What could Cochrane do better for guideline developers?

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I declare no conflict of interest
The evidence pyramid

Original studies

Systematic reviews

Syntheses

Synopses

Guidelines

EB (Evidence-Based)
A match re-made in heaven?
What is an evidence-based guideline?

- A document with recommendations to support practitioners and care users, aimed at improvement of the quality of care, based on evidence, expertise, and experiences of practitioners and care users.

(Working Group Guideline for Guidelines, Regieraad 2011)
Institute of Medicine 2011

Guidelines should be:

• based on a systematic review of existing evidence;
• developed by a multidisciplinary panel of experts and key representatives;
• considering patient preferences, as appropriate;
• based on an explicit and transparent process that minimizes biases, and conflicts of interest;
• providing quality of evidence and strength of recommendations;
• reconsidered and revised as appropriate when important new evidence warrants it.
Evidence-based guideline development

- Systematic reviews and meta-analyses
- Randomised controlled trials
- Cohort, case control studies
- Uncontrolled studies
- Expert opinion

Quality assessment

Conclusion including Level of evidence

Considered judgement

Recommendation

(evidence plus experience)

- Clinical relevance
- Patient safety
- Patient preferences
- Availability of services
- Organization of care
- Impact on costs
- Legal / ethical consequences
To promote evidence-informed health decision-making by producing high-quality, relevant, accessible reviews & other synthesized research evidence.
Range of knowledge used by NICE

<table>
<thead>
<tr>
<th></th>
<th>MSCC*</th>
<th>Advanced Breast Ca</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consensus alone</td>
<td>32%</td>
<td>44%</td>
</tr>
<tr>
<td>Observational studies</td>
<td>40%</td>
<td>16%</td>
</tr>
<tr>
<td>RCTs</td>
<td>7%</td>
<td>37%</td>
</tr>
<tr>
<td>Other guidance</td>
<td>17%</td>
<td>-</td>
</tr>
<tr>
<td>‘Extrapolation’</td>
<td>3%</td>
<td>-</td>
</tr>
<tr>
<td>Health economic studies</td>
<td>1%</td>
<td>2%</td>
</tr>
<tr>
<td>Audit data</td>
<td>1%</td>
<td>-</td>
</tr>
</tbody>
</table>

*= metastatic spinal cord compression

CG75. November 2009
www.nice.org.uk/CG75.
- Level of evidence
- Strengths of recommendations
- Evidence to decision frameworks
Future developments in guidelines

• Inclusion and appraisal of other forms of knowledge (G-I-N AID knowledge working group)

• Development of different cliënt or situational profiles (personalized medicine)
  ➢ subgroup or sensitivity analyses in SR’s

• Shared decision making
  ➢ More options in recommendations
  ➢ “decision aids”
<table>
<thead>
<tr>
<th>Type of reasoning</th>
<th>Short description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bayesian evasion (Hacking)</td>
<td>learning from experience</td>
</tr>
<tr>
<td>Abduction (Peirce)</td>
<td>to the best explanation</td>
</tr>
<tr>
<td>Mechanistic/deterministic</td>
<td>how things appear to work</td>
</tr>
<tr>
<td>Falsification (Popper)</td>
<td>trial and error</td>
</tr>
<tr>
<td>Precautionary principle</td>
<td>uncertainty→prevent harm</td>
</tr>
<tr>
<td>Logic of care (Mol)</td>
<td>healthcare is a practice</td>
</tr>
<tr>
<td>Non-analytical (Gigerenzer)</td>
<td>using intuition</td>
</tr>
</tbody>
</table>

Introducing other kinds of evidence?
Future developments in guidelines

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Selection and frasing of clinical questions

• “We wanted to find out if vocational rehabilitation can help workers return to work after injuring their fingers, hand or arm”

• Based on coincidence, a research project, enthusiasm, availability of resources or on important bottlenecks in clinical care? .......

- Involving guideline developers and stakeholders more systematically at the start
- GL’s present gaps in knowledge → input for Cochrane
Timing and planning of updates

• Increasingly a modular approach in updating of guidelines is/will be used
• Gives opportunities for a better match between guideline topics and Cochrane reviews
  ➢ Active role of Coordinator and Editorial Board
  ➢ More direct contact between review groups and guideline developers
What could Cochrane do better?