Project/Topic of your Clinical Question: __________________________________________
Reviewer: ___________________________ Today’s Date: ___________________________ Final Evidence Level: __________
Article Title: ___________________________ 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: _________________________________________________________

Is a case-control study congruent with the author’s study aim/purpose/objectives above?

☐ Yes  ☐ No  ☐ Unknown

Comments: ________________________________________________________________

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 CASE-CONTROL STUDY VALID OR CREDIBLE?

1. Were there clearly defined groups of patients, matched on factors or exposures other than the hypothesized association?
   ☐ Yes  ☐ No  ☐ Unknown
   • Were cases and controls at similar risk of developing the outcome?
     Comments: ________________________________________________________________

2. Was there a plausible association between exposure and outcome?
   ☐ Yes  ☐ No  ☐ Unknown
   • Is it clear that the exposure preceded the onset of the outcome?
   • Does the association make biological sense?
   • Was the amount of exposure associated with the severity of outcome (i.e., dose-response)?
     Comments: ________________________________________________________________

3. Were treatments/exposures and clinical outcomes measured in the same way in both groups?
   ☐ Yes  ☐ No  ☐ Unknown
   Comments: ________________________________________________________________
4. Was the assessment of outcomes either objective or blinded to exposure?  
   □ Yes  □ No  □ Unknown
   
   Comments:

5. Was the interval between exposure of study patients and measurement of outcome long enough to determine the hypothesized association?  
   □ Yes  □ No  □ Unknown
   
   Comments:

6. Was there freedom from conflict of interest?  
   □ Yes  □ No  □ Unknown
   • Sponsor/Funding Agency or Investigators
   
   Comments:

7. Did the study have a sufficiently large sample size?  
   □ Yes  □ No  □ Unknown
   • Was a power analysis described?
   • Did the sample size achieve or exceed that resulting from the power analysis?
   • Did each subgroup also have sufficient sample size (e.g., at least 6 to 12 participants)?
   
   Comments:

8. Were the statistical analysis methods appropriate?  
   □ Yes  □ No  □ Unknown
   • Were the statistical analysis methods clearly described?
   • If subgroups were evaluated, was a statistical adjustment made for the differences?
   
   Comments:

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

   • For an Etiology study: How strong is the association/correlation between exposure and outcome?
   • For an Prevalence study: What is the rate (e.g., number per population)?
   • What were the measures of statistical uncertainty (e.g., precision)?
     (Were the results presented with Confidence Intervals or Standard Deviations?)
10. Were the results statistically significant?  
   
   **Note:** This question may not be applicable in all prevalence studies.  
   
   **Comments:**

   □ Yes  □ No  □ Unknown

11. Were the results clinically significant?  
   
   **Comments:**

   □ Yes  □ No  □ Unknown

   • If potential confounders were identified, were they discussed in relationship to the results?

   **Comments:**

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

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

   • Is the setting of the study applicable to my population of interest?
   • Do the patient exposures and outcomes apply to my population or question of interest?
   • Were the patients in this study similar to my population of interest?

   **Comments:**

13. Are my patient’s and family’s values and preferences satisfied by the knowledge gained from this study?  
   
   □ Yes  □ No  □ Unknown

   **Comments:**

14. 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 Case-Control Study:
- Lesser Quality Case-Control Study:
- Not Valid, Reliable, or Applicable

Table of Evidence Levels

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Development for this appraisal form is based on: