Developing evidence-based guidelines at WHO

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What is a WHO guideline?

"Guidelines are recommendations intended to assist providers and recipients of health care and other stakeholders to make informed decisions. Recommendations may relate to clinical interventions, public health activities, or government policies." WHO 2003, 2007
What is a WHO Guideline?

- Applies to clinical and public health interventions
- Does not apply to standards (pharmaceutical, food), standard operating procedures, evidence synthesis without recommendations, 'how to' manuals
- Grey area – compilations of clinical information without clear recommendations
- The NAME is irrelevant
<table>
<thead>
<tr>
<th>WHO guideline process</th>
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</thead>
<tbody>
<tr>
<td>Determine title, responsible officer, WHO department</td>
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<tr>
<td>• Scope the document: describe problems with existing guidance, variations and gaps</td>
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<td>• Determine group composition and/or consultations</td>
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<td>• Solicit declarations-of-interest</td>
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<tr>
<td>• Formulate questions and choice of relevant outcomes</td>
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<tr>
<td>• Retrieve, evaluate and synthesize evidence</td>
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<tr>
<td>• Establish benefit/risk profile (integrate evidence with values and preferences, equity and costs)</td>
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<td>• Formulate recommendations</td>
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<td>• Implement and evaluate impact</td>
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<td>• Describe and fund further research needs</td>
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<td>• Update guidelines as pre-specified</td>
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Practicalities

- For principle and/or controversial recommendations:
  - Synthesis of all available evidence
  - Evidence summaries for group meetings using standard template
  - Formal assessment of quality of evidence
  - Consideration of resource use and costs
  - Linked evidence to recommendations, explaining reasons for judgements

- System for assessing evidence for interventions: GRADE
Quality of evidence

The extent to which one can be confident that an estimate of effect or association is correct.

Although the degree of confidence is a continuum, four categories are used:

- High
- Moderate
- Low
- Very low
# GRADE tables for quality

Table 2: GRADE quality assessment criteria

<table>
<thead>
<tr>
<th>Quality of evidence</th>
<th>Study design</th>
<th>Lower if *</th>
<th>Higher if *</th>
</tr>
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<tbody>
<tr>
<td>High</td>
<td>Randomized trial</td>
<td>Study quality:</td>
<td>Strong association:</td>
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<tr>
<td></td>
<td></td>
<td>-1 Serious limitations</td>
<td>+1 Strong, no plausible confounders,</td>
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<tr>
<td></td>
<td></td>
<td>-2 Very serious limitations</td>
<td>consistent and direct evidence</td>
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<tr>
<td>Moderate</td>
<td></td>
<td>-1 Important inconsistency</td>
<td>+2 Very strong, no major threats to validity</td>
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<tr>
<td>Low</td>
<td>Observational study</td>
<td>Directness:</td>
<td>and direct evidence</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-1 Some uncertainty</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>-2 Major uncertainty</td>
<td></td>
</tr>
<tr>
<td>Very low</td>
<td>Any other evidence</td>
<td>-1 Sparse data</td>
<td>+1 Evidence of a Dose response gradient</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Directness:</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>-1 High probability of Reporting bias</td>
<td>+1 All plausible confounders would have</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>reduced the effect</td>
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* 1 = move up or down one grade (for example from high to intermediate)

** 2 = move up or down two grades (for example from high to low)

*** A statistically significant relative risk of >2 (< 0.5), based on consistent evidence from two or more observational studies, with no plausible confounders.

**** A statistically significant relative risk of > 5 (< 0.2) based on direct evidence with no major threats to validity.
Recommendations versus evidence

- Recommendations are judgements
  - Quality of evidence
  - Trade off between benefits and harms
  - Costs
  - Values and preferences
Why bother about grading?

- People draw conclusions about the quality of evidence and strength of recommendations.

- Systematic and explicit approaches can help protect against errors, resolve disagreements, facilitate critical appraisal, and communicate information.
Strength of recommendations

Although the degree of confidence is a continuum, two categories are used: strong and weak.

A **strong recommendation** is one for which the panel is confident that the desirable effects of adherence to a recommendation outweigh the undesirable effects.

A **weak recommendation** is one for which the panel concludes that the desirable effects of adherence to a recommendation probably outweigh the undesirable effects, but the panel is not confident about these trade-offs. Reasons for not being confident can include:

- absence of high quality evidence;
- presence of imprecise estimates of benefits or harms;
- uncertainty or variation in how different individuals value the outcomes;
- small benefits;
- the benefits may not be worth the costs (including the costs of implementing the recommendation).
Implications of recommendations

Examples of implications of a strong recommendation are:

- **For patients**: Most people in your situation would want the recommended course of action and only a small proportion would not.
- **For clinicians**: Most patients should receive the recommended course of action. Adherence to this recommendation is a reasonable measure of good quality care.
- **For policy-makers**: The recommendation can be adapted as a policy in most situations. Quality initiatives could use this recommendation to measure variations in quality.

Examples of implications of a weak recommendation are:

- **For patients**: The majority of people in your situation would want the recommended course of action, but many would not.
- **For clinicians**: Be prepared to help patients to make a decision that is consistent with their own values.
- **For policy-makers**: There is a need for substantial debate and involvement of stakeholders.
Guidelines Review Committee (GRC)

Background

The Guidelines Review Committee (GRC) was established by Information Note 16/2007 to develop and implement procedures for guideline development that ensure that WHO guidelines are consistent with internationally accepted best practices, including the appropriate use of evidence.

The terms of reference of the GRC are:

- Defining appropriate and standardized processes related to guideline development, including developing standard formats and templates for different levels of recommendations (e.g. rapid policy advice or full guidelines) and different stages of preparation of such recommendations.
- Ensuring that all guidelines prepared by WHO comply with the previously prepared Guidelines for Guidelines (GFG) by providing advice, guidance, and initial and final approval of WHO guideline documents.
- Developing and implementing a plan to ensure that WHO guidelines committee members have appropriate knowledge of the approved methods for guideline development and to identify opportunities in collaboration with the Global Learning Committee to build capacity of WHO staff in guidelines development.
- Developing collaboration and cooperation with other organizations and international networks that have methodological expertise and skills in relation to guidelines development, adaptation and implementation (e.g. National Institute for Clinical Excellence, United Kingdom, the Guidelines International Network, the Cochrane Collaboration, etc.).

Secretariat

http://intranet.who.int/homes/rpc/grc/