
Updating clinical practice guidelines: experiences from the UK (& USA)

Martin Eccles

Centre for Health Services Research

Newcastle upon Tyne

UK

When should guidelines be updated?

- Considerable resources are being expended internationally on the development of clinical practice guidelines
 - Increasing consensus about methods for developing evidence-based guidelines
 - Less attention has been paid to the process for assessing when guidelines should be updated
-

Options?

- A scheduled review date
 - Could result in wasted resources
 - a full update undertaken prematurely within a slowly evolving field
 - guidelines in a rapidly evolving field becoming out-of-date before the scheduled review
 - Update when new information becomes available
 - Unclear how this should be operationalised
-

What situations might require CPGs to be updated?

1. Changes in the evidence on the existing benefits and harms of interventions
 2. Changes in the outcomes considered important
 3. Changes in the available interventions
-

What situations might require CPGs to be updated?

4. Changes in the evidence that current practice is optimal
 5. Changes in the values placed on outcomes
 6. Changes in the resources available for health care
-

Operationalising

- Changes in evidence, available interventions or performance
 - Changes in the values placed on outcomes often reflect societal norms
 - Measuring the values placed on outcomes and how these change over time is complex
 - When changes occur in the availability of resources for health care or the costs of interventions, a generic policy on updating is unlikely to be helpful
 - policy makers in disparate health care systems consider different factors in deciding whether services remain affordable
-

Two stages

- ❑ Ideally
 - ❑ Conduct a systematic review,
 - ❑ Costly and time-consuming
 - ❑ Tantamount to completing the first step of updating, rather than determining whether updating was necessary
1. Identify significant new evidence
 2. Assess whether the new evidence warrants updating of guideline
-

Two processes

1. Ask expert opinion

- Multidisciplinary

- Recruit from the original guideline development group
 - Complement by additional topic experts and generalists with expertise in critical appraisal to broaden input on the need for updating
-

Two processes

2. Conduct focused literature reviews

- Mitigate against oversights by experts
 - Major general interest and specialty journals
 - Timed from when the literature search for the original guideline ended
 - Initially target review articles, editorials, and commentaries, new guidelines
-

Invalid recommendations – is it clear?

- New information providing prima facie evidence
 - A large clinical trial demonstrates convincingly that a recommended therapy is ineffective or harmful
 - If not then assessment will necessarily involve judgment
 - Generally more balanced if they involve both topic experts and generalists with expertise in guideline development
 - Greater emphasis on new evidence regarding the principal diagnostic or therapeutic procedures that have a major impact on outcomes (such as mortality)
-

Invalid recommendations – some or all?

- Some recommendations become invalid whilst others remain current
 - A guideline on congestive heart failure
 - 37 individual recommendations - how many must be invalid to require updating the whole guideline?
 - A single, outdated recommendation could invalidate the entire document
-

Making it work

- Agency for Healthcare Research and Quality (AHRQ) Guidelines
 - 17 of the 19 practice guidelines published
 - still in circulation
-

Making it work

- Mail survey to members of the original AHRQ guideline panels
 - N=170, response rate=71%
 - Literature searches
 - Annals, JAMA, BMJ, Lancet, NEJM plus key specialty journals
 - 6,994 titles yielding 173 articles
 - 159 new guidelines on the same topics
-

Survey of experts

- 170 surveys, 121 (71%) were returned
 - Response rates varied by guideline
 - For all but three guidelines more than 60% of the surveys were returned
 - Assessments of the validity of the practice guideline statement from 8 non-panel experts for 7 of the guidelines
-

Updating required

- 3/17 guidelines were still valid
 - 6/17 guidelines were in need of a minor update
 - 7/17 guidelines to be in need of a major update
 - 1/17 not possible to reach a judgement
 - Poor response rate, highly technical area
-

Survival

- All guidelines

- 50% survive at least 5.8 years (95% CI 5.0 to 6.6 years)

- Major update guidelines

- 90% survival estimate of 5.5 years, (95% CI 4.5 to 6.5 years)
 - 50% survival estimate of 7.1 years (95% CI 6.4 to 7.8 years)
-

Conclusions

- Survival at lower bound of 95% CI – 3 years
- \$100,000 for 17 guidelines
- Easier in areas the generalists knew
- BUT
 - Only a relatively small number of existing clinical practice guidelines
 - Not selected randomly
 - Could not determine the actual date that guidelines went out-of-date, only that they had done so within a certain interval
 - probably overestimates the useful life of these guidelines
 - Method not been validated against the ideal “gold standard”: a simultaneous full update of the guidelines

Implications

- Intermittent updating

OR

- The living guideline?
 - Continual accumulation of evidence
 - “Standing” panel
 - Sectional updating
 - Electronic linking
-