NICE National Institute for Health and Care Excellence

Determining minimal important differences for clinical effectiveness in clinical practice guidelines

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Minimal important difference:

- The smallest change in an outcome that is considered important by patients or health care professionals
- Application within NICE guidelines requires judgement:
 - Little advice in current guidelines manual (2012)
 - GRADE and imprecision. Guyatt et al. GRADE guidelines 6.
 Rating the quality of evidence imprecision. J Clin Epidemiol. 2011
 - Use MID or use default if no MID
 - Choice of MID is not addressed

Update of NICE osteoarthritis guideline





The National Collaborating Contro for Chinese Conditions

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OSTEOARTHRITIS

National clinical guideline for care and management in adults

Publicitud by



NICE

Recommendation for paracetamol:

'Healthcare professionals should consider offering paracetamol for pain relief in addition to core treatments; regular dosing may be required. Paracetamol and/or topical non-steroidal antiinflammatory drugs (NSAIDs) should be considered ahead of oral NSAIDs, cyclooxygenase 2 (COX-2) inhibitors or opioids.'

Good practice suggestion

- Choice of MID:
 - The best source is a systematic review of the evidence or an international consensus statement. Established MIDs are likely to be published and should have been around long enough to be seen and accepted by clinical community.
 - MIDs developed for individual RCTs are not appropriate for use in guideline development as we should not routinely be using MIDs from single research studies for decision-making

MID or default?

- MIDs available from one small study
- MIDs varied across outcomes but generally around 0.2 SD continuous outcomes
- Therefore, used GRADE default (0.5 SD for continuous outcomes)

How have other NICE guidelines applied MIDs?

How do we explain MIDs to GDGs?



1. Survey of lead reviewers for NICE guidelines

- Vanessa Nunes (2010)
- 9 guidelines, published or in development from 1 collaborating centre
- Used 3 approaches for MIDs in GRADE:
 - Default values
 - Literature values
 - GDG agreement

2. Retrospective review of published NICE guidelines

- All NICE clinical guidelines published
 January 2013-February 2014
- Reviews of effectiveness of interventions
- Extracted information on MIDs
- 19 guidelines identified
- 4 guidelines used more than one approach to MIDs

Use of MIDs

GRADE default applied throughout, no further explanation	7
No MID identified, default applied	10
MID identified but not used, default applied	1
MID identified and applied	4



Identification of MIDs

Literature search	2
Asked GDG	2
Literature search and discussed with GDG	8



Examples of MIDs

- Urinary incontinence in women
 - Use of MID or default varied between questions
 - Consensus voting to determine use of MID
- MI with ST segment elevation
 - No discussion around choice of MID but detailed discussion about suitability of default
- IV fluid in hospitalised adults
 - Any reduction in mortality was considered clinically important



3. Interviews with lead reviewers for NICE guidelines

- 6 staff based at 4 collaborating centres and 2 internal teams
- Telephone or in person
 - GDGs struggle with the concept of MIDs
 - GRADE default values are problematic
 - Lack of good examples that GDG can recognise
 - Insufficient time to address these issues
 - Unclear when is best time to introduce concept

Future work to formalise NICE approach to MIDs



Proposed criteria for MIDs

- MIDs supported by systematic review or multiple publications or
- Developed by established group or
- Widely-recognised and applied in the clinical community
- If no MID is(are) identified, discuss with the GDG whether the GRADE default is appropriate

Proposed approach

- Ask GDG for MIDs relevant to each question/outcome
- Literature search
- Discuss identified MIDs with GDG, can they be used in guideline?
- Informal consensus but formal processes (e.g. voting) can be used if needed

Proposed timing

- Protocol development
- GRADE training
- Introduce at early meetings but discuss in detail when evidence is presented



Returning to osteoarthritis...

- An unanticipated problem:
 - Updated vs older part of guideline different criteria applied to acupuncture review (used statistical significance) which was not updated
 - Criticism from stakeholders
 - We need to decide how to deal with this situation as it is likely to occur with other guidelines