Governance document: National Heart Foundation of Australia (NHFA) and Cardiac Society of Australia and New Zealand (CSANZ): Australian Clinical Guidelines for the Management of Acute Coronary Syndromes 2016 [1]

Outline of the process for the development of the National Heart Foundation of Australia and Cardiac Society of Australia and New Zealand: Australian Clinical Guidelines for the Management of Acute Coronary Syndromes 2016

Recognising the expectation for a higher level of transparency and stakeholder engagement, the NHFA and CSANZ (with NHFA as the project lead) embarked on an ambitious process to ensure the next iteration of the clinical care guidelines for the management of acute coronary syndromes (ACS) were developed within a governance structure commensurate with the evolving landscape of rigorous guideline development.

This document seeks to outline the roles and responsibilities of contributors to this process for the Heart Foundation and Cardiac Society of Australia and New Zealand, however it must be recognised that these guidelines were developed based upon the expertise of honorary members of the Heart Foundation (essentially a small but committed group of experts in Australia). These experts often experience overlapping commitments and hence the importance of both transparency and appropriate management of Conflicts of Interest (COI) is acknowledged. Processes employed by the NHFA aim to ensure the integrity of guideline developers and to strike an appropriate balance between the existence of ‘interests’ in a topic under review and the expertise required to make sound and meaningful recommendations.

A detailed description of the membership of the working group is included below. The approach to development and consultation has been designed to ensure appropriate representation and engagement in the guideline writing process. The methodology used in the development of this guideline was guided by the methodological expertise of working group members [2].

1. Structure:

The Executive of the Working Group (Executive)

The Executive was the overarching group with overall responsibility for delivery of the guideline. The Executive comprised the Chair, the designated senior writing group member, and principal writers of each content writing group, together with a consumer representative and Heart Foundation staff. During development, the Executive:

- Had overarching responsibility for the progress and delivery of the final content, including recommendations, in the guideline document.
- Reported to the NHFA internal approval committees (Clinical Issues Committee, Cardiovascular Health Advisory Committee, National Board).
- Provided advice regarding external stakeholder engagement.
- Ensured consistency in the guideline format.
- Reviewed the final clinical questions being submitted for literature review/evidence appraisal.
Considered and responded to feedback received from external stakeholders during the guideline development process.

A quorum of members required for decisions was defined as half of the membership plus one member.

Consensus for general working group operations was defined as more than or equal to two thirds of members.

Consensus for finalisation of recommendations was defined by 80% of member agreement. The rationale for any disagreement was recorded.

The Writing groups (Chest pain, STEMI, NSTEMI, Secondary prevention)

Each writing group, comprised a content expert (Main Writer) supported by a senior member (Concilliary) acting in an advisory/communication role, as well as other experts (relevant to the topic) advising/ contributing their expertise. Either the Concilliary or Main Writer also had the role of the Chair of the writing group (decided within the writing group). The writing groups had principal responsibility for the scope and initial draft of the guideline content: Specific activities included:

- Define the initial questions to be submitted for literature review.
- Provide a structured environment for discussion, and debate relevant evidence for assimilation into recommendations.
- Provide input for the first draft of the section evidence summary and draft recommendations.
- Provide level of evidence and strength of recommendation classification for recommendations.

The Reference group

The Reference group comprised nominated representatives of identified key stakeholder organisations/bodies with national relevance in the provision of ACS care in Australia. Members of the reference group were asked to engage in the guideline development process, including review of draft content across the entire guideline. Specific requests of the reference group included:

- Review and provide input into the scope of the guidelines and the questions being submitted for literature review.
- Review the guideline including draft recommendations; provide consultation and commentary with respect to evidence based clinical content; consider issues of implementation weighed against the relative impact, while remaining mindful that recommendations are evidence-based; advise on implementation of the guidelines.
  - If any disagreement or dispute about the content arose through the reference group review, this was resolved by the Executive which had final approval of content.
- In the case of organisation representatives, represent the parent endorsing body to facilitate the process of endorsement where appropriate.
Organisation representatives had the responsibility of keeping the organisation they represented informed and up to date throughout the development process.

2. NHFA governance structure

Any decisions and products produced by the Working Group had to be approved by the Heart Foundation through the usual internal clinical approval processes. For the Heart Foundation this included the Clinical Issues Committee (CIC) and Cardiovascular Health Advisory Committee (CVHAC), a sub-committee of the National Board of the Heart Foundation. The National Heart Foundation and CSANZ Boards had final approval/sign-off.

Refer to Appendix 1.

3. Working Group operations (including Executive, Writing Groups and Reference Groups)

- Tenure of the chair and working group members was for the period of the guideline development project.
- All working group members were honorary.
- The Executive and Writing Group chairs were nominated by the Heart Foundation prior to the first meetings. The Writing Group Concilliary and Main Writers were decided by the Executive prior to the first writing group meetings.
- The Writing Group Chairs in collaboration with the Writing Group were responsible for the delivery of scope, clinical questions, a process to receive and review evidence summaries, draft updates to the guideline and draft clinical recommendations for open consultation, and review of responses to these. Chairperson’s prerogative was not a part of the governance/decision making process. Refer to Appendix 2.
- Working Group Chairs (including Executive, Writing Groups and Reference Group) were responsible for managing COI of their group. All members were expected to disclose COI at commencement and throughout membership and continuously review their disclosure to the working group and the Heart Foundation during the project. COI disclosure was a standing agenda item at each Working Group meeting. A register was maintained as a record of these (including emails and relevant papers and documents).
- Where the Chair disclosed a COI, responsibility for the meeting/actions of the Working Group was delegated to another member of the Working Group, or Heart Foundation staff.
- Working Group meetings were via teleconference or face-to-face. The frequency of meetings and contact was determined by the Working Group based on Project requirements.
- Correspondence between meetings was largely electronic.
- Clinical questions were approved by NHFA internal committees. The final content was presented for broad targeted consultation.
• Consensus for general working group operations was defined as more than or equal to two thirds of members.

4. Literature Search

The literature search required to inform the ACS Guideline development was out-sourced. An organisation was commissioned after expressions of interest were sought and applicants rigorously reviewed (via a selective tender process). The Executive committee was consulted in making the final decision. The appointed organisation was KP Health Australia.

5. Communication

With CSANZ

• Updates were given via NHFA Chief Executive Officer reports to NHFA/CSANZ Boards.
• CSANZ representative member (Professor Phil Aylward) was on the ACS Guideline Executive committee:
  o In this capacity as representative for CSANZ his role was to keep CSANZ appraised of the guideline development progress, and facilitate the process of CSANZ endorsement/ approval of the completed guideline.

Other

• Executive meetings had organisation representative reports as a regular agenda item, to facilitate communication between potential endorsing organisations and the NHFA throughout the guideline development process.
• In order to further facilitate formal updates to endorsing organisations, the Heart Foundation generated quarterly reports on progress for circulation through organisation representatives to their parent organisations (using template in Appendix 3).
• Communication with the appointed literature search organisation was as indicated in Appendix 4 diagram.
• Working Group meetings were via teleconference or face-to-face, and discussions minuted and circulated to members via email. Communication within the working group is described further above.
• There was a public consultation period on the final draft, advertised on the Heart Foundation website and through clinical networks in April 2016 for 30 days.

6. Conflict of Interest

The ACS Guideline Working Group acknowledges the importance of both transparency and appropriate management of COI. A COI arises in any situation in which a member or related person has an interest which influences, or may appear to influence, the proper performance of the
members’ responsibilities. The appearance of a COI may be as important as any actual conflict of interest.

Each ACS Guideline working group member was expected to disclose in writing to the Heart Foundation the fact, nature and extent of any interest of the Individual and any associate of the Individual which was or may be or become in conflict with the duties or obligations of the Heart Foundation in relation to the Project, whether direct or indirect, and whether as a partner, contractor, servant, shareholder, principal, agent, officer or otherwise.

A register was maintained by The Heart Foundation as a record of these COI (including emails and relevant papers and documents).

What is considered a relevant Conflict of Interest?

A relevant COI was a financial/other relationship (including intellectual) with an entity that could be perceived to influence, or give the appearance of influencing, what has been incorporated into the submitted piece of work.

What should be disclosed?

Interest statements comprised a declaration of any interests that may be capable of influencing advice or decisions relating to the update of the guideline, or that may affect the integrity and reputation of the Heart Foundation and the Cardiac Society of Australia and New Zealand. An interest statement included interactions with any entity that could broadly be considered relevant to the work, including non-financial intellectual property. Intellectual conflict of interest included “enhanced academic or practice profile and prestige” related to guideline content or other work outside of the guideline [2].

Classification of Conflicts of Interest

Conflicts of interest were considered within a framework that considered both the relationship of the participating individual, combined with the nature of the potential conflict specific to the topic under consideration within the guideline development process.

The Relationship to the individual was considered as either:

1. Personal: Directly pertaining to the individual or family, where the benefit was received personally.
2. Non-personal: Pertaining to the individual's employing institution (but where the benefit was not received personally), where the individual had some managerial responsibilities and influence over the interaction between that institution and organisations that may seek to exert influence. Examples include:
   - A grant from a company for the running of a unit or department for which a member was responsible.
   - A grant or fellowship or other payment to sponsor a post or member of staff in the unit for which a member was responsible.
   - The commissioning of research or other work by, or advice from, staff who work in a unit for which the member was responsible.
The Nature of the potential conflict of interest was considered in the following classifications.

High-level pecuniary interest
1. Any consultancy, directorship, position in or work for a healthcare industry (including research and pharmaceutical industry) that attracted regular or occasional payments in cash or in kind, having been undertaken within the 36 months of the project.
2. Any shareholdings, or other beneficial interests, in shares of a healthcare industry (including research and pharmaceutical industry) that was either held by the individual or for which the individual had legal responsibility.
3. The holding of a fellowship endowed by the healthcare industry (including pharmaceutical industry). Examples include:
   o a grant from a company for the running of a unit or department for which a member is/was responsible
   o a grant or fellowship or other payment to sponsor a post or member of staff in the unit for which a member is/was responsible the commissioning of research or other work by, or advice from, staff who work in a unit for which the member is/was responsible.

Low-level pecuniary interest
1. Speaker Fees for presentation at educational events that have sought sponsorship or were sponsored by the health care industry.
2. Expenses or hospitality provided by a healthcare industry company beyond that reasonably required for accommodation, meals and travel to attend meetings and conferences, both which have been undertaken within the 36 months preceding the meeting at which the declaration is made and which are planned but have not taken place.
3. Any payment or other support by the health industry, that does not convey any material benefit to an individual personally but that might lead to indirect benefit.

Non-pecuniary interest
1. A clear opinion, reached as the conclusion of direct involvement in primary research projects or clinical trials, about the clinical and/or cost effectiveness of an intervention under review.
2. A public statement in which an individual covered by this Code has expressed a clear opinion about the matter under consideration, which could reasonably be interpreted as prejudicial to an objective interpretation of the evidence.
3. Holding office in an organisation or advocacy group with a direct interest in the matter under consideration.
4. Other reputational risks in relation to an intervention under review.
Managing conflict of interest

Conflicting interests among the guideline development group required appropriate management to ensure clinical recommendations were not compromised. There was a great deal of debate relating to the management of COI during the guideline development process to minimise the risk of biases in the framing/formulation of clinical recommendations and final guideline content. Processes employed by the NHFA aimed to ensure the integrity of guideline developers and to strike an appropriate balance between the existence of ‘interests’ in a topic under review and the expertise required to make sound and meaningful recommendations.

Conflicts of interests were managed by:

- Open disclosure of all COI to all members of the Working Group and public declaration of all COI in the guidelines. Members were expected to disclose COI at commencement of membership and also to update the working group during the project if there were any changes to this declaration.
- COI declarations were revisited at each working group meeting (including Executive, Writing Groups, Reference Group) to ensure new disclosures were recorded.
- The principle writer and the appointed senior in Writing Groups reviewed and rated the COI that occurred within their group, and provided a relevant summary report at the beginning of each Executive meeting.
- If a COI disclosure was deemed significant, individuals may have been restricted from involvement in discussions and decisions on related topics. Management of discussions pertaining to related topics were conducted in line with the framework recommendations below, within the working groups. Any uncertainties regarding the appropriate management of potential conflicts of interest were to be raised with the Executive group for a final decision by two thirds consensus (or referred to CIC for guidance if needed). In circumstances where a COI was disclosed, the process of managing the disclosure was to include:
  - limited involvement in the deliberation of the evidence, with possibility of bias noted
  - limited involvement in discussions on the wording, structure or intent of the clinical recommendation
  - limited involvement in the formulation of the clinical recommendation relevant to disclosure of a conflict.

A management framework was used to guide management of disclosed COI which aligned specific actions with specific financial/pecuniary thresholds, as listed below:
Framework to guide management of COI

<table>
<thead>
<tr>
<th></th>
<th>Personal</th>
<th>Non-personal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>High-level Pecuniary</strong></td>
<td>Declare and withdraw from participation</td>
<td>Declare, participate in the workgroup but abstain from formulation of relevant clinical recommendations</td>
</tr>
<tr>
<td>(≥$10k threshold)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Low-Level Pecuniary</strong></td>
<td>Declare, participate. Chair and Work group Senior to ensure alternate views are adequately discussed and consensus reached on the final wording</td>
<td>Declare and participate. Chair and Work group Senior to ensure alternate views are adequately discussed and consensus reached on the final wording</td>
</tr>
<tr>
<td>(&lt;$10k threshold)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Non-Pecuniary</strong></td>
<td>Declare and participate. Chair and Work group Senior to ensure alternate views are adequately discussed and consensus reached on the final wording</td>
<td>Declare and participate. Chair and Work group Senior to ensure alternate views are adequately discussed and consensus reached on the final wording</td>
</tr>
</tbody>
</table>

7. Confidentiality

Each Working Group member agreed to confidentiality obligations under the Terms of Reference. Working group members could not, and could not permit any of their officers, employees, agents, contractors, or related entities to, use or disclose to any person any information disclosed to them by the Heart Foundation or as a part of this project, without the prior written consent of the Heart Foundation. No breaches of confidentiality were noted.

Executive

Clinical Issues Committee (CIC)

Cardiovascular Health Advisory Committee (CVHAC)

National Board

National Heart Foundation internal approval process

Chest pain Writing Group
STEMI Writing Group
NSTEMI Writing Group
Secondary Prevention Writing Group

Reference Group
# Appendix 2: Template for approving Recommendations

<table>
<thead>
<tr>
<th>Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Writing group:</td>
</tr>
<tr>
<td>1. Recommendation</td>
</tr>
<tr>
<td>Current Drafting:</td>
</tr>
<tr>
<td>New Drafting (leave blank if no changes required):</td>
</tr>
</tbody>
</table>

**Body of Evidence** *(see table 2 below)*

Rate methodological quality of Body of Evidence

*(A: Excellent; B: Good; C: Satisfactory; D: Poor)*

| Evidence base- | |
| Consistency - | |
| Clinical Impact - | |
| Generalisability - | |
| Applicability – | |

**Overall NHMRC Body of Evidence rating:**

<table>
<thead>
<tr>
<th>NHMRC Level of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>(see table 1 below)</em></td>
</tr>
</tbody>
</table>

| 1. NHMRC Grading of Recommendation *(see table 3)* | *(A,B,C,D)* |
| 2. GRADE recommendation strength *(see table 4)* | *(Strong/weak)* |

| 3. Additional comments | |

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### Table 1. NHMRC Level of Evidence [3]

<table>
<thead>
<tr>
<th>Level</th>
<th>Intervention</th>
<th>Diagnostic accuracy</th>
<th>Prognosis</th>
<th>Aetiology</th>
<th>Screening Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>A systematic review of level II studies</td>
<td>A systematic review of level II studies</td>
<td>A systematic review of level II studies</td>
<td>A systematic review of level II studies</td>
<td>A systematic review of level II studies</td>
</tr>
<tr>
<td>II</td>
<td>A randomised controlled trial</td>
<td>A study of test accuracy with: an independent, blinded comparison with a valid reference standard, among consecutive persons with a defined clinical presentation</td>
<td>A prospective cohort study</td>
<td>A prospective cohort study</td>
<td>A randomised controlled trial</td>
</tr>
<tr>
<td>III-1</td>
<td>A pseudorandomised controlled trial (i.e. alternate allocation or some other method)</td>
<td>A study of test accuracy with: an independent, blinded comparison with a valid reference standard, among non-consecutive persons with a defined clinical presentation</td>
<td>All or none</td>
<td>All or none</td>
<td>A pseudorandomised controlled trial (i.e. alternate allocation or some other method)</td>
</tr>
<tr>
<td>III-2</td>
<td>A comparative study with concurrent controls: • Non-randomised, experimental trial • Cohort study • Case-control study • Interrupted time series with a control group</td>
<td>A comparison with reference standard that does not meet the criteria required for Level II and III-1 evidence</td>
<td>A retrospective cohort study</td>
<td>A comparative study with concurrent controls: • Non-randomised, experimental trial • Cohort study • Case-control study</td>
<td>A comparative study with concurrent controls: • Non-randomised, experimental trial • Cohort study • Case-control study</td>
</tr>
<tr>
<td>III-3</td>
<td>A comparative study without concurrent controls: • Historical control study • Two or more single arm study • Interrupted time series without a parallel control group</td>
<td>Diagnostic case-control study</td>
<td>A retrospective cohort study</td>
<td>A case-control study</td>
<td>A comparative study without concurrent controls: • Historical control study • Two or more single arm study</td>
</tr>
<tr>
<td>IV</td>
<td>Case series with either post-test or pre-test/post-test outcomes</td>
<td>Study of diagnostic yield (no reference standard)</td>
<td>Case series, or cohort study of persons at different stages of disease</td>
<td>A cross-sectional study or case series</td>
<td>Case series</td>
</tr>
</tbody>
</table>
### Table 2. NHMRC Body of Evidence Matrix [3]

<table>
<thead>
<tr>
<th>Component</th>
<th>A: Excellent</th>
<th>B: Good</th>
<th>C: Satisfactory</th>
<th>D: Poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence</td>
<td>One or more level I trials with a low risk of bias or several level II trials with low risk of bias</td>
<td>One or two level II trials with a low risk of bias or a systematic review/several level III trials with a low risk of bias</td>
<td>One or two level III trials with a low risk of bias or a level I or II trials with a moderate risk of bias</td>
<td>Level IV trials, or level 1 to III trials/systematic reviews with a high risk of bias</td>
</tr>
<tr>
<td>Consistency</td>
<td>All trials consistent</td>
<td>Most trials consistent and inconsistency may be explained</td>
<td>Some inconsistency reflecting genuine uncertainty around clinical question</td>
<td>Evidence is inconsistent</td>
</tr>
<tr>
<td>Clinical Impact</td>
<td>Very large</td>
<td>Substantial</td>
<td>Moderate</td>
<td>Slight or restricted</td>
</tr>
<tr>
<td>Generalisability</td>
<td>Population/s in evidence summary are the same as the target population for the guideline</td>
<td>Population/s in evidence summary are similar to the target population for the guideline</td>
<td>Population/s in evidence summary differ to target population for the guideline but is clinically sensible to apply to target population</td>
<td>Population/s in evidence summary differ to target population and hard to judge whether it is sensible to generalise to target population</td>
</tr>
<tr>
<td>Applicability</td>
<td>Directly applicable to Australian heart care</td>
<td>Applicable to Australian heart care context with few caveats</td>
<td>Probably applicable to Australian heart care context with some caveats</td>
<td>Not applicable to Australian heart care context</td>
</tr>
</tbody>
</table>

### Table 3. NHMRC Grades of Recommendation [3]

<table>
<thead>
<tr>
<th>Grade of Recommendation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Body of evidence can be trusted to guide practice</td>
</tr>
<tr>
<td>B</td>
<td>Body of evidence can be trusted to guide practice in most situations</td>
</tr>
<tr>
<td>C</td>
<td>Body of evidence provides some support for recommendation/s but care should be taken in its application</td>
</tr>
<tr>
<td>D</td>
<td>Body of evidence is weak and recommendation must be applied with caution</td>
</tr>
</tbody>
</table>
Table 4. GRADE methodology for Recommendations [4]

Strength of recommendation using GRADE Methodology

<table>
<thead>
<tr>
<th>Strong against</th>
<th>Weak against</th>
<th>Weak for</th>
<th>Strong for</th>
</tr>
</thead>
</table>

Within GRADE methodology there are 2 strengths of recommendation: Strong or Weak/conditional. The direction and strength of each recommendation is determined on the basis of four key factors: level of confidence in effect estimates (as determined by quality of evidence), balance between benefits and harms, uncertainty or variability in patients’ values and preferences, and resource considerations.

The strength of the recommendation is defined by the following principles:

**GRADE METHODOLOGY** [5]

**Strong recommendation**
- High or moderate confidence in effect estimates AND
- Benefits clearly outweigh the harms or vice versa AND
- All or almost all fully informed patients will make the same choice AND
- Benefits of the intervention are clearly justified in all or almost all circumstances of resource allocation

**Weak recommendation**
- Low or very low confidence in effect estimates OR
- Balance between benefits and harms is close OR
- Variability or uncertainty in what fully informed patients may choose OR
- Benefits of the intervention may not be justified in some circumstances of resource allocation
## Appendix 3. Reporting template for organisation representatives

<table>
<thead>
<tr>
<th>Topic</th>
<th>Description</th>
<th>Timelines</th>
</tr>
</thead>
</table>
| Update to the NHFA/CSANZ Guideline for the management of ACS (2016) | **Objective:**  
To develop an evidence-based clinical guideline to guide the management of Acute Coronary Syndromes in Australian adults. The guideline is intended to complement existing pre-hospital and secondary prevention guidance. |           |
| Progress                                                             |                                                                                                                                                                                                            |           |
Appendix 4. Schematic outlining internal process of receiving evidence summaries and communication

Stage 1. Approval of Summary

Teleconference with lead/subject experts and Evidence Reviewer

Heart Foundation (HF) facilitated feedback to Evidence Reviewer after which the evidence summary could be detailed

Broad literature search reviewed by lead/subject experts

Evidence-based summary

If not approved HF facilitated feedback to Evidence Reviewer

Approval by lead/subject expert

Opportunity for feedback from all members

Stage 2. Development of recommendation/s

Draft of recommendations by lead/subject expert(s)

Opportunity for feedback from all members

Evidence based summary and draft of recommendation(s) approved by Heart Foundation committee

Payment to Evidence Reviewer

Between meetings (approx. 30 days)

Communication by email/phone

At meeting
References


