Putting it Together: Assessing an Economic Analysis

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Assessing an analysis

- What is the health problem targeted?
- Is the question clearly stated?
- Is it relevant and timely?
- Have the authors clearly identified and described the strategies/interventions being compared?
- What evidence supports the interventions being compared?
- What is the health outcome considered? Is it relevant and appropriate?
- What perspective is used? Is it appropriate to the study question and the target audience?
- What is the time frame of the analysis?
Assessing an analysis

- How were health outcome data obtained?
  - If quality weights were used, where did they come from?
- How were cost data obtained?
  - Was relevant resource use properly tabulated?
  - Do the costs seem credible and internally consistent?
- How do the authors account for timing of future costs and outcomes (discounting)?
- If a cost-effectiveness or cost-utility analysis, do the authors present an appropriate incremental cost-effectiveness ratio if one is needed?
Assessing an analysis

● How did the authors address uncertainty in their measurements and/or model inputs?
● Did the analysis answer the stated research question?
● Do the authors appropriately identify and handle potential weaknesses?
● How likely are the study findings to influence practice and/or policy?
Drummond checklist (1996): Study design

- The research question is stated.
- The economic importance of the research question is stated.
- The viewpoint(s) of the analysis are clearly stated and justified.
- The rationale for choosing alternative programmes or interventions compared is stated.

Checklist is available online at the following link:
http://handbook.cochrane.org/chapter_15/figure_15_5_a_drummond_checklist_drummond_1996.htm
Study design

- The alternatives being compared are clearly described.
- The form of economic evaluation used is stated.
- The choice of form of economic evaluation is justified in relation to the questions addressed.
Data collection

- The source(s) of effectiveness estimates used are stated.
- Details of the design and results of effectiveness study are given (if based on a single study).
- Details of the methods of synthesis or meta-analysis of estimates are given (if based on a synthesis of a number of effectiveness studies).
The primary outcome measure(s) for the economic evaluation are clearly stated.

Methods to value benefits are stated.

Details of the subjects from whom valuations were obtained were given.

Productivity changes (if included) are reported separately.

The relevance of productivity changes to the study question is discussed.
Data collection

- Quantities of resource use are reported separately from their unit costs.
- Methods for the estimation of quantities and unit costs are described.
- Currency and price data are recorded.
- Details of currency of price adjustments for inflation or currency conversion are given.
Details of any model used are given.
The choice of model used and the key parameters on which it is based are justified.
Analysis and interpretation of results

- Time horizon of costs and benefits is stated.
- The discount rate(s) is stated.
- The choice of discount rate(s) is justified.
- An explanation is given if costs and benefits are not discounted.
- Details of statistical tests and confidence intervals are given for stochastic data.
The approach to sensitivity analysis is given.
The choice of variables for sensitivity analysis is justified.
The ranges over which the variables are varied are justified.
Relevant alternatives are compared.
Incremental analysis is reported.
Major outcomes are presented in a disaggregated as well as aggregated form.

The answer to the study question is given.

Conclusions follow from the data reported.

Conclusions are accompanied by the appropriate caveats.