

# CRITICAL APPRAISAL SKILLS PROGRAMME

## Making sense of evidence about clinical effectiveness



### 10 questions to help you make sense of a review

These questions consider the following:

*Are the results of the review valid? (SECTION A)*

*What are the results? (SECTION B)*

*Will the results help locally? (SECTION C)*

A number of italicised prompts are given after each question. These are designed to remind you why the question is important. There will not be time in the small groups to answer them all in detail!

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# A/ Are the results of the review valid?

## Screening Questions

|                                                                                                                                                                                                                                                                                                      |                                        |                                               |                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------|---------------------------------------|
| <b>1. Did the review address a clearly focused question?</b><br><br><i>HINT: An issue can be 'focused' in terms of</i> <ul style="list-style-type: none"> <li>the population studied</li> <li>the intervention given</li> <li>the outcome considered</li> </ul>                                      | <b>Yes</b><br><input type="checkbox"/> | <b>Can't tell</b><br><input type="checkbox"/> | <b>No</b><br><input type="checkbox"/> |
| <b>2. Did the authors look for the appropriate sort of papers?</b><br><br><i>HINT: The 'best sort of studies' would</i> <ul style="list-style-type: none"> <li>address the review's question</li> <li>have an appropriate study design (usually RCTs for papers evaluating interventions)</li> </ul> | <b>Yes</b><br><input type="checkbox"/> | <b>Can't tell</b><br><input type="checkbox"/> | <b>No</b><br><input type="checkbox"/> |

## Is it worth continuing?

### Detailed questions

|                                                                                                                                                                                                                                                                                                                                                                                                                              |                                        |                                               |                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------------------------|---------------------------------------|
| <b>3. Do you think the important, relevant studies were included?</b><br><br><i>HINT Look for</i> <ul style="list-style-type: none"> <li>which bibliographic databases were used</li> <li>follow up from reference lists</li> <li>personal contact with experts</li> <li>search for unpublished as well as published studies</li> <li>search for non-English language studies</li> </ul>                                     | <b>Yes</b><br><input type="checkbox"/> | <b>Can't tell</b><br><input type="checkbox"/> | <b>No</b><br><input type="checkbox"/> |
| <b>4. Did the review's authors do enough to assess the quality of the included studies?</b><br><br><i>HINT The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies' results ("All that glitters is not gold" Merchant of Venice – Act II Scene?)</i>                                                                                                              | <b>Yes</b><br><input type="checkbox"/> | <b>Can't tell</b><br><input type="checkbox"/> | <b>No</b><br><input type="checkbox"/> |
| <b>5. If the results of the review have been combined, was it reasonable to do so?</b><br><br><i>HINT: Consider whether</i> <ul style="list-style-type: none"> <li>the results were similar from study to study</li> <li>the results of all the included studies are clearly displayed</li> <li>the results of the different studies are similar</li> <li>the reasons for any variations in results are discussed</li> </ul> | <b>Yes</b><br><input type="checkbox"/> | <b>Can't tell</b><br><input type="checkbox"/> | <b>No</b><br><input type="checkbox"/> |

## B/ What are the results?

### 6. What are the overall result of the reviews?

*HINT: Consider*

- if you are clear about the review's 'bottom line' results:
- what these are (numerically if appropriate)
- how were the results expressed (NNT, odds ratio etc.)

### 7. How precise are the results?

*HINT: Look at the confidence intervals, if given*

## C/Will the results help locally?

### 8. Can the results be applied to the local population?

*HINT: Consider whether*

- the patients covered by the review could be sufficiently different to your population to cause concern
- your local setting is likely to differ much from that of the review

Yes  
☐

Can't tell  
☐

No  
☐

### 9. Were all important outcomes considered?

Yes  
☐

Can't tell  
☐

No  
☐

### 10. Are the benefits worth the harms and costs?

*Even if this is not addressed by the review, what do you think?*

