



Critical Appraisal Toolkit

7

Critical Appraisal Toolkit for Systematic Reviews

How to use this toolkit?

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

- Is the study valid?
- What are the results?
- Will the results help locally?

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.

1. Did the review ask a clearly-focused question?

Consider if the question is focused in terms of:

- The population studied
- The intervention given or exposure
- The outcomes considered

Yes Can't Tell No

2. Did the review include the right type of study?

Consider if the included studies:

- Address the review's question
- Have an appropriate study design

Yes Can't Tell No

If you have answered "Yes" to both questions, it is worth continuing with the appraisal

3. Did the reviewers try to identify all relevant studies?

Consider:

- Which bibliographic databases were used
- If there was a follow-up from reference lists
- If there was personal contact with experts
- If the reviewers searched for unpublished studies
- If the reviewers searched for non-English language studies

Yes Can't Tell No

Critical Appraisal Toolkits

Case Control Study	1
Cohort Study	2
Diagnostic Test Study	3
Economic Evaluations	4
Qualitative Research	5
Randomised Controlled Trials	6
Systematic Reviews	7

4. Did the reviewers assess the quality of the included studies?

Consider if a clear, pre-determined strategy was used to determine which studies were included. Look for:

- A scoring system
- More than one assessor

Yes Can't Tell No

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

Consider whether:

- The results of each study are clearly displayed
- The results were similar from study to study (look for tests of homogeneity)
- The reason for any variations in results are discussed

Yes Can't Tell No

6. How are the results presented and what is the main result?

Consider:

- How the results are expressed (e.g. odds ratio, relative risk etc.)
- How large this size of result is and how meaningful it is
- How you would sum up the bottom-line result of the review in one sentence

Yes Can't Tell No

7. How precise are these results?

Consider:

- If a confidence interval were reported. Would your decision about whether or not to use this intervention be the same at the upper confidence limit as at the lower confidence limit?
 - If a p-value is reported where confidence intervals are unavailable
-

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

Consider whether:

- The population sample covered by the review could be different from your population in ways that would produce different results
- Your local setting differs much from that of the review
- You can provide the same intervention in your setting

Yes Can't Tell No

9. Were all important outcomes considered?

Consider outcomes from the point of view of the:

- Individual
- Policy makers and professionals
- Family / carers
- Wider community

Yes Can't Tell No

10. Should policy or practice change as a result of the evidence contained in this review?

Consider whether any benefit reported outweighs any harm and / or cost. If this information is not reported can it be filled in from elsewhere?

Yes Can't Tell No

For more information or assistance in using this toolkit, please contact the Knowledge and Informatics Trainer for the Knowledge and Information Service:
01522 57(3478) or Library.Informatics@ulh.nhs.uk.