

Project/Topic of your Clinical Question: _____
 Reviewer: _____ Today's Date: _____ Final Evidence Level: _____
 Article Title: _____
 Year: _____ First Author: _____ Journal: _____

Do the study aim/purpose/objectives and inclusion/exclusion criteria assist in answering your clinical question?
 Yes No Unknown

- Study Aim/Purpose/Objectives:

- Inclusion Criteria:

- Exclusion Criteria:

When reading the bolded questions, consider the bulleted questions to help answer the main question.
 If you are uncertain of your skills in evidence evaluation, please consult a local evidence expert for assistance:
 CCHMC Evidence Experts: <http://groups/ce/NewEBC/EBDMHelp.htm>
 Unfamiliar terms can be found in the LEGEND Glossary: <http://groups/ce/NewEBC/EBCFiles/GLOSSARY-EBDM.pdf>

VALIDITY: ARE THE RESULTS OF THE SYSTEMATIC REVIEW / META-ANALYSIS VALID OR CREDIBLE?

1. Did the overview address a focused clinical question? Yes No Unknown
Comments:

2. Was the search for relevant studies detailed and exhaustive? Yes No Unknown
 • Was it *unlikely* that important, relevant studies were missed?
Comments:

3. Were the included studies appraised and assigned a high level of quality? Yes No Unknown
Comments:

4. Were the methods consistent or homogeneous from study to study, such as the bullets below? Yes No Unknown

- Did the overview describe the study populations at a well-defined point in the course of disease?
- Were the patients sufficiently homogeneous with respect to prognostic risk?
- Were objective and unbiased outcome criteria used?
- Was the follow-up sufficiently complete?

Comments:

5. Were the outcomes quantifiable and precisely measurable? Yes No Unknown

- Was the outcome assessed independent of knowledge of prognostic factors?

Comments:

6. Was there freedom from conflict of interest? Yes No Unknown

- Sponsor/Funding Agency or Investigators

Comments:

RELIABILITY: ARE THESE VALID STUDY RESULTS IMPORTANT?

7. Were the statistical analysis methods appropriate? Yes No Unknown

- Were the statistical analysis methods clearly described?
- If subgroups in the sample had different prognostic factors (*e.g., demographics, disease specifics, comorbidity*), was an adjustment made for the differences between groups?
- Was an adjustment made for changes that occur as the patient ages, if any?

Comments:

8. What are the main results of the study? (*e.g., Helpful data: Page #, Table #, Figures, Graphs*)

- How likely are the outcomes over time?
 - Absolute results (*e.g., 5 year survival rate*) or Relative results (*e.g., risk from prognostic factor*) or Survival Curves (*e.g., cumulative events*)
- What were the measures of statistical uncertainty (*e.g., precision*)?
(*Were the results presented with Confidence Intervals or Standard Deviations?*)

9. Were the results statistically significant? Yes No Unknown

Comments:

10. Were the results clinically significant? Yes No Unknown

Comments:

APPLICABILITY: CAN I APPLY THESE VALID, IMPORTANT STUDY RESULTS TO TREATING MY PATIENTS?

11. Can the results be applied to my population of interest? Yes No Unknown

- Do the patient outcomes apply to my population or question of interest?
- Were the patients in the studies similar to my population of interest?
- Is the setting of the study applicable to my population of interest?

Comments:

12. Are my patient's values and preferences satisfied by the knowledge gained from this study (such as outcomes considered)? Yes No Unknown

Comments:

13. Would you include this study/article in development of a care recommendation? Yes No Unknown

Comments:

ADDITIONAL COMMENTS OR CONCLUSIONS ("TAKE-HOME POINTS"):

QUALITY LEVEL / EVIDENCE LEVEL

- Consider each "No" answer and the degree to which this limitation is a threat to the validity of the results, then check the appropriate box to assign the level of quality for this study/article.
- Consider an "Unknown" answer to one or more questions as a similar limitation to answering "No," if the information is not available in the article.

THE EVIDENCE LEVEL IS: **Good Quality Systematic Review** [1a]
 Lesser Quality Systematic Review [1b]
 Not Valid, Reliable, or Applicable

Table of Evidence Levels													
DOMAIN OF CLINICAL QUESTION	TYPE OF STUDY / STUDY DESIGN												
	Systematic Review Meta-Analysis	Cohort – Prospective	Cohort – Retrospective	Case – Control	Cross – Sectional	Descriptive Study Epidemiology Case Series	Mixed Methods Study	Decision Analysis Economic Analysis Computer Simulation	Guidelines	Case Reports N-of-1 Study	Bench Study	Published Expert Opinion	Local Consensus Published Abstracts
Prognosis	1a 1b	2a 2b	3a 3b	4a 4b	4a 4b	4a 4b	2/3/4 a/b	5a 5b	5a 5b	5a 5b	5a 5b	5a 5b	5

Development for this appraisal form is based on:

1. Guyatt, G.; Rennie, D.; Evidence-Based Medicine Working Group.; and American Medical Association.: Users' guides to the medical literature : a manual for evidence-based clinical practice. *Users' guides to the medical literature : a manual for evidence-based clinical practice*: "JAMA & archives journals." Chicago, IL, 2002
2. Melnyk, B. M. and E. Fineout-Overholt (2005). Evidence-based practice in nursing & healthcare : a guide to best practice. Philadelphia, Lippincott Williams & Wilkins.
3. Phillips, et al: Oxford Centre for Evidence-based Medicine Levels of Evidence, 2001. Last accessed Nov 14, 2007 from <http://www.cebm.net/index.aspx?o=1025>.
4. Fineout-Overholt and Johnston: Teaching EBP: asking searchable, answerable clinical questions. *Worldviews Evid Based Nurs*, 2(3): 157-60, 2005.