



PEARLS Worksheet for the 4SYN Synthesis Presentation

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PEARLS 4SYN is a synthesis of the conclusions from PEARLS 1G, 2SR, and 3RCT, a communication of this synthesis to the presenter's clinical team, and a team discussion about whether to implement the evidence presented. A PowerPoint presentation is desirable for graphics and key points. The presentation should address the questions in this worksheet. The activity should be fifty minutes in total with thirty minutes for the presentation and twenty minutes for discussion.

Introduction

- 1. What is the intervention being considered?** *This could be one of the guideline recommendations, or an alternate intervention proposed by the presenter. You should discuss why the intervention is important to your practice population.*
- 2. Which guideline did you select and why?** *Justify this choice based on the prevalence of the condition, the effectiveness of the intervention, the influence of the guideline on the local medical community, and the quality of the guideline development process. (Which you can address in more detail later.)*
- 3. Which systematic review (SR) did you select and why?** *Justify this choice based on its relevance to the proposed intervention, its influence on the guideline development group, and the quality of the systematic review. Describe how the systematic review was found if it was not identified via the guideline.*
- 4. Which randomized controlled trial (RCT) did you select and why?** *Justify this choice based on the critical appraisal presented in the systematic review. Why do you think that this RCT represents the best primary evidence available? (You should address relevance to your potential intervention, the quality of the study ie how well did it control for bias, and the confidence interval of the results.)*

Section A. Are the findings trustworthy?

- 5. How did the conflicts of interest of the Guideline Development Group compare to the expectations of the Standards for Developing Trustworthy Clinical Practice Guidelines?** *From PEARLS 1G Sections A.1-2.*
- 6. How was the randomized controlled trial funded?** *Was there a conflict of interest? If so, how may this have influenced the study design? PEARLS 3RCT Section A.1*
- 7. Compare the intervention being considered to the guideline recommendation (if different), the systematic review PICO, and the RCT PICO.** *Offer and justify your opinion about the importance of these differences.*



8. **Did the systematic review give you confidence that you have the best available evidence? Explain why or why not.** *Did the authors perform a thorough search and critical analysis of the relevant primary literature? PEARLS 2SR Section A.1-5*
9. **How internally valid was the RCT?** *How well did it control potential variables? PEARLS 3RCT Sections A.2-7.*
10. **Was this validity reasonably reflected in the critical appraisal done by the systematic review authors and the level of evidence assigned by the guideline development group?** *PEARLS 2SR Section A.3-4; PEARLS 1G Section A.4. If the level of evidence quoted in the guideline is not reflected in the validity of the RCT, then could this be related to conflict of interest?*

Section B & C. What were the results & Can the results be applied to your patients?

11. **What was the magnitude of benefit of the intervention and the confidence interval in the study populations?** *PEARLS 2SR Section B.5. PEARLS 3RCT Section B.8-10. This question needs to be answered in the context of the RCT PICO and the SR PICO. A graphic representation such as a pie chart would be desirable.*
12. **What is the expected magnitude of benefit of the intervention if applied to your patient population?** *PEARLS 2SR Section C.7-8. PEARLS 3RCT Section C.11. (The answer may simply be more than, less than, or similar to the RCT/SR populations.) What assumptions did you make when answering this question?*
13. **How large are the likely harms and costs of the intervention?** *PEARLS 2SR Section C.9. PEARLS 3RCT Sections C.11-13.*
14. **Are there barriers to implementation that are relevant to your practice but are not discussed in the three articles?**

Conclusion

15. **Are you confident that your three articles reasonably summarize the best available evidence?** *If not then what is missing? Why did your search strategy fail?*
16. **Does the guideline recommendation reasonably interpret the findings of the systematic review and RCT?** *If not, then discuss how the primary evidence was misinterpreted.*
17. **Do you think that the intervention is worthwhile? In which patients?**
18. **Do you think that all clinic team members should apply the intervention? If so, do you think the clinic should apply Quality Improvement (QI) theory and methods to ensure that it is being implemented?** *Your answer should consider the prevalence of the problem, the magnitude of benefit, the harms/costs, and other barriers to implementation.*



Your presentation should be followed by questions and an open clinic team discussion. This discussion should end with one of three conclusions. *Factors to consider are the strength of the evidence, the expected magnitude of benefit in your patient population, available resources, usual practice in your medical community, and standard of care ([what a minimally competent physician in the same field would do under similar circumstances](#)).*

- 1. The intervention has already been implemented and should be a potential QI topic.**
- 2. The team has just now been convinced to apply the intervention and it should be considered as a future QI topic.**
- 3. The team does not think that the topic is an appropriate QI topic because of a lack of agreement about implementing it, or because it is not considered important enough to be worth the effort of performing QI.**