



CRITICAL APPRAISAL SKILLS PROGRAMME **making sense of evidence about clinical effectiveness**

CASP's 11 questions to help you make sense of a trial

General comments

- Three broad issues need to be considered when appraising a trial:

Are the results of the trial valid?

What are the results?

Will the results help locally?

The 11 questions on the following pages are designed to help you think about these issues systematically.

- The first three questions are screening questions and can be answered quickly. If the answer to all three 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.
- A number of italicised hints are given after each question. These are designed to remind you why the question is important.
- The 11 questions were adapted from Guyatt GH, Sackett DL, Cook DJ, Users' guides to the medical literature. II. How to use an article about therapy or prevention. *JAMA* 1993; **270**: 2598-2601 and **271**: 59-63, by the Critical Appraisal Skills Programme in Oxford (CASP).

A/ Are the results of the trial valid?

Screening Questions

<p>1 Did the trial address a clear question?</p> <p><i>Can you tell what</i></p> <ul style="list-style-type: none"> • <i>population was studied</i> • <i>ointervention was given</i> • <i>comparator was given</i> • <i>outcomes were measured and when?</i> 	<p>Yes</p> <input type="checkbox"/>	<p>Can't tell</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>
<p>2 Was the assignment of patients to treatments randomised?</p>	<p>Yes</p> <input type="checkbox"/>	<p>Can't tell</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>
<p>3 Were all of the patients who entered the trial properly accounted for at its conclusion</p> <ul style="list-style-type: none"> • <i>was follow up complete?</i> • <i>were patients analysed in the groups to which they were randomised?</i> • 	<p>Yes</p> <input type="checkbox"/>	<p>Can't tell</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>

Detailed Questions

<p>4 Were patients, health workers and study personnel 'blind' to treatment?</p> <ul style="list-style-type: none"> • <i>were the patients</i> • <i>were the health workers</i> • <i>were the study personnel</i> 	<p>Yes</p> <input type="checkbox"/>	<p>Can't tell</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>
<p>5 Were the groups similar at the start of the trial?</p> <ul style="list-style-type: none"> • <i>In terms of other factors that might effect the outcome such as age, sex, social class</i> 	<p>Yes</p> <input type="checkbox"/>	<p>Can't tell</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>
<p>6 Aside from the experimental intervention, were the groups treated equally?</p>	<p>Yes</p> <input type="checkbox"/>	<p>Can't tell</p> <input type="checkbox"/>	<p>No</p> <input type="checkbox"/>

B/ What are the results?

<p>7 How large was the treatment effect?</p> <p><i>Look at the result for each of the outcomes measured</i></p>	<p>8 How precise re the estimates of the treatment effect?</p> <p><i>What are the confidence limits or P-values for each estimate?</i></p>

C/ Will the results help locally?

<p>9 Can the results be applied to the local population?</p> <p><i>Consider whether there good reasons to think that the patients covered by the trial may be importantly different from your own</i></p>	<p>Yes <input type="checkbox"/></p> <p>Can't tell <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
<p>10 Were all clinically important outcomes considered?</p> <p><i>If not, does this affect the decision?</i></p>	<p>Yes <input type="checkbox"/></p> <p>Can't tell <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>
<p>11 Are the benefits worth the harms and costs?</p> <p><i>This is unlikely to be addressed by the trial. But what do you think?</i></p>	<p>Yes <input type="checkbox"/></p> <p>Can't tell <input type="checkbox"/></p> <p>No <input type="checkbox"/></p>