ACE's GUIDELINES FOR GUIDELINES (G4G) GUIDE

Version 1.0 May 2025

Record of updates

Date	Version	Summary of main changes
May 2025	1.0	Publication of ACE's Guidelines for Guidelines (G4G) Guide.

Introduction

Clinical guidelines are important knowledge tools that summarise evidence conveniently and present recommendations to support clinical decision-making. Clinical guidelines have a range of purposes, from improving effectiveness and quality of care, to decreasing unnecessary variations in practice, costly preventable mistakes and adverse events. However, their potential benefits are only as good as the quality of the guidelines themselves. Over the years, guideline development methodologies have evolved, with various approaches available to fit the needs and capacity of different countries or scientific groups. While some variation may be warranted, certain standards should be upheld to maximise the application of rigorous development and the successful implementation of the resulting recommendations.

Against this backdrop, ACE identified the need to foster the following core principles in local guideline development:

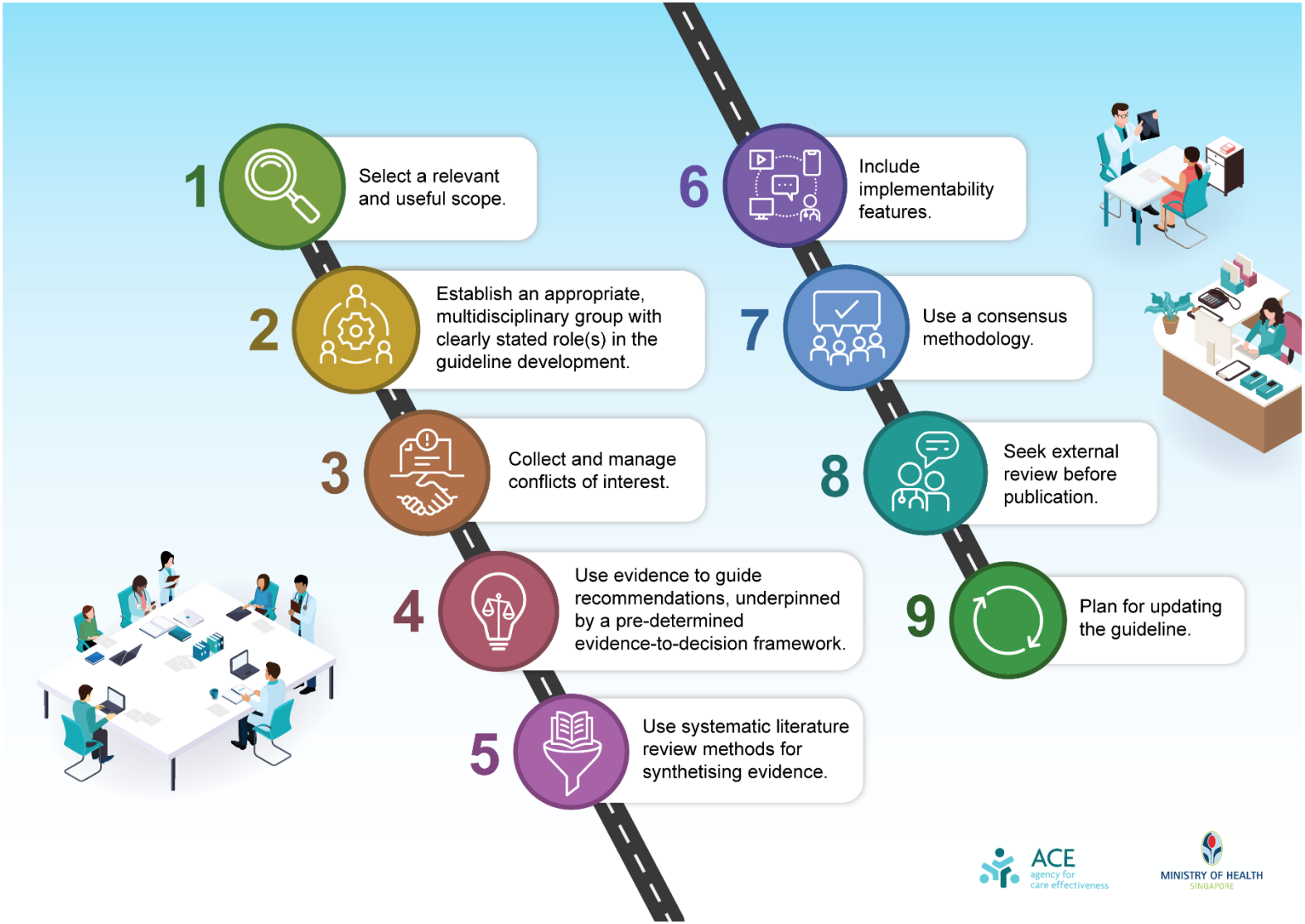
a. Clinical guidelines should be based on evidence reporting the effectiveness of care practices on health outcomes, using the highest quality evidence available at the time of guideline development;
b. Clinical guidelines should take into account resource impact, including cost, feasibility, and sustainability of recommended care practices;
c. Clinical guidelines should make recommendations that apply to most individuals with the identified condition; however, they should allow and support individualisation of care to account for differences in patient physiology (e.g. biologic differences in drug metabolism, genetics), comorbidities, and other individual circumstances – including specific preferences or values.

To support local guidelines developers who wish to produce evidence-based, relevant, high-quality clinical guidelines for Singapore's healthcare setting, the above core principles have been elaborated into ***nine minimum standards or "Guidelines for Guidelines (G4G)"*** – which are in line with existing reputable sources of criteria for guideline quality, such as the AGREE Enterprise's Appraisal of Guidelines for Research and Evaluation II (AGREE II) instrument, the GIN-McMaster Guideline Development checklist, the IOM Standards for the Development of Trustworthy Clinical Practice Guidelines.

The intent of the G4G is not to dictate a single methodological approach for developing clinical guidelines (for example, de-novo systematic review of the evidence vs adaptation of existing guidelines). Instead, **ACE's G4G highlight quality criteria to be applied across methodologies as minimum standards during clinical guideline development.**

Guideline developers interested to know how ACE develops its own guidelines (ACE Clinical Guidances, or ACGs in short) can read more in the ACG Methods and Process Manual.

Figure 1. G4G summary



1. Guidelines for Guidelines (G4G)

Standard 1. Select a relevant and useful scope.

The planning and development of a guideline should be informed by the clinical need to be addressed. Traditional textbook-like approaches where a guideline covers every step of the care pathway for a chosen topic need to be weighed against the care gap to address, as well as available resources to produce and maintain the document. When crafting the guideline scope, consider at a minimum:

a) What is the key knowledge gap that the guideline intends to address?
b) Who is the target audience/setting (e.g. primary care)?
c) What is the guideline's goal, if implemented?

Examples of guidelines' goals

- To disseminate evidence-based recommendations for supporting decision-making and reducing variation in practice [general objective, not measurable, vague endpoint]
- To lower rates of complications in patients with type 2 diabetes mellitus [specific objective]

Ideally, information about the need for the guideline and prioritisation considerations (e.g. of different areas under one topic or of different conditions) should be included.

Standard 2. Establish and appropriate multidisciplinary group with clearly stated role(s) in the guideline development.

Clinical experts play an essential role for advising on the clinical accuracy, relevancy to local context, and applicability of the guideline recommendations. A balanced composition of the guideline development group enables the comprehensive identification of clinical problems, prevents the process from being impacted by potential biases arising from special interests, and ultimately increases the probability that the guideline will be accepted and applied. There is no set minimum size, and the number of members depends on the subject and guideline's goal. A process for identifying and selecting members should be in place (e.g. seeking nominations or recruitment based on predetermined criteria) and described. A Chair (or Co-chairs) should be recruited early to contribute to planning and development of the guideline from the start (including processes for establishing the guideline group, where applicable). The Chair or Co-chairs should have demonstrated leadership capabilities and be able to facilitate effective and open discussions by ensuring all voices are heard. If the Chair is also a content expert, they should be free from conflicts of interest. When appointing the guideline development group, consider balanced representation from:

a) Disciplines relevant to the guideline scope
b) Care settings (e.g. primary care vs tertiary care) and sectors (e.g. public vs private practice)
c) National healthcare clusters

Ideally, people with lived experiences (such as patients, carers, patient advocates) should also be included. Depending on the experience of the clinical experts, evidence work can be carried out by the guideline group itself or by a technical team. Different modalities exist to suit varying needs; nevertheless, roles and responsibilities of the guideline groups vis-à-vis the technical team or clinical experts subgroups should be clearly stated upfront.

Standard 3. Collect and manage conflicts of interest.

All members of the guideline development group should be required to declare in written format (potential) conflicts of interest (COI) at the beginning of the development process. All sources of funding of the guideline should also be clarified. While the presence of a (potential) COI is not necessarily a reason for excluding a candidate group member, it is not recommended to appoint individuals if they possess serious COI – for example, employees of pharmaceutical or device manufacturer companies, or people with a direct financial interest in the recommendations of the guideline. Besides a declaration process, a COI policy should be in place to inform actions during guideline development in the case that an interest cannot be eliminated; for example, excluding the conflicted member from specific discussions or voting steps.

Standard 4. Use evidence to guide recommendations, underpinned by a pre-determined evidence-to-decision framework.

Several evidence-to-decision/recommendation (EtD/R) frameworks exist to help guideline developers use the evidence in a structured and transparent way to inform their recommendations. Each guideline group should apply a pre-agreed EtD/R outlining the factors to be considered to arrive at a recommendation. At a minimum, the framework (i.e. the factors to consider) should include:

- certainty and magnitude of effects (quality of the evidence by outcomes - established grading systems to assess the strength and certainty of the evidence include the Grading of Recommendations, Assessment, Development, and Evaluation (GRADE))
- balance of health benefits and risks (trade-offs of desirable and undesirable outcomes)
- stakeholders' values and preferences, including patient acceptability
- resource impact and feasibility considerations (including availability, cost for the patient and for the healthcare system, local approval/registration)

Applying an EtD/R framework helps the guideline group in being systematic when determining the strength of a recommendation. For example, a strong recommendation may be warranted when there is a large difference between benefits and risks and evidence is of high quality. A weak recommendation may required when there is significant variability in patients' values and preferences, or when cost is a barrier. Ideally, the deliberation of the guideline group on the EtD/R factors should be summarised and made available to the guideline user, including a description of how strength of a recommendation is selected and worded (e.g. "use" vs "should use" vs "consider" etc).

Standard 5. Use systematic literature review methods for synthetising evidence.

When a systematic review of the evidence is planned to inform recommendation-making, the following should be carried out:

- Generate and document the key questions to be answered using a standard format and providing clear description of the population of interest, interventions and comparators to be examined, and outcomes (e.g. PICO protocol)
- Determine the types of studies to include (including databases to be searched) and document the search strategy
- Critically appraise the included studies using validated risk of bias checklists
- Synthetise the evidence using formats that enable judgement on the magnitude and certainty of effects by outcome (e.g. GRADE, see G4G standard number 4)
- Complement clinical evidence with searches for additional information, such as evidence on resource use and cost (included published cost analyses) where needed

Standard 6. Include implementability features.

The process applied to guideline development plays a key role for maximising opportunities to implement the final recommendations. For example, the way recommendations are worded and embedded into the context of the overall guideline is crucial for the guideline's acceptance and applicability. Some of the important implementablity features of a guideline are considered from the start and facilitated by the EtD/R framework: applicability to target users, users' values and preferences, overall local application. In addition, consider the following:

- **Wording of recommendations**: avoid statements of facts (e.g. "smokers are at increased risk of lung disease"); instead, recommendations should be actionable, ideally complemented by information on under what circumstances that care practice should be performed and with sufficient supporting details so that users do not need to refer to other materials.
- **Ease of application**: the guideline can provide advice or tools on how the recommendations can be implemented, including key clinical indicators for tracking and monitoring criteria.
- **Formats**: multiple formats and appropriate visual presentation will help meeting the needs of users; guideline tools or derivative products can be explored to support effective dissemination and implementation (e.g. mobile applications, integration with clinical decision support systems, adaptation as an educational resource).
- **Accessibility and dissemination**: for a guideline to be implemented, it first needs to reach its users; plan for effective dissemination after its publication and maximise accessibility by making the guideline easily available (e.g. printed vs soft copies, accessible on internet-separated devices etc).

Standard 7. Use a consensus methodology.

Methods for reaching consensus should be decided at the start of the development and described as part of the guideline methods. This should include information about any specific decision rule (for example whether full consensus is required or if the majority is sufficient).

Explicit consensus methods (e.g. Delphi method, nominal group technique, RAND/UCLA method) are recommended over implicit methods like 'informal consensus'.

Standard 8. Seek external review before publication.

Before publishing the guideline, a review process enables the identification of any uncertainties or missing areas. This step should be conducted by individuals with relevant clinical or professional experience, who were not involved in developing the guideline.

Standard 9. Plan for updating the guideline.

The utility of a guideline depends on whether recommendations remain up to date. A procedure for updating the guideline should be provided, including frequency or criteria for reviewing the recommendations, as well as when the guideline should be considered withdrawn. While new evidence is usually a key criterion for updating recommendations, other factors can influence changes in the guideline (such as, changes in the local healthcare landscape). Ideally, methodology for the updating procedure, outcomes of reviewing rounds, and resulting changes are described.

Additional considerations

Application of the G4G standards should be documented where possible. Transparent description of how evidence was used and considerations leading to the guideline group's recommendations will foster trustworthiness in the document and maximise its implementation by users (such as individual healthcare professionals, healthcare institutions, or policy makers).

ACE will review the G4G two-yearly, or sooner if significant changes in quality criteria for guideline development arise.

The Agency for Care Effectiveness was established by the Ministry of Health Singapore to drive better decision-making in healthcare through health technology assessment, clinical guidance, and education.

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