

**CRITICAL APPRAISAL CHECKLIST  
FOR ECONOMIC EVALUATIONS.**

**Study Design: Any research design incorporating an economic  
evaluation**

**Adapted from:**

**Critical Appraisal Skills Programme (CASP), Public Health Resource Unit,  
Institute of Health Science, Oxford.**

**Drummond et al. Methods for the economic evaluation of health care  
programmes. 2<sup>nd</sup> Edition. Oxford: Oxford Medical Publications, 1997.**

## IS THE ECONOMIC EVALUATION LIKELY TO BE USABLE?

	Yes	Can't tell	No
<p><b>1. Was a well-defined question posed in an answerable form?</b></p> <p>Consider:</p> <ul style="list-style-type: none"> <li>Is it clear what the authors were trying to do?</li> </ul>			
<p><b>2. Was a comprehensive description of the competing alternatives given (i.e. can you tell who did what to whom, where and how often)?</b></p>			
<p><b>3. Was there evidence that the programme's effectiveness had been established?</b></p> <p>Consider:</p> <ul style="list-style-type: none"> <li>Was the study attached to the economic evaluation an RCT?</li> <li>How valid was the study design used? (N.B. You may want to appraise it using an appropriate checklist).</li> </ul>			

## HOW WERE OUTCOMES AND COSTS ASSESSED AND COMPARED?

	Yes	Can't tell	No
<p><b>4. Were all the important and relevant outcomes and costs for each alternative identified?</b></p> <p>Consider:</p> <ul style="list-style-type: none"> <li>What perspective(s) was/were taken, e.g. health service, patient, society.</li> </ul>			
<p><b>5. Were outcomes and costs measured accurately in appropriate units (e.g. hours of nursing time, number of physician visits, years-of-life gained) prior to evaluation?</b></p>			
<p><b>6. Were the outcomes and costs valued credibly?</b></p> <p>Consider:</p> <ul style="list-style-type: none"> <li>Were opportunity costs considered?</li> </ul>			

<b>7. Were outcomes and costs adjusted for different times at which they occurred (discounting)?</b>	<b>Yes</b>	<b>Can't tell</b>	<b>No</b>
<b>8. Was an incremental analysis of the outcomes and costs of alternatives performed?</b>			
<b>9. Was a sensitivity analysis performed?</b>  Consider: <ul style="list-style-type: none"> <li>• Were all the main areas of uncertainty considered?</li> </ul>			

**WILL THE RESULTS HELP IN PURCHASING FOR LOCAL PEOPLE?**

<b>10. Did the presentation and discussion of the results include all, or enough, of the issues that are of concern to purchasers?</b>	<b>Yes</b>	<b>Can't tell</b>	<b>No</b>
<b>11. Were the conclusions of the evaluation justified by the evidence presented?</b>			
<b>12. Can the results be applied to the local population?</b>  Consider: <ul style="list-style-type: none"> <li>• Are the patients similar enough to your population?</li> <li>• Is your local setting similar to that in the study?</li> </ul>			

## **JARGON BUSTER.**

<b>Economic evaluation</b>	<p>Involves the explicit measurement and valuation of resource consumption or cost and health outcomes (often referred to as consequences or benefits), so that they can be related to the costs of alternative treatment strategies.</p> <p><b>N.B.</b> The economic evaluation needs to be set in the context of the overall quality and relevance of the study. This may mean appraising the study as well. e.g. If the RCT is of poor quality, there's no point pursuing an appraisal of the economic evaluation.</p>
<b>Cost-minimisation analysis (CMA)</b>	<p>Used when the effect of both interventions is identical (or assumed to be identical). Thus, there is no outcome measure - only costs are accounted for.</p>
<b>Cost-effectiveness analysis (CEA)</b>	<p>Used when the effect of the interventions can be expressed in terms of one main outcome measurable in natural units, e.g. improvement in cholesterol level.</p>
<b>Cost-utility analysis (CUA)</b>	<p>Used when the effect of the interventions on health status has two or more important dimensions, e.g. benefit and side effects of treatment. The outcome is a utility unit, e.g. QALY, which combines a quantitative and qualitative measure.</p>
<b>Cost-benefit analyses (CBA)</b>	<p>Used to compare interventions for two different conditions, e.g. hip replacement and CABG. Both costs and outcomes have to be measured in monetary terms.</p>
<b>Perspective</b>	<p>The viewpoint of the economic evaluation. This may be the health service, the patient, society. Generally, broader viewpoints are more relevant to questions about the allocation of resources, but also need careful thought to identify all the relevant outcomes and costs.</p>
<b>Opportunity cost</b>	<p>Addresses the idea that if resources are used in one way, they cannot be used for something else. Resources may be monetary, but may reflect other areas e.g. staff time, operating theatre use.</p>
<b>Marginal costs</b>	<p>The change in total costs resulting from a one-unit increase or decrease in the service, e.g. the cost of one additional patient.</p>
<b>Incremental analysis</b>	<p>The additional costs that one service or intervention imposes over another compared with the additional benefits it delivers.</p>
<b>Sensitivity analysis</b>	<p>The standard method of allowing for uncertainty in economic evaluations. Involves varying the values of key parameters, one at a time, to see if the results of the evaluation are sensitive to the assumptions made.</p>
<b>Discounting</b>	<p>Discounting makes current costs and benefits worth more than those occurring in the future because there is an opportunity cost to spending money now and a desire to enjoy benefits now rather than in the future. e.g. If the money was invested (wisely) now it would be worth more in one year's time.</p>
<b>Quality-adjusted life-year (QALY)</b>	<p>A measure which tries to combine a quantitative measure (months gained, years gained etc) with a qualitative measure of the quality of that time.</p>