



## 10 questions to help you make sense of a Systematic Review

### How to use this appraisal tool

Three broad issues need to be considered when appraising a systematic review study:

- Are the results of the study valid? (Section A)
- What are the results? (Section B)
- Will the results help locally? (Section C)

The 10 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 some degree of overlap between the questions, you are asked to record a “yes”, “no” or “can’t tell” to most of the questions. A number of italicised prompts are given after each question. These are designed to remind you why the question is important. Record your reasons for your answers in the spaces provided.

These checklists were designed to be used as educational pedagogic tools, as part of a workshop setting, therefore we do not suggest a scoring system. The core CASP checklists (randomised controlled trial & systematic review) were based on JAMA 'Users' guides to the medical literature 1994 (adapted from Guyatt GH, Sackett DL, and Cook DJ), and piloted with health care practitioners.

For each new checklist a group of experts were assembled to develop and pilot the checklist and the workshop format with which it would be used. Over the years overall adjustments have been made to the format, but a recent survey of checklist users reiterated that the basic format continues to be useful and appropriate.

**Referencing: we recommend using the Harvard style citation, i.e.:**

**Critical Appraisal Skills Programme (2017). CASP (insert name of checklist i.e. Systematic Review) Checklist. [online] Available at: *URL*. Accessed: *Date Accessed*.**

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## (A) Are the results of the review valid?

### Screening Questions

1. Did the review address a clearly focused question?

Yes

Can't tell

No

HINT: An issue can be 'focused' in terms of

- The population studied
- The intervention given
- The outcome considered

2. Did the authors look for the right type of papers?

Yes

Can't tell

No

HINT: 'The best sort of studies' would

- Address the review's question
- Have an appropriate study design (usually RCTs for papers evaluating interventions)

## Is It worth continuing?



### Detailed Questions

3. Do you think all the important, relevant studies were included?

Yes

Can't tell

No

HINT: Look for

- Which bibliographic databases were used
- Follow up from reference lists
- Personal contact with experts
- Search for unpublished as well as published studies
- Search for non-English language studies

**4. Did the review’s authors do enough to assess the quality of the included studies?**

Yes     Can’t tell     No

HINT: The authors need to consider the rigour of the studies they have identified. Lack of rigour may affect the studies’ results. (“All that glisters is not gold” Merchant of Venice – Act II Scene 7)

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**5. If the results of the review have been combined, was it reasonable to do so?**

Yes     Can’t tell     No

HINT: Consider whether

- The results were similar from study to study
- The results of all the included studies are clearly displayed
- The results of the different studies are similar
- The reasons for any variations in results are discussed

## **(B) What are the results?**

**6. What are the overall results of the review?**

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)

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## 7. How precise are the results?

HINT: Look at the confidence intervals, if given

### (C) Will the results help locally?

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

Yes  Can't tell  No

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

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## 9. Were all important outcomes considered?

Yes  Can't tell  No

HINT: Consider whether

- Is there other information you would like to have seen

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

Yes  Can't tell  No

HINT: Consider

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