



GUIDELINE 10.1

BASIC LIFE SUPPORT TRAINING

INTRODUCTION

Participation in Basic Life Support training courses is known to increase bystander CPR and improve the outcomes of victims. The Guidelines in this manual are based on the best evidence available combined with the educational premise that "simple is best". The trainers/facilitators of resuscitation techniques should base their teaching on the target audience and their educational needs and/or practice requirements. Therefore some interpretation of the guidelines may be necessary to ensure that simple, sensible resuscitation practices are taught and learned.

Regardless of the recency of CPR training or re-training, any attempt at resuscitation is better than no attempt and should be encouraged.

Training organisations are required to assess CPR competence. Assessors need to be cognisant of the intent of the resuscitation community that any attempt at resuscitation is better than no attempt. As such, assessment should focus on adequate CPR and not on the technicalities of achieving set figures or rates. [Class A; LOE Expert Consensus Opinion]

Primary school age children are able to perform age appropriate Basic Life Support skills effectively when attention is given to the context in which these skills are introduced and how the skills are taught. Comparable knowledge and psychomotor skills are taught to children of this age and retained, with subsequent demonstration of effective performance. Other successful examples include teaching of skills related to most games and the teaching of safety knowledge and skills when travelling to and from school.^{1,2}[Class A; Expert Consensus Opinion]

The Australian Resuscitation Council and New Zealand Resuscitation Council believe that organisations and individuals experienced in resuscitation training are best positioned to contextualise the above principles into their training programs.

RECOMMENDATIONS

- Learning objectives for training must include the following: recognition of an emergency, ability to call an emergency response number, competence in chest compressions, rescue breathing, use of an automated external defibrillator, and emotional preparation for the capability to act in an emergency³.

- At a minimum, mouth to mouth rescue breathing must be taught and assessed (in conjunction with the learning objectives outlined above), in any training program
- Training with social support reduces family member and patient anxiety and improves emotional adjustment and increases feelings of empowerment.³ [Class A; LOE II, III-1, IV, extrapolated evidence]
- Access to training courses or self-instruction must be readily available in the community.⁴
- The definition of specific characteristics and needs of each training group should be an initial step in all curriculum development.⁴
- The use of realistic techniques (e.g. video-assisted instruction) to improve outcomes should be considered.³ [Class B; LOE II, III-1, III-2, IV]
- CPR training and actual performance is safe in most circumstances. Individuals undertaking Basic Life Support training should be advised of the nature and extent of the physical activity required during the training program. Learners who develop significant symptoms (e.g. chest pain, severe shortness of breath) during CPR should be advised to stop.³ [Class A; LOE IV, extrapolated evidence]
- Initial training must always include specific plans for refresher training. [Class A; LOE VI]
- The optimal duration of an instructor-led basic life support course has not been determined.³ [Class B; LOE II, III-1] At the completion of the course learners must be able to physically demonstrate CPR skills and knowledge on a manikin. Solely computer based systems do not fulfil this requirement. [Class A; LOE IV]
- Training should take place in an environment that is comfortable for learners and should use instructional methods that learners understand. [Class A; LOE IV]
- Trainers/facilitators (for courses for laypersons or healthcare professionals) must have received appropriate instruction in facilitation of learning and must attend training / facilitation updates on a regular basis [Class A; LOE IV]
- Research in Basic Life Support training must be encouraged, developed and integrated into practice where appropriate. [Class A; Expert Consensus Opinion]
- The educational efficacy of new course content or methods must be demonstrated before the course is widely conducted. [Class A; Expert Consensus Opinion]
- CPR prompt/feedback devices may be considered during Basic Life Support training and in clinical use as an overall strategy to improve the quality of CPR.³ [Class B, LOE III-1, III-2, III-3, extrapolated evidence]
- Prompt devices may include a signal to perform an action (e.g. metronome for compression rate) and feedback after-event-information based on effect of an action (e.g. visual display of compression depth).³

CPR RECERTIFICATION

- The optimal interval for retraining has not been established, but repeated refresher training is needed for individuals who are not performing resuscitation on a regular basis.³ [Class A; LOE IV]
- All those trained in CPR should refresh their CPR skills at least annually. [Class A; Expert Consensus Opinion]

REFERENCES

1. Jacobs, I and Kroll, L. 1997 Development of strategies to encourage the teaching of cardio-pulmonary resuscitation in schools and workplaces The Australian Resuscitation Council and the School of Public Health, Curtin University of Technology.
2. Lester, C; Weston, C; Morgan M; Donnelly, P; Assar, D 1994. The Headstart school programme: teaching cardiopulmonary resuscitation to schoolchildren. Health Education Journal 53, pp454-461.
3. Soar J, Mancini ME, Bhanji F, Billi JE, Dennett J, Finn J, Ma MHM, Perkins GD, Rodgers DL, Hazinski MF, Jacobs I, Morley PT, on behalf of the Education, Implementation, and Teams Chapter Collaborators. Part 12: Education, implementation, and teams: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. Resuscitation 2010;81:e288–e330.
4. International Liaison Committee on Resuscitation. Education in Resuscitation. Resuscitation 2003; 59: 11-43 <http://www.resuscitationjournal.com>

LEVEL OF EVIDENCE

Level III-2, III-3

Level IV

Expert Consensus Opinion

CLASS OF RECOMMENDATION

Class A – Recommended

FURTHER READING

ARC Guideline 7 External Automated Defibrillation (AED in Basic Life Support (BLS)

ARC Guideline 8 Cardiopulmonary Resuscitation

ARC Guideline 10.3 Cross Infection Risks and Manikin Disinfection



GUIDELINE 10.3

CROSS INFECTION RISKS AND MANIKIN DISINFECTION

PRINCIPLES

- The risk of disease transmission during CPR training is extremely low ¹[Class B; LOE extrapolated evidence]
- Both trainers and trainees should be required to assume responsibility for equipment that they have used; organisations and trainers must make disinfection and good hygiene practice evident to trainees² [Class A; Expert Consensus Opinion]
- Manikins should be maintained in good condition to enable effective cleaning and disinfection² [Class A; Expert Consensus Opinion]
- Consideration should be given to the use of manufacturers' adjuncts such as manikin face shields; however use of adjuncts does not eliminate the need for thorough cleaning and disinfection. Manikin surfaces should be thoroughly cleaned and then disinfected after each trainer/trainee use¹[Class B; LOE extrapolated evidence]
- The mouth, saliva, exhaled air and blood may be the source of viruses and bacteria. These infections may contaminate manikin face pieces so parts of the manikin that come into contact with oral secretions / saliva should be changed or reprocessed between use to avoid transmitting infections between trainees¹[Class B; LOE extrapolated evidence]
- Trainees with signs of respiratory infections (flu-like symptoms, fever, cough, sore throat) or who have mouth or facial lesions (cold sores, chicken pox, impetigo, wounds) should not participate in group training¹ [Class B; LOE extrapolated evidence]
- Trainers and trainees should avoid contact with any saliva or body fluids present on the manikin and should wear gloves when handling used equipment or disinfectant solutions¹[Class B; LOE extrapolated evidence]
- Good hand hygiene on the part of instructors and participants before and after use of manikins is also important in preventing infection. Where hand washing is impractical, it can be accomplished by the use of antiseptic hand rub or gel² [Class A; Expert Consensus Opinion]

- After use, face pieces should be thoroughly cleaned with warm water and detergent, rinsed and dried before disinfection with an appropriate disinfectant.² Face pieces must be dry before placing in disinfectant to ensure that the disinfecting solution is not diluted. Before use it is essential to rinse the face piece or other items with water to rinse off residual disinfectant.²[Class A; Expert Consensus Opinion]. A number of disinfecting agents e.g. chlorhexidine 0.5% w/v in 70% alcohol, sodium hypochlorite (bleach) are available. These agents should be used in accordance with the Australian Government Department of Health & Ageing document “Infection Control Guidelines for the Prevention of Transmission of Infectious Diseases in the Health Care Setting”² and manufacturers’ instructions. [Class A; Expert Consensus Opinion].

REFERENCES

1. Soar J, Mancini ME, Bhanji F, Billi JE, Dennett J, Finn J, Ma MHM, Perkins GD, Rodgers DL, Hazinski MF, Jacobs I, Morley PT, on behalf of the Education, Implementation, and Teams Chapter Collaborators. Part 12: Education, implementation, and teams: 2010 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. Resuscitation 2010;81:e288–e330. <http://www.resuscitationjournal.com>
2. Australian Guidelines for the Prevention and Control of Infection in Healthcare (2010) National Health and Medical Research Council (NHMRC) <http://www.nhmrc.gov.au/node/30290>

FURTHER READING

ARC Guideline 5 Breathing
 ARC Guideline 6 Compressions
 ARC Guideline 7 External Automated Defibrillation in Basic Life Support
 ARC Guideline 8 Cardiopulmonary Resuscitation
 ARC Guideline 10.3 Cross Infection Risks and Manikin Disinfection

Section 10: Guideline 10.5 - Legal and Ethical Issues Related to Resuscitation

Summary

Note: This guideline does not constitute legal advice. Individuals and/or organizations should obtain legal advice if required for their own jurisdiction.

Who does this guideline apply to?

This guideline applies to adults, children and infant victims.

Who is the audience for this guideline?

This guideline pertains to the important but limited number of legal and ethical issues concerning resuscitation encountered by first-aiders, first-responders and healthcare professionals. Some, but not all situations related to resuscitation are considered by Common and Statute law. Circumstances not considered by Statute law are subject to Common law.

Index

	<u>Page</u>
Duty to rescue	1
Consent for treatment	4
Treatment without consent	4
Advance care directives refusing treatment	9
Discontinuation (withdrawal) and withholding of treatment	11
Do not attempt resuscitation orders	12
Termination of resuscitation attempts	13

Duty to Rescue

A frequent question is whether lay persons, by-standers, first-responders and healthcare personnel off-duty have a duty to assist (rescue) a person in need of emergency care. The legal issues surrounding resuscitation by lay persons, trained volunteers and those who have a duty of care to rescue are clear in only a few circumstances.¹ While 'Good Samaritans' and 'Volunteers' have no duty of care to rescue, many differences in legislation exist between jurisdictions which provide protection for 'Good Samaritans' and Volunteers when they do assist a person in need of emergency care. Medical practitioners are subject to legal, ethical and professional principles.

Australia

Only the Northern Territory has legislation that requires a duty to rescue by any person without a duty of care. In that jurisdiction, any person who callously fails to provide rescue, resuscitation, medical treatment, first aid or succour of any kind to a person urgently in need of it and whose life may be endangered is guilty of a crime and is liable to imprisonment for 7 years (*Criminal Code Act 2014*, s155).

Good Samaritans and Volunteers

A 'Good Samaritan' is defined in legislation as a person acting without expecting financial or other reward for providing assistance. Although jurisdictional differences exist, Volunteers are generally (circuitously) defined as a member of a Volunteer organization performing voluntary community work.

Lay persons or Volunteers acting as 'Good Samaritans' are under no legal obligation to assist a fellow human being, that is, they have no legal "duty to rescue". However, uniquely, in The Northern Territory, persons are required by Statute law to render assistance to any other in need. ANZCOR encourages rescue but rescuers should be aware of dangers to themselves.

Having decided to assist, a rescuer is expected to display a standard of care appropriate to their training (or lack of training). Generally speaking, that legal standard is low. Rescuers need not fear litigation if they come to the aid of a fellow human in need. No 'Good Samaritan' or Volunteer in Australia, or probably elsewhere, has ever been successfully sued for consequences of rendering assistance to a person in need. Indeed, legal protection is provided.

All Australian States and Territories have enacted Statutes that provide some measure of protection for the 'Good Samaritan' and/or the Volunteer. They are required to act at least with 'good faith' and 'without recklessness'. In New South Wales and Queensland the 'Good Samaritan' or Volunteer is required to act with reasonable care and skill – a standard which is in fact no different from the common law standard which pre-dated the legislation. However, Volunteers must act within the scope of activity and instructions of their organisation. However, legislation does not afford the same protection to the organisation which controls the Volunteer.

The standard of care required of a person who has a duty of care to respond, is higher. Like other persons in our community who hold themselves out to have a skill, they must perform their tasks to a standard expected of a reasonably competent person with their training and experience. However, this does not mean that the standard of care given must be of the highest level.

Doctors (and healthcare professionals)

Australia

Doctors, and probably other trained healthcare workers, who have been requested to provide assistance outside their usual place of work when ready for duty have a legal obligation to do so in New South Wales and in Western Australia.

This was established for New South Wales in the Common Law case of *Lowns v Woods* (1995) 36 NSWLR 344 when section 27(2)(c) of the then existing *Medical Practitioners Act 1938* (NSW), which has been repealed, specified that a medical practitioner was guilty of misconduct if refusing or failing to attend a person in need of urgent attention by a medical practitioner. This principle has been continued in section 139C(c) of the current *Health Practitioner Regulation National Law Act* (NSW) which holds a medical practitioner guilty of unsatisfactory professional conduct if they refuse or fail, without reasonable cause, to attend (within a reasonable time after being so requested) on a person for the purpose of rendering professional services in the capacity of a medical practitioner if the practitioner has reasonable cause to believe that the person is in need of urgent attention by a medical practitioner, unless the practitioner has taken all reasonable steps to ensure that another medical practitioner attends instead within a reasonable time.

In Western Australia, a medical practitioner was found guilty of professional improper conduct under the existing *Medical Act 1894* (WA), which has been repealed, when they failed to provide assistance to a victim of a motor vehicle accident (*Medical Board of Australia and Dekker* [2013] WASAT 182).

At the time of writing, the law pertaining to doctors (or healthcare professionals) has not been tested in other jurisdictions. Although the *Health Practitioner Regulation National Law Act* also applies to other Australian jurisdictions (as a national law), it does not contain a section specifying that failure to render urgent is unsatisfactory professional conduct. However, a doctor in any jurisdiction who fails to render emergency assistance to a victim may be subject to legal or disciplinary action since section 2.5 of the code of medical practice (Good Medical Practice: A Code of Conduct for Doctors in Australia) states: “Good medical practice involves offering emergency assistance in an emergency that takes account of your safety, your skills, the availability of other options and the impact on any other patients under your care; and continuing to provide that assistance until your services are no longer required”.

New Zealand

Notwithstanding the legal requirements of persons with a duty of care, in New Zealand, the *Crimes Act 1961* (s151) requires a person in charge of another by reason of detention, age, sickness insanity or any other cause, to provide the “necessaries of life” to preserve life and prevent permanent injury and if neglecting to do so is criminally liable unless a lawful excuse exists. Such excuses would be good medical practice in the victim’s best interests.

Ethical standards of medical practice are enshrined in law. Right 4(s2) of the Code of Health and Disability Services Consumers’ Rights, lawful as a regulation under the Health and Disability Commissioner Act (1994), provides that every consumer has a right to have services provided that comply with legal, professional, ethical and relevant other standards. The Code extends to every registered health professional person or organisation providing a health service to the public whether remunerated or not. Since the New Zealand Medical Associations’s Code of Ethics specifies that a doctor has a duty to attend a medical emergency if requested, that ethical duty is a legal requirement for doctors under the Act. In this context an emergency is defined as a sudden unforeseen injury, illness or complication demanding immediate early professional care to save or prevent gross disability, pain or distress.

Ethical and hence lawful excuses to not attend an emergency are attendance at another emergency, existence of a more appropriate or geographically available service, the doctor is off-duty and impaired by alcohol or medication, attendance places the doctor at personal risk or the doctor is unable to provide a level of care necessary for the emergency, for example if impeded by fatigue. Inability to attend the emergency for any reason does not exonerate the medical duty of care to assist in provision of alternative health care.

Recommendation

ANZCOR encourages healthcare professionals' off-duty to render assistance if requested to do so even when they may have no duty to rescue provided their own safety is not threatened.

Trained Volunteers

It is uncertain whether a trained Volunteer e.g. a surf life-saver or a St John Volunteer, is legally required to rescue (render assistance) when on duty, although one could argue strongly from an ethical point of view that such duty does exist, provided that the rescuer is not placed in danger. Indeed, a rescuer is owed a duty of care by the rescued victim not to be endangered.² When not on duty, trained Volunteers would be regarded as 'Good Samaritans' if deciding to rescue.

Recommendation

ANZCOR encourages 'Good Samaritans' and Volunteers to render assistance to fellow persons in need providing their own safety is not threatened, although they do not have a legal duty to rescue (render assistance).

Consent for Treatment

Before treating a competent victim of illness or accident, a rescuer must obtain their consent, otherwise the treatment potentially constitutes 'medical trespass' (assault) and the victim could recover damages without requirement of proof of injury, causation or negligence.³ If the victim has impaired decision-making capacity the consent of a substitute decision-maker should be obtained whenever possible.

Every competent adult and the parents or guardians of minors have the over-whelming right of autonomy and self-determination. A person has impaired decision-making capacity (incompetent) if they are not capable of understanding, retaining, using or communicating any information relevant to making a healthcare decision. If the person has an advanced care directive, they are deemed to lack decision-making capacity when they satisfy any requirement in the directive that specifies when that incapacity exists.

Adults are assumed to be competent unless they have impaired decision-making capacity. Children are regarded as having impaired decision-making capacity until the age of 18. However, most states permit younger persons to make decisions if they are able to understand the issues involved.

In the case of infants and other children who are not capable of understanding the issues, refusal to receive treatment can be difficult to interpret. In general, it is the parent/guardian who should decide whether the advantages outweigh the burden of any distress caused by treatment. In the absence of a parent/guardian rescuers should regard children as having impaired decision-making capacity.

Treatment without Consent

Although treatment normally requires consent, an injured or ill person should not be deprived of treatment merely because they lack decision-making capacity. The key legal factors which determine whether treatment can be given without consent are: whether the victim has or has not decision-making capacity; whether an advance care directive exists; the degree of urgency of the situation and whether a substitute decision-maker is present, willing and able to consent.

If the victim is unable to give consent and no substitute decision maker is present, the legal requirement to obtain consent before assistance or treatment is waived under Common Law and Statute law in several circumstances.³

Common Law

1. Emergency

Under the Common Law doctrine of emergency, a doctor (and possibly other healthcare professional), may provide urgent (emergency) treatment to a patient if the doctor acts reasonably and honestly believes on reasonable grounds that the treatment is required to prevent a serious threat to the victim's life or health.³ At the time of writing, the law pertaining to healthcare professionals other than doctors has not been tested.

2. Necessity

The principle of necessity in Common Law may justify a doctor (and possibly other healthcare professionals) giving treatment when the condition is not life-threatening without the patient's consent³ although authority for this is uncertain and may rest on 'Accepted Medical Practice'. A doctor may provide treatment without consent when it is not practicable to communicate with the victim (e.g. the victim is unconscious and therefore lacks decision-making capacity) and when a reasonable doctor would in the circumstances act in the 'best interests' of the victim.

Under this category, the reasonable doctor is acting in accordance with a responsible and competent body of professional opinion. This is the Bolam test in Common Law but it has been modified in all Australian States and Territories by legislation which enables its acceptance only if a Court deems it as reasonable.

Statute Law

Under Statute Law, all States, the Australian Capital Territory (ACT) and the Northern Territory (NT) have legislation pertaining to provision of emergency care. These jurisdictions have similar but slightly different requirements. The essential aspects of each are described below. The subject of 'special treatment', e.g., fertility limiting treatment, is not considered in this guideline. For the purpose of this document, the terms patient/person/principal in legislation have been converted to 'victim'.

- **Australian Capital Territory** (*Guardianship and Management of Property Act 1991*, Nov 2013)
A health professional (doctor or dentist) may provide urgent medical treatment without consent under common law (s32N). The nature of urgent medical treatment is not defined but it would be included in medical treatment, which is defined as a medical procedure or treatment, dental treatment and a series of procedures or a course of treatments.

An appointed guardian has power to consent for medical procedures or other treatment on behalf of patients with impaired decision-making ability.

If no guardian has been appointed, a health attorney may give such consent. Such health attorneys are in priority: the patient's domestic partner; a carer is an unremunerated or unrewarded person who gives or arranges care and support in a domestic context but not a member of a hospital, nursing home, group home, boarding house, hostel or similar place; a close relative or close friend. If a health attorney refuses consent the matter must be referred to the public advocate.

- **New South Wales** (*Guardianship Act 1987*, Oct 2014)

A doctor, dentist or other person supervised by them may give urgent treatment without consent to a victim incapable of giving consent. Urgent treatment is defined as that to save life, prevent serious damage to health or to prevent/relieve pain, distress and suffering.

Minor treatment may also be given without any consent if no responsible person is present or is unwilling or cannot be contacted, provided that it is certified in writing in the patient's clinical record that the treatment is necessary to promote the patient's health and well-being and the patient does not object (s37). The hierarchy of persons responsible is: the patient's appointed guardian (if provided with power to consent to medical or dental treatment); spouse in a close and continuing relationship; carer (person providing unpaid support and domestic services); close friend (person maintaining close personal relationship through frequent personal contact and a personal interest in patient's welfare).

- **Northern Territory** (*Criminal Code Act 2014*)

Any person who callously fails to provide rescue, resuscitation, medical treatment, first aid or succour of any kind to a person urgently in need of it and whose life may be endangered is guilty of a crime and is liable to imprisonment for 7 years (s155).

- **Queensland** (*Guardianship and Administration Act 2000*, July 2014)

When the victim has impaired capacity, urgent treatment may be given without their consent by a health provider (person who provides health care in the practice of a profession or ordinary course of business). Urgent treatment is defined as that to meet an imminent risk to the patient's life or health. However urgent treatment cannot be given without consent to meet an imminent risk to life or health if the rescuer knows that the victim objects to that in an advance care directive under the *Powers of Attorney Act 1998*.

Care to prevent significant pain or distress for the victim with impaired capacity may also be given without the victim's consent but only when it is not reasonably practicable to get consent under the *Powers of Attorney Act 1998*. The provision of health care (other than urgent treatment) in this circumstance is subject to consent in the following priority: an advance health directive; tribunal appointed guardian or order; statutory health attorney. The statutory health attorney, who can make any decision about receiving health care that the patient having capacity could make, is in order: spouse in a close and continuing relationship; non-paid carer 18 years or more who provides or arranges domestic services or support (but not member of hospital, nursing home, group home, boarding house or hostel); close friend or relation 18 years or more; public guardian (PAA s63).

Treatment to prevent significant pain or distress may not be given without consent if the rescuer knows that the victim objects to the treatment - unless the victim has minimal or no understanding of what the care involves or why it is required, and the care is likely to cause no distress or temporary distress outweighed by the benefit of the treatment. The reasons for providing treatment without consent must be certified in the victim's clinical record.

Withholding or withdrawal of life-sustaining measures is not classed as treatment (GAA s63).

Minor, uncontroversial health care (other than special health care), may be given by a health provider without consent of the victim when the provider reasonably considers: the victim has impaired capacity; the health care is necessary to promote health and wellbeing; and the health care is of the type that will best promote the victim's health and wellbeing. However, such care may not be given without consent if the provider knows or could be reasonably expected to know that the victim objects to the care. The care given and the reasons must be certified in the clinical records (GAA s64).

Care defined as health care does not include first-aid treatment, or non-intrusive examination for diagnostic purposes (e.g. visual examination of mouth, throat, nasal cavity, eyes or ears) or administration of a pharmaceutical drug which is non-prescriptive, normally self-administered and for a recommended purpose at a recommended dose. That is, these types of care are not subject to the need for consent.

- **South Australia** (*Consent to Medical Treatment and Palliative Care Act 1995*, July 2014; *Advance Care Directives Act 2013*, July 2014)

A medical practitioner may administer emergency treatment to a victim incapable of consenting (whether or not the victim has impaired decision-making capacity) when of the opinion that the treatment is necessary to meet an imminent risk to life or health provided that: the opinion is supported by the written opinion (if practicably obtainable) of another medical practitioner who has examined the victim; the victim has not refused consent; and the medical practitioner has enquired whether the victim (if 16 years or over) has given an advance directive. However, a medical practitioner may treat a victim despite an advance care directive if reasonably believing that the directive is not intended to apply to treatment of the kind proposed and to the circumstances of the proposed treatment (CMTPCA, s13). A health practitioner (see below) may refuse to comply with a provision of an advance care directive on conscientious grounds (AADA, s37).

If a guardian, substitute decision-maker (legally appointed) or person responsible (in descending order of priority) is available, treatment must not be given without their consent (s13). If the victim is a child and a parent or guardian is available consent must be sought. However if consent is refused, treatment for the child may be given despite refusal if in the best interests of the child's health and well-being (s13).

A person responsible for the victim means (in priority): an appointed guardian; a prescribed relative (spouse, adult domestic partner, adult related by blood or marriage, adult related by adoption, adult of Aboriginal or Torres Strait Islander descent related by kinship rules); adult friend who has a close and continuing relationship with the patient; adult willing to decide who charged with overseeing day-to-day supervision, care and well-being of the patient; Guardianship Board (s14). A decision by the person responsible to give or refuse treatment must, as far as is reasonably practicable, reflect the decision that the patient would have made had not their decision-making capacity been impaired.

Health care (other than emergency medical treatment) may be given by a health practitioner to the victim with impaired decision-making capacity provided consent is obtained from a person responsible (see above). However this does not apply to a child for whose treatment the consent of a parent or guardian or the consent of the child (whom the medical practitioner is of the opinion is able to understand the nature, consequences and risks of the treatment) is given, and is in the best interest of the child's health and well-being and is supported in writing by the opinion of another medical practitioner who has examined the child before the treatment is commenced.

Health care in this context means any care, service, procedure or treatment provided by, or under the supervision of a health practitioner for the purpose of diagnosing, maintaining or treating a physical or mental condition. A health practitioner means a person who practises a health profession (within the meaning of the *Health Practitioner Regulation National Law Act* (South Australia) 2010 or any other profession or practice declared by subordinate regulation, which includes members of ambulance services (ambulance officers and paramedics) (*Consent to Medical Treatment and Palliative Care Regulations* 2014).

- **Tasmania** (*Guardianship and Administration Act* 1995)

A doctor or dentist or a person under their supervision may give urgent treatment without the consent of a victim incapable of giving consent. Urgent treatment is defined as that necessary to save life, prevent serious damage to health or to prevent suffering significant pain or distress. (s 40).

Other treatment that would successfully promote the victim's health and wellbeing may also be given without consent to a victim incapable of consenting when there is no person responsible to give consent and when the victim does not object. A person responsible may give consent to treatment that would be in the best interests of the victim. A person responsible is in order of priority: a) when patient less than 18 years: spouse, if unmarried, parent, b) when patient 18 years or over: guardian, spouse, carer (non-paid person who regularly provides or arranges provision of domestic services and support but not member of a hospital, nursing home, group home, boarding house, hostel or similar facility), close friend or relative (person who maintains both a close personal relationship through frequent contact and personal interest in the victim's welfare)(ss41,43).

Best interests of the victim are determined by taking into account: (a) the wishes of the victim, as far as they can be ascertained, and (b) the consequences to the victim if the proposed treatment is not carried out, and (c) any alternative treatment available to the victim, and (d) the nature and degree of any significant risks associated with the proposed treatment or any alternative treatment; and (e) that the treatment is to be carried out only to promote and maintain the health and wellbeing of the victim, and (f) any other matters prescribed by the regulations.

- **Victoria** (*Guardianship and Administration Act* 1986, May 2005)

When the victim (≥ 18 years) is incapable of giving consent, a registered practitioner (doctor or dentist) may on reasonable grounds carry out or supervise urgent treatment (s42A). Urgent treatment is defined as that to save the victim's life, to prevent serious damage to health or to prevent significant pain or distress. However, such treatment must not be given if a certificate of refusal of such treatment is in force (s41) under the *Medical Treatment Act* 1988.

When the victim is incapable of giving consent, it may be obtained from a person responsible who must act in the victim's "best interests". The person responsible is defined in order as: a person appointed with enduring power of attorney; a person appointed by the Guardianship tribunal; a person appointed under a guardianship order; a person appointed by the patient (when competent); a person last appointed by the patient (when competent); the patient's spouse or domestic partner (person in the relationship as a couple irrespective of gender and irrespective of living under same roof but not providing domestic support and personal care for fee, reward or on behalf of another person or organisation); the patient's primary carer; the patient's nearest relative (In order: son/daughter, father/mother, brother/sister, grandfather/grandmother, grandson/granddaughter, uncle/aunt, nephew/niece).

“Best interests” of the victim are determined by: a) the wishes of the victim, so far as they can be ascertained; and b) the wishes of any nearest relative or any other family members; and c) the consequences to the victim if the treatment is not carried out; and d) any alternative treatment available; and e) the nature and degree of any significant risks associated with the treatment or any alternative treatment; and f) whether the treatment to be carried out is only to promote and maintain the health and well-being of the victim; and g) any other matters prescribed by the regulations (s38).

- **Western Australia** (*Guardianship and Administration Act 1990*)

A medical or dental practitioner may give urgent treatment to a victim incapable of consenting but consent must be obtained from a parent or person who has apparent care and control of the victim. Urgent treatment is defined as that to save life. Non-urgent treatment may be given to a victim incapable of consent but it requires the consent of an appointed guardian or in the absence of a guardian the consent of the nearest relative (s119) which is defined in order of priority: spouse (married or person living with patient on a bona fide domestic basis), child, parent, brother/sister, grandparent, uncle/aunt, nephew/niece.

- **New Zealand** (Health and Disability Commissioner Regulations 1996)

When the victim is unable to consent and no person entitled to consent on behalf of the victim is available, the provider may give service where (a) it is in the best interests of the victim, and (b) reasonable steps have been taken to ascertain the victim’s views, and (c) (i) either the services are consistent with the choice the victim would have made if competent, or (ii) the views of other suitable persons interested in the victim’s welfare have been ascertained. A person entitled to consent on behalf of an incompetent person is a welfare guardian under the *Protection of Personal Property Rights Act*, parents or guardians under the *Guardianship Act* or a person with enduring power of attorney.

Recommendation

ANZCOR recommends that rescuers seek the consent of a victim before giving treatment. If the victim is incapable of consenting, a rescuer may give urgent treatment to preserve life and health without consent unless an advance care directive prohibits such treatment. If the victim is incapable of consenting and the treatment proposed is not urgent, the consent of a person responsible, if present and willing to give consent, should be sought.

Advance Care Directives Refusing Treatment

Competent adults are legally entitled to refuse any treatment even if life-sustaining or in their own best interests. Substitute decision-makers, such as parents or guardians of minors or legal guardians can likewise refuse treatment but only if in the “best interests” of their charge.

It has long been settled law that parents or guardians of minors with critical conditions may make legal and ethical decisions, in conjunction with doctors, on withholding and withdrawing life-sustaining treatment.

Several Australian States/Territories and New Zealand have legislation that gives statutory force to the principle of Common Law that competent persons may refuse treatment. Treatment provided in knowledge of legally binding refusal of treatment is the offence of medical trespass.

An advance care directive or similar (e.g., refusal of treatment certificate, advance health directive) whereby treatment may be refused is required to be completed by the person when competent.

The directive operates only when the victim no longer has capacity for decision-making about health care matters. Each jurisdiction has a different formulation for an advance care directive, with or without a substituted decision maker.⁵ Non-statutory common law guides for advance care are also available in all Australian jurisdictions. Advanced care directives for competent adults cannot be constructed by other parties.

An Advance Care Directive made in one jurisdiction is not necessarily recognized by other jurisdictions except by New South Wales under the Guardianship Act (s60), by The Northern Territory under the *Advance Personal Planning Act* 2014, (s88), by Queensland under the *Powers of Attorney Act* 1998 which recognizes enduring power of attorney (s34) and advance health directives (s40) and by South Australia under *Advance Care Directives Act* 2013 (s33).

- **Australian Capital Territory**

Refusal or withdrawal of medical treatment may be exercised by a person appointed with enduring power of attorney under the *Powers of Attorney Act* 2006.

- **New South Wales**

An enduring guardian appointed under *The Guardianship Act* 1987 (NSW) may limit treatment. In NSW, an “enduring power of attorney” refers to a person appointed to manage financial affairs of an incompetent person under the *Powers of Attorney Act* 2003. NSW has no specific legislation for advance care directives but a common law care plan may be established using the principle of best interests of the victim as the basis for decisions.

- **Northern Territory**

A victim can formulate an advance person plan with limitation of treatment and appoint a substitute decision-maker under the *Advance Personal Planning Act* 2014.

- **Queensland**

A victim can complete an advance health directive (advance care directive) and/or appoint an enduring power of attorney (persona/health matters) who may do so when the victim lacks capacity under the *Powers of Attorney Act* 1998. Additional matters not in an advance health directive but made under common law are not affected by the Act.

An advance health directive to withhold or withdraw a life-sustaining measure (including artificial nutrition and hydration) operates only while the victim has impaired capacity and *cannot* operate unless the victim has no reasonable prospect of regaining capacity and has: (1) a terminal illness from which death is reasonably expected within 1 year, or (2) is in a persistent vegetative state, or (3) is permanently unconscious (in coma), or (4) has an illness or injury of such severity that there is no reasonable prospect of recovery without continued application of life-sustaining measures (PAA, s36).

- **South Australia**

A victim can complete an advance care directive detailing refusal of treatment and nominate a substitute decision-makers under the *Advance Care Directives Act* 2013. Substitute decision-makers use the principles of substituted judgement. However, a health practitioner may refuse to comply with an advanced directive if they believe on reasonable grounds that it was not intended to apply in the particular circumstances, or it does not reflect the current wishes of the victim, or is not consistent with professional or health care standards or the rescuer has a conscientious objection. A parent cannot give an advanced care directive on behalf of their child (*Advance Care Directive Act* 2013, s11).

- **Tasmania**

A victim can complete an 'advance care directive for care at the end of life' including limitation of treatment and nominate persons responsible or an enduring guardian under the *Guardianship and Administration Act 1995* as substitute decision-makers. These persons must exercise substituted judgement when the victim loses capacity.

- **Victoria**

A competent person may complete a refusal of treatment certificate concerning a current condition under the *Medical Treatment Act 1988* and/or appoint an agent with enduring power of attorney to make decisions on loss of competency of the victim under the *Guardianship and Administration Act 1986*.

- **Western Australia**

An advance health directive consenting or refusing treatment can be formulated by a victim and/or a person appointed with enduring power of guardianship under the *Guardianship and Administration Act 1990*.

- **New Zealand**

Every consumer has the right to use an advance directive in accordance with the common law under s(7)(5) of *Health and Disability Commissioner Regulations 1996*. The advance directive may be a written or oral means to convey a decision to receive, refuse or withdraw consent to services in relation to a future possible health care procedure and is intended to be effective when the victim is not competent. The advance directive may be exercised by a person with enduring power of attorney under s(98A) of *Protection of Personal and Property Rights Act 1988*. However in the absence of an advance directive, the attorney cannot consent to refuse any standard medical treatment or procedure intended to save the person's life or prevent serious damage to the person's health (s18)(1).

Recommendation

ANZCOR recommends that an advance care directive should be followed irrespective of whether the rescuer believes treatment would be in the best interests of the victim. In South Australia a rescuer may disregard the directive if they believe it is not applicable to the circumstance or they have a conscientious objection to its adherence.

Discontinuation (Withdrawal) and Withholding Treatment

In the absence of an advance care directive, Queensland and South Australia are the only States whose legislation specifically includes references to withholding or withdrawing (discontinuation) of treatment without consent. This does not mean however that treatment cannot be withheld or withdrawn without consent in other States. The normal administration of medical treatment would expectedly include the withdrawing and withholding of treatment.

- **Queensland** (*Guardianship and Administration Act 2000*, July 2014; *Powers of Attorney Act 1988*, July 2014)

In an acute emergency, life-sustaining treatment (CPR, assisted ventilation) for a victim with impaired capacity may be withheld or withdrawn (immediately) without consent when the commencement or continuation of such treatment would be inconsistent with good medical practice (GAA s63A).

However, such treatment may not be withheld or withdrawn if the health provider knows the victim objects to such withholding or withdrawing (GAA s63A(2)). In this context, according to guidelines issued by the Queensland Government ⁴, ‘knowing’ of an objection by the rescuer means the victim (him/herself, i.e., not a relative) had articulated their objection to the treating doctor or nurse or had written their objection in an advance health directive or they had indicated it by their conduct. An objection by the victim in this context means they have indicated their wish or had indicated it in a previous similar circumstance and have not since indicated otherwise (GAA). If the doctor knows of such objection but believes commencing CPR would not be good medical practice, consent to withhold it may be obtained from a substitute decision-maker who must make their decision in the victim’s best interests ⁴. However, if there is no time to obtain such consent, CPR must be commenced and then consent obtained from a substitute decision-maker to withdraw life-sustaining measures ⁴. A substitute decision-maker (appointed guardian or statutory health attorney (see below), cannot consent to withholding or withdrawing of life-sustaining treatment unless the health provider considers that commencement or continuation of such treatment is inconsistent with good medical practice (GAA s66A). If such treatment is withheld or withdrawn under an advance health directive or on request of a guardian or statutory health attorney, it must be certified in the victim’s clinical record (GAA s66B).

When not an acute emergency, the withholding or withdrawal of life-sustaining treatment from a victim who lacks capacity requires the consent of an appointed guardian or a statutory health attorney (see above). If such consent is refused, commencement or continuation of such treatment may conflict with the common law which permits doctors not to give treatment considered futile. In irreconcilable conflict, assistance should be sought from the Office of the Adult Guardian which may rule that the statutory health attorney is no longer acting in the best interests of the patient, and appoint an alternative guardian.

- **South Australia** (*Consent to Medical Treatment and Palliative Care Act 1995*, July 2014)
A medical practitioner or a person under their supervision is under no duty to use, or continue to use, life sustaining measures (including CPR, assisted ventilation, artificial nutrition and hydration) in treating a victim if the effect of doing so would be merely to prolong life in (either) a moribund state without any real prospect of recovery or in a persistent vegetative state (whether or not the victim or the victim’s representative has requested that such measures be used or continued); and must if the victim or their representative so directs, withdraw life sustaining measures (CMTPCA s17(2)).

Neither the administration of medical treatment to relieve pain or distress nor the withholding nor the withdrawing of life sustaining measures constitutes an intervening cause of death (CMTPCA s17(3)).

Recommendation

ANZCOR recommends that withholding or withdrawing life-sustaining treatment should be in agreement with good medical practice and the best interests of the victim but subject to any advance care directive.

‘Do Not Attempt Resuscitation’ Orders

In health institutions/facilities, a decision not to provide treatment, such as by a ‘no-CPR’, ‘Do-Not-Attempt-Resuscitation’ (DNAR), ‘Not for Resuscitation’ (NFR) order or ‘A medically-initiated DNR order’ should be documented in clinical notes, explained and signed by a doctor in charge of care.

The legal status of such orders within institutions is not clear ⁶ and probably void between institutions and out-of-hospital unless signed by the victim when competent or by a substitute decision-maker. An advance care directive or an acute resuscitation plan involving discussion with the victim before an acute event is far preferable.

Although healthcare personnel are under no obligation to inform, offer or provide treatment considered to be futile to a victim, the reasons for such should be documented in the victim's clinical record.

In out-of-hospital circumstances, emergency services are often activated for patients in cardiac arrest who are chronically ill or have a terminal illness. Generally, the principles of treating a victim with impaired decision-making capacity (see above) apply. Rescuers should determine if an advance care directive exists and if a substitute decision-maker has been appointed and is available.

The International Liaison Committee on Resuscitation recommends the use of standardised out-of-hospital physician orders for patients who are chronically ill or have a terminal illness. These must be easily understood by healthcare professionals. Additional instructions should indicate whether healthcare personnel are to initiate or continue life-sustaining interventions for patients in cardiac arrest and those in near-arrest.

Because laws governing the use of DNAR forms and advance care directives vary by jurisdiction, healthcare providers should be aware of local laws, regulations, policies and protocols.

Standardized orders for limitations on life-sustaining treatments should be considered in order to decrease the incidence of futile resuscitation attempts and to ensure that adult victims' wishes are honoured. Instructions should be specific, detailed, and transferable across health care settings, and easily understood. Processes, protocols, and systems should be developed that fit within local cultural norms and legal limitations to allow providers to honour patient wishes regarding resuscitation efforts.

Recommendation

ANZCOR recommends that in hospital a 'Do Not Attempt Resuscitation' or similar order should not be formulated without involvement of the victim or persons responsible for the victim who lacks decision-making capacity.

Termination of Resuscitation Attempts

The decision to terminate resuscitation may be difficult. Resuscitation after cardiac arrest produces a good quality of life in many survivors. There is little evidence to suggest that resuscitation leads to a large pool of survivors with an unacceptable quality of life. Although cardiac arrest survivors may experience post-arrest problems including anxiety, depression, post-traumatic stress, and difficulties with cognitive function, these may be manageable conditions and clinicians should be aware of these potential problems, screen for them and, if found, treat them.

There is substantial variability in the approaches to termination of resuscitation attempts after cardiac arrest outside hospital. Factors taken into account include whether the arrest was witnessed, whether bystander CPR was provided, the duration of cardiac arrest, and associated co-morbidities. One prospective study demonstrated the 'basic life support termination of resuscitation rule' (no shockable rhythm, unwitnessed by emergency services and no return of spontaneous circulation) is predictive of death when applied by defibrillation-only emergency medical technicians.

The survival rate with the application of this rule is 0.5% (95% CI 0.2-0.9). ⁷

However, two in-hospital studies and one emergency department study showed that the reliability of this termination of resuscitation threshold as a predictor of outcome is lower in these settings.⁸

After cardiac arrest and return of circulation (ROSC) in-hospital, no single clinical observation or investigation alone is sufficiently reliable to determine when treatment should be abandoned to avoid non-survival or an unfavourable neurological outcome (vegetative state, severe cerebral disability). The earliest time to prognosticate an unfavourable neurological outcome is 72 hours after ROSC, but longer if sedative or paralytic drugs confound the situation.⁹ Among predictive factors are the clinical observations of persistent coma, bilateral absent pupillary or corneal reflexes, absent motor and extensor response to pain, presence of myoclonus, absent N20 wave in somato-sensory evoked potentials, high serum values of neurological biomarkers, a marked reduction of grey matter/white matter ratio on CT scan within 2 hours of ROSC and extensive reduction in diffusion on MRI at 2-6 days after ROSC. Prognostication based on the electroencephalogram (absence of reactivity to external stimuli, presence of burst suppression, status epilepticus) is also useful in combination with other factors after rewarming if therapeutic hypothermia has been used. The BIS (bispectral index) is not recommended for outcome prognostication.

Recommendations

Prospectively validated termination of resuscitation rules such as the “basic life support termination of resuscitation rule” are recommended to guide termination of pre-hospital CPR in adults (Class B).

ANZCOR recommends that discontinuation of treatment after ROSC after cardiac arrest in-hospital should be based on a combination of clinical and investigational findings.

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Guideline 10.6 Family Presence during Resuscitation

Summary

Who does this guideline apply to?

This guideline applies to adults, children and infant victims.

Who is the audience for this guideline?

This guideline is for use by bystanders, first aiders or first aid providers, first responders and health professionals.

Recommendations

The Australian and New Zealand Committee on Resuscitation (ANZCOR) recommends that:

1. family members of adults, children and infants undergoing resuscitation be given the option to be present during resuscitation, ideally with an assigned support person
2. healthcare institutions should have a family presence policy and staff education strategy in place.

Guideline

1 Family Presence during Resuscitation: Adults

The vast majority of studies on family presence in resuscitation are surveys assessing the attitude of health professionals to the idea of an institutional family presence policy. While this is understandable in the context of identifying barriers to the implementation of policy, there are few studies comparing actual family or patient outcomes associated with family presence. Most that have reported outcomes describe adult family members accompanying paediatric patients. The accompanying worksheet using NHMRC Levels of Evidence located nine (9) studies reporting outcome for adult family members.

Survival outcomes:

No identified studies reported survival outcomes associated with family presence during the resuscitation of adult patients.

Resuscitation team performance:

One fair quality LOE II randomised controlled trial reported that family presence during resuscitation did not interrupt resuscitation, or delay the decision to discontinue resuscitation.¹ One good quality LOE III-2 cohort study² found that clinicians reported that family presence did not impede or interrupt the resuscitation. Three LOE IV case series³⁻⁵ found that the presence of family members did not impair the resuscitation team performance. This was supported by Bjorshol and colleagues⁶ in a study that modelled a 'stressful' family presence during a manikin resuscitation scenario, finding that this was not associated with poorer quality of CPR delivery.

One study, a fair quality manikin study⁷ (extrapolated evidence), reported that simulated 'family presence stress' resulted in a significantly longer time to the delivery of the first shock, and the delivery of fewer shocks during the scenario. However, chest compressions, intubation and drug administration were not affected.

Adverse effects on family members:

One LOE II good quality randomised controlled trial⁸, two good quality LOE III-2 cohort studies^{2,9} and two good quality LOE IV case series^{3,4} all found that being present during the trauma or cardiac resuscitation of a family member did not have detrimental emotional or psychological impacts. Most studies reported that being present at the resuscitation was actually associated with improved measures of coping and positive emotional outcomes.

2 Family Presence during Resuscitation: Children & infants

Survival benefit:

The accompanying worksheet using NHMRC Levels of Evidence located one good quality LOE III-2 cohort study¹⁰ reported improved survival rates associated with family presence in paediatric resuscitation compared with a group with no family presence, however the study was not powered for survival as an outcome. No other studies reported survival rates.

Resuscitation team performance:

One fair quality LOE II randomised controlled trial,¹ one large, LOE III-1, good quality pseudo-randomised, controlled trial,¹¹ one good quality LOE III-2 cohort study,¹⁰ and five (5) LOE IV case series^{3,4,12-14} reported evidence that the presence of a family member during the trauma or cardiac resuscitation of a child did not impede the performance of the resuscitation team. Two of these studies^{10,11} used 'time to critical clinical interventions' for example; intubation, IV access, primary survey completion to compare or report resuscitation team performance. The remaining five studies^{3,4,12-14} reported the attending clinician's or the observer's opinion as to whether the resuscitation was compromised in any way by the family presence. One study, a fair quality manikin study⁷ (extrapolated evidence), reported that simulated 'family presence stress' resulted in a significantly longer time to the delivery of the first shock, and the delivery of fewer shocks during the scenario. However, chest compressions, intubation and drug administration were not affected.

Adverse effects on family members:

One LOE II good quality randomised controlled trial [Holzhauser 2006], one fair quality LOE III-2 cohort study [Maxton 2000] and three good quality LOE IV case series [Doyle 1987, Mangurten 2006, Meyer 2000] all found that family presence during the trauma or cardiac

resuscitation of a paediatric family member did not have detrimental emotional or psychological impacts. Most studies reported that being present at the resuscitation was associated with improved measures of coping and positive emotional outcomes.

3 Recommendation

Based on the current evidence family members of patients undergoing resuscitation should be given the option to be present, ideally with an assigned support person. Each healthcare institution should have a family presence policy and staff education strategy in place.

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Further Reading

ARC Worksheet 10.6a

- In adult patients who have sustained cardiac arrest (P) does family presence during resuscitation (I) compared to no family presence during resuscitation (C) affect patient survival (O)?
- In adult patients who have sustained cardiac arrest (P) does family presence during resuscitation (I) compared to no family presence during resuscitation (C) impair resuscitation team performance (O)?
- In adult patients who have sustained cardiac arrest (P) does family presence during resuscitation (I) compared to no family presence during resuscitation (C) have adverse effects on families (O)?

ARC Worksheet 10.6b

- In paediatric patients who have sustained cardiac arrest (P) does family presence during resuscitation (I) compared to no family presence during resuscitation (C) affect patient survival (O)?
- In paediatric patients who have sustained cardiac arrest (P) does family presence during resuscitation (I) compared to no family presence during resuscitation (C) impair resuscitation team performance (O)?
- In paediatric patients who have sustained cardiac arrest (P) does family presence during resuscitation (I) compared to no family presence during resuscitation (C) have adverse effects on families (O)?