

Pro	oject/Topic of your Clinical Quest	ion:		
	viewer:	Today's Date:	Final Evidence	e Level:
	ticle Title:			
Yea	ar:	First Author:	Journal:	
Do	• Study Aim/Purpose/Objectiv		in answering your clinical que	estion? No Unknown
	• Target Population:			
	a decision analysis, economic ana thor's study aim/purpose/object Comments:		ongruent with the	☐ No ☐ Unknown
If yo	nen reading the bolded questions, co you are uncertain of your skills in evid CCHMC Evidence Experts:			



4.	<ul> <li>Were all important and relevant outcomes considered (e.g., clinical, quality of life, harm, disability, death, costs, lost time from work)?</li> <li>Was the length of time considered (analysis time horizon) long enough to idential important and relevant outcomes?</li> <li>Comments:</li> </ul>	Yes	☐ No	Unknown
5.	Was a model clearly described and appropriate?  Comments:	Yes	☐ No	Unknown
6.	For an economic analysis, do included costs match stated perspective(s)?  Comments:	Yes	☐ No	Unknown
7.	Were the outcomes and costs measured using valid and reliable tools?  Comments:	Yes	☐ No	Unknown
8.	In measuring outcomes and costs, were the measures/utilities used valued and appropriate?  Note: Measures/Utilities include, but are not limited to, ICER (Incremental Cost-Effectiveness Ratio), QALY (Quality-Adjusted Life Years), or DALY (Daily-Adjusted Life Years).  • Were the measures/utilities obtained in an explicit and sensible way from credible sources?  Comments:	Yes	☐ No	Unknown
9.	Was an explicit and sensible process used to identify, select, and combine evidence into probabilities?  • Was the potential impact of any uncertainty in the evidence determined (e.g., Sensitivity Analysis)?  Comments:	Yes	☐ No	Unknown
10.	<ul> <li>Was there freedom from conflict of interest?</li> <li>Sponsor/Funding Agency or Investigators         Comments:     </li> </ul>	Yes	☐ No	Unknown
RE	LIABILITY: How Were Outcomes and Costs Assessed and Compared?			
11.	Does one strategy result in a clinically important gain for patients?  If No, is the result a toss—up?  • Were the main assumptions stated and justified?  Comments:	Yes Yes	No No	Unknown



12.	Could uncertainty in the evidence change the result?  Comments:	Yes	∐ No	Unknown
13.	For an economic analysis, was a comprehensive economic comparison of all important health care strategies conducted?  • Were the main assumptions stated and justified?  Comments:	Yes	☐ No	Unknown
14.	What are the main results of the study? (e.g., Helpful data: Page #, Table #, Figures, Graphs)			
	<ul> <li>Is the model validated by the results?</li></ul>			
	<ul> <li>How large was the main effect (e.g., clinical outcomes, process outcomes, magnitude of ratios, total cost, cost-effectiveness ratios)?</li> </ul>			
15.	Was an incremental analysis (i.e., CE Ratios) of the outcomes and costs of alternatives performed (i.e., Sensitivity Analysis)?  Comments:	S Yes	☐ No	Unknown
16.	Was appropriate allowance made for uncertainties in the analysis?  Comments:	☐ Yes	☐ No	Unknown
	<ul> <li>What were the measures of statistical uncertainty (e.g., precision)?</li> <li>(Were the results presented with Confidence Intervals or Standard Deviations?)</li> </ul>			
17.	Were outcomes and costs adjusted for different times at which they occurred, such as discounting?  Comments:	Yes	☐ No	Unknown
18.	Are the estimates of outcomes and costs related to the baseline risk in the treatment population, if relevant?  Comments:	Yes	☐ No	Unknown
19.	Were the results statistically significant?  Comments:	Yes	☐ No	Unknown



<ul> <li>Were the results clinically significant?</li> <li>If potential confounders were identified, were they discussed in relationshit to the results?</li> <li>Comments:</li> </ul>	☐ Yes ☐ No ☐ Unknown
21. Were the conclusions of the evaluation justified by the evidence presented?  Comments:	Yes No Unknown
<b>APPLICABILITY:</b> CAN I APPLY THESE VALID, IMPORTANT STUDY RESULTS TO MY POPULATION?	Is the Evaluation Usable?
22. Did the presentation and discussion of the results include all or enough of the issues that are of concern to consumers (e.g., patient, healthcare system, policy maker, payor)?  Comments:	Yes No Unknown
<ul> <li>23. Can the results be applied to my population of interest?</li> <li>Is the intervention feasible in my care setting?</li> <li>Are the likely benefits worth the potential harm and costs? Comments:</li> </ul>	Yes No Unknown
<ul> <li>24. Are my patient's and family's values and preferences satisfied by the knowledge gained from this study?</li> <li>Were the patients in this study similar to my population of interest?</li> <li>Do your patient and you have a clear assessment of their values and prefer</li> <li>Are they met by this analysis?</li> </ul> Comments:	Yes No Unknown rences?
25. Would you include this study/article in development of a recommendation?  Comments:	☐ Yes ☐ No ☐ Unknown
ADDITIONAL COMMENTS OR CONCLUSIONS ("TAKE-HOME POINTS"):	



#### **Decision Analysis / Economic Analysis / Computer Simulation**

#### **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 Decision Analysis / Economic Analysis / Computer Simulation Lesser Quality Decision Analysis / Economic Analysis / Computer Simulation	
	Not Valid, Reliable, or Applicable	

Table of Evidence Levels																				
	TYPE OF STUDY / STUDY DESIGN																			
DOMAIN OF CLINICAL QUESTION	Systematic Review Meta-Analysis	Meta–Synthesis	RCT ⁺	сст⁺	Psychometric Study	Qualitative Study	Cohort – Prospective	Cohort – Retrospective	Case – Control	Longitudinal (Before/After, Time Series)	Cross – Sectional	Descriptive Study Epidemiology Case Series	Quality Improvement (PDSA)	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
All Domains	1a 1b											4a 4b		2/3/4 a/b	5a 5b	5a 5b	5a 5b	5a 5b	5a 5b	5

\* RCT = Randomized Controlled Trial; CCT = Controlled Clinical Trial

#### Development for this appraisal form is based on:

- Brown, A. D.; Raab, S. S.; Suba, E. J.; Wright, R. G.; and International Consensus Conference on the Fight Against Cervical Cancer, I. A. C. T. F. S. C. I. U. S. A.: Costeffectiveness studies on cervical cancer. Acta Cytologica, 45(4): 509-14, 2001.
- Drummond, M. F.; Aguiar-Ibanez, R.; and Nixon, J.: Economic evaluation. Singapore Med J, 47(6): 456-61; quiz 462, 2006.
- 3. Fineout-Overholt and Johnston: Teaching EBP: asking searchable, answerable clinical questions. Worldviews Evid Based Nurs, 2(3): 157-60, 2005.
- 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
- Kopec, J. A. et al.: Validation of population-based disease simulation models: a review of concepts and methods. BMC Public Health, 10: 710, 2010.
- Melnyk, B. M. and E. Fineout-Overholt (2005). Evidence-based practice in nursing & healthcare: a guide to best practice. Philadelphia, Lippincott Williams & Wilkins.
- 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.
- Siegel, J. E.; Weinstein, M. C.; Russell, L. B.; and Gold, M. R.: Recommendations for reporting cost-effectiveness analyses. Panel on Cost-Effectiveness in Health and Medicine. JAMA, 276(16): 1339-41, 1996.
- Soares, M., and Dumville, J. C.: Critical appraisal of cost-effectiveness and cost-utility studies in health care. Evidence-Based Nursing, 11(4): 99-102, 2008.
- 10. Weinstein, M. C.; Siegel, J. E.; Gold, M. R.; Kamlet, M. S.; and Russell, L. B.: Recommendations of the Panel on Cost-effectiveness in Health and Medicine. JAMA, 276(15): 1253-8, 1996.