CRITICAL APPRAISAL SKILLS
Making Sense Of Evidence
12 questions to help you make sense of economic evaluations

General comments

- Three broad issues need to be considered when appraising an economic evaluation.

  A/ Is the economic evaluation valid?

  B/ How were costs and consequences assessed and compared?

  C/ Will the results help in purchasing services for local people?

  The 12 questions on the following pages are designed to help you think about these issues systematically.

- The first two questions are screening questions and can be answered quickly. If the answer to both is "yes", it is worth proceeding with the remaining questions.

- There is a fair degree of overlap between several of the questions.

- You are asked to record a "yes", "no" or "can't tell" to most of the questions.

- Beneath each question there are hints that may help you understand the question better. They will remind you why the question is important. In the small group concentrate on answering the main question – it is not necessary for the group to answer all the detailed points.

- The 12 questions are adapted from: Drummond MF, Stoddart GL, Torrance GW. Methods for the economic evaluation of health care programmes. Oxford: Oxford University Press, 1987.

These materials have been developed and tested by the Critical Appraisal Skills Programme (CASP), Oxford, UK and CASP Spain (CASPe).

A/ Is the economic evaluation valid?

	Yes	Can't tell	No
1 Was a well-defined question posed? *HINT: Is it clear what the authors are trying to achieve?* *What is the perspective?* *How many options are compared?* *Are both costs and consequences considered?* *What is the time horizon?*	❑	❑	❑
2 Was a comprehensive description of the competing alternatives given? *HINT: Is there a clear decision tree (or similar given): Can you tell* *who did what, to whom, where and how often?*	❑	❑	❑
3 Does the paper provide evidence that the programme would be effective (ie would the programme do more harm than good)? *HINT: Consider if an RCT or systematic review was used; if not, consider how strong the evidence was.* *(Economic evaluations frequently have to integrate different types of knowledge stemming from different study designs.)*	❑	❑	❑
4 Were the effects of the intervention identified, measured and valued appropriately *HINT: Effects can be measured in natural units (e.g. years of life) or more complex units (e.g. years adjusted for quality of life such as QALYs) or monetary equivalents of the benefit gained (e.g. $).*	❑	❑	❑

B/ How were consequences and costs assessed and compared?

5. Were all important and relevant resources required and health outcome costs for each alternative identified, measured in appropriate units and valued credibly? *HINTS:* *Identified?* *Remember the perspective being taken.* *Measured accurately in appropriate units prior to evaluation?* *Appropriate units may be hours of nursing time, number of physician visits, years-of-life gained etc.* *Valued credibly?* *Are the values realistic?* *How have they been derived?* *Have opportunity costs been considered?*	**Yes** ❑ **Can't tell** ❑ **No** ❑
6 Were costs and consequences adjusted for different times at which they occurred (discounting)?	**Yes** ❑ **Can't tell** ❑ **No** ❑
7. What were the results of the evaluation? *HINTS:* *What is the bottom line?* *What units were used (e.g. cost/life year gained, cost/QALY, Net benefit)*	
8 Was an incremental analysis of the consequences and costs of alternatives performed?	**Yes** ❑ **Can't tell** ❑ **No** ❑
9. Was an adequate sensitivity analysis performed? *HINT: Consider if all the main areas of uncertainty were considered by changing the estimate of the variable and looking at how this would change the result of the economic evaluation?*	**Yes** ❑ **Can't tell** ❑ **No** ❑

C/ Will the results help in purchasing for local people?

10. **Is the programme likely to be equally effective in your context or setting?** *HINT: Consider whether* *a) the patients covered by the review could be sufficiently different to your population to cause concern b) your local setting is likely to differ much from that of the review.*	**Yes** ❑ **Can't tell** ❑ **No** ❑
11. Are the costs translatable to your setting?	**Yes** ❑ **Can't tell** ❑ **No** ❑
12. Is it worth doing in your setting?	**Yes** ❑ **No** ❑