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 longitudinal 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](http://groups/ce/NewEBC/EBDMHelp.htm) 

Unfamiliar terms can be found in the LEGEND Glossary: [http://groups/ce/NewEBC/EBCFiles/GLOSSARY-EBDM.pdf](http://groups/ce/NewEBC/EBCFiles/GLOSSARY-EBDM.pdf)

**VALIDITY: ARE THE RESULTS OF THE LONGITUDINAL STUDY VALID OR CREDIBLE?**

1. Were the study methods appropriate for the question?  
   - Yes  
   - No  
   - Unknown
   
   - Were the study methods clearly described *(e.g., setting, sample population)*? 
   
   Comments:

   - Were data collected at more than one point in time *(i.e., before / after, pretest / posttest, time series)*? 
   
   Comments:

2. Were instruments used to measure the outcomes valid and reliable?  
   - Yes  
   - No  
   - Unknown
   
   Comments:

   - Were the instruments tested to be reliable? 
   
   Comments:

3. Were all appropriate variables *(e.g., potential confounders, exposures, predictors)* and interventions clearly described?  
   - Yes  
   - No  
   - Unknown
   
   Comments:

4. Were all appropriate outcomes clearly described?  
   - Yes  
   - No  
   - Unknown
   
   Comments:
5. Was there freedom from conflict of interest?  
   - Sponsor/Funding Agency or Investigators

6. Were the statistical analysis methods appropriate? 
   - Were the statistical analysis methods clearly described?

7. Did the study have a sufficiently large sample size? 
   - 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 6-12 participants)*?

8. What were the main results of the study? *(e.g., Helpful data: Page #, Table #, Figures, Graphs)* 
   - What was the effect size? *(How large was the treatment effect?)*
   - 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? 
   - Comments:

10. Were the results clinically significant? 
    - If potential confounders were identified, were they discussed in relationship to the results?
    - Comments:

11. Were any adverse events assessed? 
    - 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?  
   - Is the treatment feasible in my care setting?  
   - Do the patient outcomes apply to my population or question of interest?  
   - Are the likely benefits worth the potential harm and costs?  
   - Were the patients in this study similar to my population of interest?  
   Comments:

   □ Yes  □ No  □ Unknown

13. Are my patient’s and family’s values and preferences satisfied by the treatment and its consequences?  
   Comments:

   □ Yes  □ No  □ Unknown

14. Would you include this study/article in development of a care recommendation?  
   Comments:

   □ Yes  □ No  □ Unknown

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 Longitudinal Study [4a]
- [ ] Lesser Quality Longitudinal Study [4b]
- [ ] Not Valid, Reliable, or Applicable

Table of Evidence Levels

<table>
<thead>
<tr>
<th>DOMAIN OF CLINICAL QUESTION</th>
<th>TYPE OF STUDY / STUDY DESIGN</th>
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<td>Treatment, Therapy, Prevention, Harm, Quality Improvement</td>
<td>Systematic Review</td>
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* RCT = Randomized Controlled Trial; CCT = Controlled Clinical Trial

Development for this appraisal form is based on: