RAPID CRITICAL APPRAISAL OF A QUALITY IMPROVEMENT PROJECT

PROJECT DESCRIPTION/LEVEL OF STUDY

Project title: 

Date: 

Reviewer(s) name(s): 

PICOT Question: 

Article citation (APA): 

Indicate the level of the study you are appraising: 

Recommendation for article inclusion in the body of evidence to answer your question: 

GENERAL DESCRIPTION OF STUDY

OVERVIEW

1. Purpose of study/article/project:
   1. Design/Method:
   2. Sample:
   3. Setting:
   4. Data Collection:
VALIDITY: Are the results of this study valid?

1. Was an improvement method clearly identified?
   - What was the improvement method?
     - PDSA
     - Lean Process
     - CQI
     - TQM
     - Six Sigma
     - Other: __________________________

2. Was the need for improvement clearly described?
   - Was the current state of the process discussed?  ☐ Yes  ☐ No
   - Was the intended impact of improvement predicted and outlined? ☐ Yes  ☐ No

3. Were the stakeholders and organizational culture clearly described?
   - Were the stakeholders involved in decisions to make changes?  ☐ Yes  ☐ No
     (e.g. champions, supporters, early adapters, clinicians, care givers, patients, process owners)

4. Were the project methods clearly described and appropriate for the aim?
   - Was the setting clearly described and appropriate (e.g. unit, clinic)?  ☐ Yes  ☐ No
   - Were the participants (e.g. clinicians, patients, groups) clearly described and appropriate?  ☐ Yes  ☐ No
   - Was the aim of the improvement project specific, measurable, actionable, relevant, time bound (e.g. SMART)?  ☐ Yes  ☐ No

5. Was the planned improvement intervention (e.g. action plans) described in enough detail to be replicated?

6. Were the planned improvement interventions based on evidence? □ Yes □ No □ Unknown

   External Evidence:
   [ ] Published Research
   [ ] Published QI Reports
   [ ] Benchmarks
   [ ] QI data (Local Data)

   Internal Evidence:
   [ ] Failure Mode and Effects Analysis (analysis of causes of dysfunction)
   [ ] Key Driver Analysis (Local Data)
   [ ] Pareto Analysis (Local Data)

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7. Were appropriate baseline data collected and reported for the outcome of interest? □ Yes □ No □ Unknown

   • Did the baseline data indicate the need for improvement? □ Yes □ No
   • Were valid and reliable tools used for measurement of the outcome to be improved? □ Yes □ No

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8. Was outcome data collection planned and appropriate to evaluate whether the QI project resulted in an improvement? □ Yes □ No □ Unknown

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9. If adaptations/modifications were made to the planned improvement intervention, were they based on outcome data from small tests of change or pilot studied? □ Yes □ No □ Unknown

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10. Were the modified improvement interventions (i.e. the future state of the process) described in enough detail to be replicated by others? □ Yes □ No □ Unknown

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11. Was all outcome data for the improvement intervention(s) collected in the same way as the baseline data? □ Yes □ No □ Unknown
12. Was there freedom from conflict of interest?  
- Sponsor/funding agency  
- Investigators  
- Yes ☐ No ☐ Unknown ☐

13. Was the date range of the cited literature current?  
- What date ranges were included? ?  to  
  - If older literature was included, why was it included?  
- Yes ☐ No ☐ Unknown ☐

RELIABILITY: Are these valid study reports important?

14. Were the statistical analysis methods appropriate?  
- What was the unit of analysis (e.g. clinician, clinician group, care area, process, etc.)?  
- Yes ☐ No ☐ Unknown ☐

- What was measured?  
- Yes ☐ No ☐ Unknown ☐

- Were the statistical analysis methods clearly described? ☐ Yes ☐ No ☐
- If multiple improvement interventions were used, was statistical analysis conducted on each intervention?  
- Yes ☐ No ☐ Unknown ☐

15. What were the main results of the study?  
- Were results of the small tests of change or pilot studies reported? ☐ Yes ☐ No ☐

- How large was the main improvement intervention effect?  
- Yes ☐ No ☐ Unknown ☐

- Statistical Significance (p value) 
- Confidence Interval and/or Standard Deviations 
- How precise was the intervention/treatment?  
  - Narrow? Wide? 
- Effect size  


Updated 12052017
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Unknown</th>
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<tbody>
<tr>
<td>16. Were the results clinically significant?</td>
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<tr>
<td>- Were the following reported: NNT, NNH, OR, RR?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
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<td>17. Were the lessons learned discussed?</td>
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<tr>
<td>- Were benefits/harms, costs, unexpected results, problems, or failures reported or discussed?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
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<td>18. Were the successful improvement interventions implemented with other clinicians or care groups (i.e. spread)?</td>
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<td>19. Were the improvement interventions studied over a period of time long enough to determine sustainability (e.g. long term effects, attrition, institutionalization)?</td>
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**APPLICABILITY/TRANSFERABILITY: Can I apply these valid, important study results?**

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<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
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<tr>
<td>20. Can the results be applied to my improvement issue of interest?</td>
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<td>- Is the treatment feasible in my care setting?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
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<td>- Do the outcomes apply to my population of interest?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
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<td>- Are the likely benefits worth the potential harm and costs?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
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<tr>
<td>- Were the subjects/participants in this study similar to my population of interest?</td>
<td>Yes</td>
<td>No</td>
<td>Unknown</td>
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<tr>
<td>- Were all clinically important outcomes considered?</td>
<td>Yes</td>
<td>No</td>
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<tr>
<td>21. Will you include the article/study in your practice decision to make a difference in outcomes?</td>
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<td>- If yes, why would you do this &amp; how would you do this?</td>
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<td>- If no, why would you not include the results to make a difference?</td>
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**STRENGTH OF STUDY**

**Level of evidence:** I, II, III, IV, V, VI, VII  
(Circle one)

**Quality of evidence:** High | Medium | Low  
(Circle one)

**STRENGTH = LEVEL + QUALITY**

What is the strength of the study/article?

What is your recommendation for article inclusion in the body of evidence to answer your question?
- Include this article in the body of evidence (place article on evaluation & synthesis tables)
- Do NOT include this article in the body of evidence

Additional Comments: