



## **Guideline 1.4 - Principles and Format for Developing Guidelines**

### Principles and Format for Developing Guidelines

1. Guidelines shall be resource documents for individuals and organisations that teach and practise resuscitation as defined in Guideline 1.1.
2. The subject matter of guidelines shall be in accordance with the stated aims and objectives of the Australian Resuscitation Council and New Zealand Resuscitation Council.
3. Approved guidelines of other organisations may be endorsed and recommended by the Australian Resuscitation Council and New Zealand Resuscitation Council.
4. Guidelines shall cite the references on which they were developed. These references will be formatted using the Vancouver style.<sup>1</sup>
5. Each guideline will identify the confidence of the estimate of effect (quality of evidence to support to support the recommendation). ANZCOR is moving towards the use of the Grading of Recommendations Assessment, Development and Evaluation (GRADE) approach<sup>2</sup> for all guidelines. Until all of the guidelines have been completed using this approach, a hybrid model will be used. The confidence of the estimate of effect may be listed as the GRADE “overall quality of evidence”: high, moderate, low, or very low (see Appendix A), or as the previously utilized “Level of Evidence” I to IV according to the National Health and Medical Research Council<sup>3</sup> (see Appendix A). When describing the quality of evidence, if evidence is obtained from studies not directly related to the specific patient / population (e.g. different patient / population, animal models, mechanical models) we encourage the guideline authors to use either the term “extrapolated evidence”, or to state that the overall quality of evidence has been downgraded for indirectness.<sup>4</sup> Where the development of a guideline has been based on “expert consensus opinion”, this should be stated as the level of evidence for that guideline.<sup>2</sup>
6. For each guideline, treatment recommendation(s) shall be given. These recommendations bring together the scientific evidence, clinical experience, community values and good sense in applying the guideline. The GRADE approach recommends the use of a “Strong” or “Weak” recommendation, with wording of the guideline to reflect this (“recommend” for Strong, or “suggest” for Weak). The previous approach used by ANZCOR was the use of “Class A: Recommended” or “Class B: Acceptable” (see Appendix B). Whilst the ANZCOR is making the transition to the GRADE approach for all guidelines, a hybrid model may be used. The treatment recommendations may be made independent of the levels of evidence. The rationale behind any discordant recommendations should be included in the guideline.
7. The Australian Resuscitation Council will maintain an electronic database and hold copies

of references used in developing the guidelines.

8. The ARC guidelines should be considered in conjunction with accepted National Standards and local policies.

## References

1. International Committee of Medical Journal Editors. Uniform requirements for manuscripts submitted to biomedical journals. International Committee of Medical Journal Editors. J. Am. Med. Assoc. 1997;277(11): 927-34.
2. Schünemann H, Brozek J, Guyatt G, Oxman A. GRADE handbook; 2013. <http://gdt.guidelinedevelopment.org/app/handbook/handbook.html/> (accessed Nov 19, 2016).
3. NHMRC additional levels of evidence and grades for recommendations for guidelines developers. 2009. National Health and Medical Research Council. [https://www.nhmrc.gov.au/\\_files\\_nhmrc/file/guidelines/developers/nhmrc\\_levels\\_grades\\_evidence\\_120423.pdf](https://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/developers/nhmrc_levels_grades_evidence_120423.pdf) (accessed Mar 4, 2017)
4. Morley PT, Lang E, Aickin R, Billi JE, Eigel B, Ferrer JM, et al. Part 2: Evidence evaluation and management of conflicts of interest: 2015 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. Resuscitation. 2015;95:e33-e41.

## Appendix A: Quality of Evidence

### **GRADE Quality of Evidence<sup>2</sup>**

The quality of evidence reflects the extent to which our confidence in an estimate of the effect is adequate to support a particular recommendation. Although the quality of evidence represents a continuum, the GRADE approach results in an assessment of the quality of a body of evidence in one of four grades:

#### **High**

We are very confident that the true effect lies close to that of the estimate of the effect.

#### **Moderate**

We are moderately confident in the effect estimate: The true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different

#### **Low**

Our confidence in the effect estimate is limited: The true effect may be substantially different from the estimate of the effect.

#### **Very Low**

We have very little confidence in the effect estimate: The true effect is likely to be substantially different from the estimate of effect

## **NH&MRC Level of Evidence<sup>3</sup>**

The “Levels of Evidence” according to the National Health and Medical Research Council are listed below:

### **Level I**

Evidence obtained from a systematic review of all relevant randomised controlled trials.

### **Level II**

Evidence obtained from at least one properly designed randomised controlled trial.

### **Level III-1**

Evidence obtained from well-designed pseudo-randomised controlled trials (alternate allocation or other method).

### **Level III-2**

Evidence obtained from comparative studies with concurrent controls and allocation not randomised (cohort studies), case control studies, or interrupted time series with a control group.

### **Level III-3**

Evidence obtained from comparative studies with historical control, two or more single arm studies, or interrupted time series without a parallel control group.

### **Level IV**

Evidence obtained from case series, either post-test or pre-test and post-test.

## Appendix B: Strength of Recommendation

### **GRADE<sup>2</sup>**

When using the GRADE approach the strength of a recommendation reflects the extent to which a guideline panel is confident that desirable effects of an intervention outweigh undesirable effects, or vice versa, across the range of patients for whom the recommendation is intended.

#### **Strong recommendation**

A strong recommendation is one for which guideline panel is confident that the desirable effects of an intervention outweigh its undesirable effects (strong recommendation for an intervention) or that the undesirable effects of an intervention outweigh its desirable effects (strong recommendation against an intervention).

#### **Weak recommendation**

A weak recommendation is one for which the desirable effects probably outweigh the undesirable effects (weak recommendation for an intervention) or undesirable effects probably outweigh the desirable effects (weak recommendation against an intervention) but appreciable uncertainty exists.

### **Previous criteria used by the ARC**

#### **Class A: Recommended.**

Class A treatment recommendations are given to those guidelines which are considered to be beneficial and should be used.

#### **Class B: Acceptable.**

Class B treatment recommendations are given to those guidelines, which may be beneficial and are acceptable to be used if considered appropriate in that setting.