The Role of Trial-based Economic Evaluation in Health Care Decision Making

Discussion
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Positive versus normative perspectives

- **Positive**
  - How do decision makers reach decisions?
  - What factors do they take into account?
- **Normative**
  - How should decisions be made?
  - What does this imply about the methods of economic evaluation?

Requirements for decision making and trial-based economic evaluation

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Trial feature</th>
</tr>
</thead>
<tbody>
<tr>
<td>All relevant options</td>
<td>All options as trial arms</td>
</tr>
<tr>
<td>All relevant evidence</td>
<td>No other evidence on any parameters relevant to the decision</td>
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<tr>
<td>Appropriate time-horizon</td>
<td>Trial follow-up and time horizon are the same</td>
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An iterative approach to evaluation

- Primary research (e.g. RCTs) → Setting of research priorities
- Synthesis and modelling with updated evidence → Identify decision problems
- Synthesis and modelling given available evidence
But we don’t know how to do everything…

Evidence synthesis and decision modelling is the appropriate framework for economic evaluation, but major challenges:

- Identifying all relevant alternatives
- Structuring decision models
- Conditioning on all relevant events
- Characterising the exchangeability of evidence

The realities of research funding

- A large proportion of funding for economic evaluation is attached to trials
- Seem to be 3 general options:
  1. Satisfy expectation of standard trial-based economic evaluation and risk misleading results
  2. Refuse to participate
  3. Pragmatic collaboration
     - Seek opportunity to use modelling to help design the trial
     - Ensure sufficient budget for analysis which includes synthesis and modelling