

Guideline for guidelines: are they up to the task? A comparative review of guideline development strategies

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Background

- Guidelines are sought
 - for improving the quality of care provided to the patients
 - reducing variability
 - containing the health care costs
- But ...
- Despite development of clinical guidelines in many countries, solving the problems of cost and quality as well as variation in care remains a challenge to health systems

Background

- Several countries have pro-active policies of guidelines development at the national level
- National programmes are developed in response to the perceived (and observed) situation of uncertain quality of guidelines
- Assumed that it is easier and more fruitful to implement national guidelines than local or society developed ones
- Pioneers started in late nineties
 - NICE in 1999, SIGN in 1995, New Zealand in 1998, Australia in 1995
- Most programmes are established in high-income countries, where there are more resources available to health systems

Background - previous studies

- Burgers et al. sent questionnaires to eighteen guideline development programmes.
 - More recent programmes were benefitting from methodology created by older ones
 - Recommended further emphasis on dissemination and implementation

Background - previous studies

- Turner et al 2008 assessed six guideline development programmes
- Van der Wees et al compared six guideline programs against the AGREE criteria to update the Dutch program for guidelines in physical therapy

Study objectives

- As part of a wider study to design a plan for development of clinical guidelines at a national level in Iran
- The main purpose of this study was to identify the main guideline development tasks
- Second objective was to identify guideline handbooks that provide a relatively comprehensive coverage of guideline development tasks

Methods

- **Selecting guideline development handbooks**
- Searched Pubmed and TRIP databases
 - sensitive terms representing 'clinical guideline development handbooks'
- Searched the Google using similar terms, aiming for the most popular handbooks
 - i.e. appearing on the first ten pages of Google search outputs
- Searched the reference lists
- Included documents produced by national or international organizations responsible for CPG development, and professional and academic bodies
- Documents produced for general or specific conditions
- published in English

Methods

- ***Data extraction***
- We first extracted the main tasks of CPG development from the NICE's handbook
- We then scanned eighteen guideline development handbooks and extracted other tasks of CPG development process
 - forming an 'inclusive' task list
- Other relevant 'tasks' were added after elaborating on the task list
 - E.g. ethical issues
- The list was reordered and in cases rephrased to reduce potential misinterpretation

Methods

- Each handbook was reviewed based on the developed task list
- The guidelines attention paid to each task was scored
 - 2, if the handbooks addressed the task and provided enough information to suggest it is seriously considered
 - 1, if the handbook just mentioned the task
 - 0, if the handbook handbooks did not mention the task
- Disagreements resolved through discussion

Findings

- Twenty five main tasks for CPG development process were identified
- The tasks list, did not reflect step by step processes of guideline development
 - E.g. involving consumers may exist in all stages of the CPG development process
- These tasks include the major elements of an evidence-based CPG development process
- Also useful as a checklist of critical tasks that should be considered in guideline development

Guideline development tasks

Selecting topic

Determining the Scope

Preparing the work plan

Identifying existing CPGs

Adapting existing CPGs

Involving consumers

Forming a GDG

Conflict of interests

Running GDG

Developing questions

Systematic search

Economic evaluation

Identifying the evidence

Appraising research

Synthesis and analysis

Making group decisions and reaching consensus

Consider ethical issue

Creating recommendation

Final Consultation

Publishing formats

Implementation strategy

Piloting

Impact assessment

Developing clinical audit criteria

Updating and correcting errors

Findings

- A narrative description of different tasks was developed based on the handbooks
- Nineteen out of the twenty five tasks were described in at least three handbooks (a priori reasoning)
 - That excludes 'ethical aspects' and 'piloting'
 - Both conceptually important, but technically challenging and logistically less feasible
- The handbooks were published within the period from 1998 to 2009
- The guidelines' handbooks' scores ranged from 16 to 45
- The highest scores achieved by handbooks developed for NICE (45), IDF (41), ASCO (39), and SIGN, NZGG, Slovakia program and CMA (38)

Findings

- We have two approaches to determine which items are necessary to develop an evidence based clinical practice guideline.
- If we consider the tasks mentioned by 75% of handbooks, as necessary:
 - selecting the topic, determining the scope, involving the consumers, forming a GDG, running GDG, systematic search and identifying the evidence, appraising researches, Synthesis and analysis, reaching and making group decision consensus, creating recommendations, final consultation, implementation strategy, updating and correcting errors are essential tasks
- Alternatively one could consider all the tasks as important
 - Remember ethical and 'perhaps' piloting issues
 - Or some national programs that are not addressing topic selection because of political structure etc

Discussion

- Included handbooks from: UK, Australia, New Zealand, Scotland, USA, Canada, Slovakia, and international organizations or societies
- Compared to previous reviews, a wider collection of handbooks, and a more comprehensive coverage of guideline development 'tasks' and elements
- No handbook on its own covered all the tasks.
- Furthermore, there was considerable variation in quality and depth of attention devoted to these tasks depending on the handbooks.
- The main items that had not been given any attention to were considering ethical issues, piloting, and identifying existing guidelines.

Discussion

- The 'piloting' task may have been left out due to the technical difficulties of conducting a pilot on a guideline before its release.
- Development of a guideline is time-consuming and takes around a year
- A proper pilot of a guideline can easily double this period
- Some recommend an update of a guideline every say three years
 - easy to understand why a pilot may not be feasible
- There are, on the other hand, indispensable benefits for testing a guideline in the field before its release
 - it may promote the guideline's implementation
 - the ultimate goal of developing guidelines.
- Further work is required for the development of rapid pilot or field test approaches, and for assessing the efficiency of systematic field testing of newly developed guidelines.

Discussion

- Incorporating ethical concerns into guidelines remains a challenge
- Methodological and conceptual limitations seems to be the main barriers to formal consideration of ethical concerns
- Surprisingly several handbooks had not mentioned 'identifying existing guidelines' task at all.
- Searching for existing guidelines is relatively easy, results in preventing potential duplicate efforts, and informs the guideline development process
- The task should be included in all guideline development programmes

Discussion

- Seven handbooks did not mention economic evaluation at all and a further six handbooks just briefly tapped on the issue.
- This is more so for the society developed handbooks.
- It should be noted that even the guideline development entities that formally cherish use of economic evaluation evidence may find it difficult honoring their intention and ending up in patchy use of such evidence

Discussion

- Obviously, the handbooks were not developed independently of each other but the links were not clear.
- SIGN, Society of Physiotherapy, and International Diabetes Federation handbooks addressed the NICE handbook.
- On the other hand NICE, NHMRC, NZGG, Council of Europe handbooks mentioned the SIGN handbook.
- Closer links and joint works on guideline development handbooks (e.g. using G-I-N forums) can be beneficial.

Discussion

- Turner et al. described fourteen key elements and compared the guidelines by these key elements. They concluded "the key elements of an evidence-based CPG development process are addressed with strong concordance by existing CPG development handbooks."
- Our findings challenge that conclusion.

- Thank you