally. The lists include a suggestion on the immediacy with which equipment and drugs should be available:
    - Immediate - available for use within the first minutes of cardiorespiratory arrest (i.e. at the start of the resuscitation)
    - Accessible - available for prompt use when the need is determined by the resuscitation team.
14. These lists are not exhaustive. Local experts should be consulted to ensure the appropriate equipment and drugs are available when they are needed, to enable provision of high-quality attempted resuscitation.

Equipment and drug lists: adult

The equipment and drug lists in this chapter are for adult mental health inpatient care.

Drug tables for cardiac arrest are highlighted in the text with the symbol !

Airway and Breathing (Adult)

Mental health inpatient care: adult

Airway and breathing

Item	Suggested availability	Comments
Ligature Cutter	Immediate	
Pocket mask with oxygen port, and oxygen tubing	Immediate	
Oxygen mask with reservoir, and oxygen tubing	Immediate	
Self-inflating bag with reservoir, and oxygen tubing	Immediate	
Clear face masks, sizes 3, 4, 5	Immediate	For use with self-inflating bag
Oropharyngeal airways, sizes 2, 3, 4	Immediate	
Nasopharyngeal airways, sizes 6, 7 (and lubrication)	Immediate	Will depend on local policy and staff training
Portable suction (battery or manual) with Yankauer sucker and soft suction catheters	Immediate	Airway suction equipment. NPSA Signal. Reference number 1309. February 2011

Item	Suggested availability	Comments
Supraglottic airway device with syringes, lubrication and ties/tapes/scissors as appropriate	Immediate/Accessible	Choice of device (e.g. laryngeal mask airway, i-gel®, laryngeal tube) and size will depend on local policy and staff training
Oxygen cylinder (with key where necessary)	Immediate	
Laryngoscope and Magill forceps	Immediate	Will depend on local policy and staff training
Stethoscope	Immediate	

Circulation (Adult)

Mental health inpatient care: adult

Circulation

Item	Suggested availability	Comments
Automated external defibrillator (AED), Manual defibrillator and/or AED for ECT departments	Immediate	Type of defibrillator and locations determined by a local risk assessment. Available to enable shock within 3 minutes of collapse
Adhesive defibrillator pads x 2 packs	Immediate	
Razor	Immediate	Secure units must have a risk assessment
ECG electrodes	Immediate	If monitoring devices are available
Large heavy-duty scissors (e.g. ‘Tuff Cut’)	Immediate	Secure units must have a risk assessment

Item	Suggested availability	Comments
Intravenous cannulae (selection of sizes) and 2% chlorhexidine/alcohol wipes, tourniquets and cannula dressings	Immediate/Accessible	Will depend on local policy and staff training
Adhesive tape	Immediate/Accessible	
Intravenous infusion set	Accessible	Will depend on local policy and staff training
0.9% sodium chloride (1000 ml)	Accessible	Amount depends on access to further fluids
Selection of needles and syringes	Accessible	Will depend on local policy and staff training
Intraosseous access device	Accessible	Will depend on local policy and staff training
Dressing Pads x 2	Immediate	

Other Items (Adult)

Mental health inpatient care: adult

Other items

Item	Suggested availability	Comments
Clock/timer	Accessible	
Gloves, aprons, eye protection	Immediate	Further personal protective equipment may be required according to local policy
Nasogastric tube	Accessible	Will depend on local policy and staff training
Sharps container and clinical waste bag	Immediate	Sharps container must be immediately available wherever sharps used
2% chlorhexidine / alcohol wipes	Accessible	
Blood sample tubes	Accessible	
Blood glucose analyser with appropriate strips	Accessible	According to local policy
Manual handling equipment	Accessible	According to setting. See Guidance for safer handling during resuscitation in healthcare settings

Item	Suggested availability	Comments
Cardiorespiratory arrest record forms for patient notes, Audit forms and CPR decision forms	Accessible	
Access to algorithms, emergency drug doses	Accessible	

CARDIAC ARREST DRUGS – FIRST LINE for intravenous use [!] (Adult)

Mental health inpatient care: adult

CARDIAC ARREST DRUGS – FIRST LINE for intravenous use !

Items	Suggested availability	Comments
Adrenaline 1mg (= 10 ml 1:10,000) IV as a prefilled syringe x 3	Immediate	Number of syringes depends on access to further syringes. 1 syringe needed for each 4-5 min of CPR. Will depend on local policy and staff training
Amiodarone 300mg as a prefilled syringe x1	Accessible	First dose required after 3 defibrillation attempts. Will depend on local policy and staff training

Other Drugs (Adult)

Mental health inpatient care: adult

Other drugs

Item	Suggested availability	Comments
Adrenaline 1mg (1 ml 1:1000)	Immediate	First line for anaphylaxis - 0.5 mg intramuscular injection in adults
Chlorphenamine 10 mg x 1	Accessible	Second line for anaphylaxis, can also be given intramuscularly. Will depend on local policy and staff training
Hydrocortisone 100 mg x 2	Accessible	Second line for anaphylaxis, can also be given intramuscularly. Will depend on local policy and staff training
Aspirin 300 mg	Accessible	For acute coronary syndrome. Will depend on local policy and staff training
Furosemide 50 mg IV x 2	Accessible	Will depend on local policy and staff training
Flumazenil 0.5 mg IV x 2	Accessible	Will depend on local policy and staff training

Item	Suggested availability	Comments
Naloxone 400 micrograms x 5	Accessible	For intramuscular or intravenous use. Will depend on local policy and staff training
Midazolam for buccal administration	Accessible	Drug preparation and use will depend on local policy and staff training
Glucagon 1 mg x 1	Accessible	For intramuscular or intravenous use. Will depend on local policy and staff training
GTN spray	Accessible	
Ipratropium bromide 500 microgram nebules x 2 (and nebulizer device)	Accessible	Will depend on local policy and staff training
Salbutamol 5 mg nebules x 2 (and nebulizer device)	Accessible	Will depend on local policy and staff training

Notes and supporting information (Adult)

Notes

1. A 999 ambulance must be called for any cardiorespiratory arrest unless there is a local resuscitation team available.

2. Keeping resuscitation drugs locked away - this problem was addressed in detail in 2005 by the Royal Pharmaceutical Society of Great Britain in a revision of the Duthie Report (1988) 'The Safe and Secure Handling of Medicines'. Resuscitation Council UK responded with a statement, along with an accompanying letter written to the CQC explaining the position.
3. When deciding how and where to store emergency drugs, a local risk assessment is required to balance the risk of access to drugs by patients and visitors against the risk of a delay in access to emergency drugs in an emergency.

Supporting information

1. Association of Anaesthetists of Great Britain and Ireland (AAGBI) Safety Guideline - Interhospital Transfer. 2009. http://www.aagbi.org
2. Intensive Care Society. Transfer Of The Critically Ill Adult 2019 https://www.ics.ac.uk/ICS/ICS/GuidelinesAndStandards/ICSGuidelines.aspx
3. The Hospital Management of Hypoglycaemia in Adults with Diabetes Mellitus https://www.diabetes.org.uk/Documents/About%20Us/Our%20views/Care%20recs/JBDS%20hypoglycaemia%20position%20(2013).pdf

Equipment and drug lists: paediatric

The equipment and drug lists in this chapter are for paediatric mental health inpatient care.

Drug tables for cardiac arrest are highlighted in the text with the symbol !

Airway and Breathing (Paediatric)

Mental health inpatient care: paediatric

Airway and breathing

Item	Suggested availability	Comments
Pocket mask with oxygen port & oxygen tubing – paediatric and adult	Immediate	Will depend on local policy and staff training
Oxygen mask with reservoir & oxygen tubing – paediatric and adult	Immediate	Will depend on local policy and staff training
Self-inflating bag with reservoir & oxygen tubing – paediatric and adult	Immediate	Will depend on local policy and staff training
Clear face masks size 00, 0, 1, 2, 3, 4	Immediate	For use with self-inflating bag. Sizes and need to be determined according to local policy.
Oropharyngeal airways size 0, 1 and tongue depressor	Immediate	Will depend on local policy and staff training
Portable suction (battery or manual) with Yankauer sucker (paediatric and adult) and soft suction catheters, sizes 6, 8, 10, 12, 14	Immediate	Soft suction catheters will be dependent on the suction device available
Oxygen cylinder (with key if necessary)	Immediate	

Item	Suggested availability	Comments
Laryngoscope and Magill forceps	Immediate	Will depend on local policy and staff training

Circulation (Paediatric)

Mental health inpatient care: paediatric

Circulation

Item	Suggest availability	Comments
Defibrillator - Manual defibrillator and/or AED	Immediate	Type of defibrillator and locations decided by a local risk assessment. AEDs are not suitable for infants (less than 12 months old) and this should be considered at risk assessment
Adhesive defibrillator pads – paediatric and adult sizes	Immediate	Spare set of pads also recommended
Intravenous cannulae (sizes 14, 16, 18, 20, 22, 24G) and 2% chlorhexidine / alcohol wipes, tourniquets and dressings	Accessible	Will depend on local policy and staff training
Adhesive tape	Accessible	
Intravenous infusion sets (with and without incorporated burette)	Accessible	Will depend on local policy and staff training
IV extension set with 3-way taps and bungs	Accessible	Will depend on local policy and staff training

Item	Suggest availability	Comments
0.9% sodium chloride	Accessible	Will depend on local policy and staff training
10% Dextrose	Accessible	
Selection of needles and syringes	Accessible	
Intraosseous access device with needles suitable for children and adults	Accessible	Will depend on local policy and staff training

CARDIAC ARREST DRUGS – FIRST LINE for intravenous use [!] (Paediatric)

Mental health inpatient care: paediatric

CARDIAC ARREST DRUGS – FIRST LINE for intravenous use !

Item	Suggested availability	Comments
Adrenaline 1mg (= 10 ml 1:10,000) prefilled syringe(s) *	Immediate	According to local policy
Chlorphenamine 10 mg x 2*	Accessible	Second line for anaphylaxis. For intramuscular or intravenous use. Will depend on local policy and staff training
Hydrocortisone 100 mg x 2*	Accessible	Second line for anaphylaxis. For intramuscular or intravenous use. Will depend on local policy and staff training

***These lists refer to drug availability and not to the doses used for the treatment of children. For correct dosing, please refer to this chart.**

Other Items (Paediatric)

Mental health inpatient care: paediatric

Other items

Item	Suggested availability	Comments
Clock / timer	Accessible	
Gloves, aprons, eye protection	Immediate	
Manual handling equipment	Accessible	According to setting. See Guidance for safer handling during resuscitation in healthcare settings
Cardiac arrest record form for patient notes and audit forms	Accessible	
Access to algorithms, emergency drug doses, paediatric drug dose calculators (e.g. Broselow tape)	Immediate	According to local policy

Other Emergency Drugs (Paediatric)

Mental health inpatient care: paediatric

Other emergency drugs

Item	Suggested availability	Comments
Adrenaline 1mg (1 ml 1:1000)*	Immediate	First line for anaphylaxis for intramuscular use
Glucagon 1 mg x 1*	Accessible	For intramuscular or intravenous use. Will depend on local policy and staff training
Salbutamol 5mg nebules x 2 (and nebulizer device)*	Accessible	Will depend on local policy and staff training

***These lists refer to drug availability and not to the doses used for the treatment of children. For correct dosing, please refer to this chart.**

Notes and Supporting Information (Paediatric)

Notes

1. A 999 ambulance must be called for any cardiorespiratory arrest unless there is a local resuscitation team available.
2. Keeping resuscitation drugs locked away - this problem was addressed in detail in 2005 by the Royal Pharmaceutical Society of Great Britain in a revision of the Duthie Report (1988) 'The Safe and Secure Handling of Medicines'. Resuscitation Council UK responded with a statement, along with an accompanying letter written to the CQC explaining the position.
3. When deciding how and where to store emergency drugs, a local risk assessment is required to balance the risk of access to drugs by patients and visitors against the risk of a delay in access to emergency drugs in an emergency.

Supporting information

1. Joint British Diabetes Societies (JBDS) for Inpatient Care Group - Guidelines: https://abcd.care/joint-british-diabetes-societies-jbds-inpatient-care-group

Related content

Quality Standards: Mental health inpatient care

ILS (Immediate Life Support) Course