

Critical Appraisal 102: **SYSTEMATIC REVIEW**

Note: This guide is intended to highlight the most important features of critical appraisal. It is not all-inclusive, and does not represent any specific currently-available critical appraisal tool (CAT).

TITLE: _____

AUTHORS: _____

SOURCE / CITATION: _____

PURPOSE OF STUDY: _____

Can I believe the results?

QUESTION	RESPONSE	COMMENTS
Are funding sources and conflicts of interest disclosed?	Y / N / Can't tell	
Was the research question clearly focused and defined? Did the researcher use a PICO structure? <i>(PICO = Patient – Intervention – Comparator – Outcomes)</i>	Y / N / Can't tell	
Are the methods described in enough detail to be reproducible?	Y / N / Can't tell	
Was the search for papers comprehensive and were all relevant studies identified? Is the search strategy reproducible ?	Y / N / Can't tell	
Is there a risk of publication bias ?	Y / N / Can't tell	
Are the criteria for inclusion and exclusion of studies clearly described?	Y / N / Can't tell	
Is there a risk of selection bias ?	Y / N / Can't tell	
Were included studies critically appraised or reviewed for methodological quality and risk of bias?	Y / N / Can't tell	
Were included studies homogenous? Were populations and overall results similar ?	Y / N / Can't tell	

What are the results?

QUESTION	RESPONSE	COMMENTS
If the results of included studies have been combined , was it reasonable to do so?	Y / N / Can't tell	
What are the main results of the SR , and how are they presented? <i>Are they presented in both relative and absolute terms?</i>	Y / N / Can't tell	

How precise are the results? <i>Look at summary of trend of results or interpretation of statistical significance and confidence interval (if conducted).</i>	Y / N / Can't tell	
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Will the results help me in my decision-making?		
QUESTION	RESPONSE	COMMENTS
Do the conclusions flow from the data ?	Y / N / Can't tell	
Are the results generalizable to my situation? Does the author provide suggestions on implementation?	Y / N / Can't tell	

ADDITIONAL NOTES:

Preparation guidance for this general guide was obtained from the following sources:

- AGREE Next Steps Consortium (2009). The AGREE II Instrument [Electronic version]. Retrieved February 13, 2012, from <http://www.agreetrust.org>.
- Guyatt, G, Oxman, A., Kunz, R., Falck-Ytter, Y, Alonso-Coello, P, Schinemann, H. (2008). GRADE: an emerging consensus on rating quality of evidence and strength of recommendations.
- Woolf SH, Grol R, Hutchinson A, Eccles M, Grimshaw J. (1999). Clinical guidelines: potential benefits, limitations, and harms of clinical guidelines. *British Medical Journal*; 318(7182):527-530.
- Committee to Advise the Public Health Service on Clinical Practice Guidelines IoM. *Clinical practice guidelines: directions for a new program*. Washington: National Academy Press; 1990.
- Institute of Medicine (2011). *Clinical practice guidelines we can trust*. Retrieved February 14, 2012, from <http://www.iom.edu/~media/Files/Report%20Files/2011/Clinical-Practice-Guidelines-We-Can-Trust/Clinical%20Practice%20Guidelines%202011%20Insert.pdf>
- Vlayen, J., Aertgeerts, B, Hannes, K, Sermeus, W & Ramaekers, D. (2005). A systematic review of appraisal tools for clinical practice guidelines: multiple similarities and one common deficit. *International Journal for Quality in Health Care*; 17(3); p 235-242.