

Developing a Systematic Review Question and Outcomes

Systematic Review Training

Center for Knowledge Management

VANDERBILT  UNIVERSITY
MEDICAL CENTER



Objectives:

- ✓ *Discuss how to develop a systematic review question*
- ✓ *Discuss how to define outcomes*

FINER Criteria

Feasible

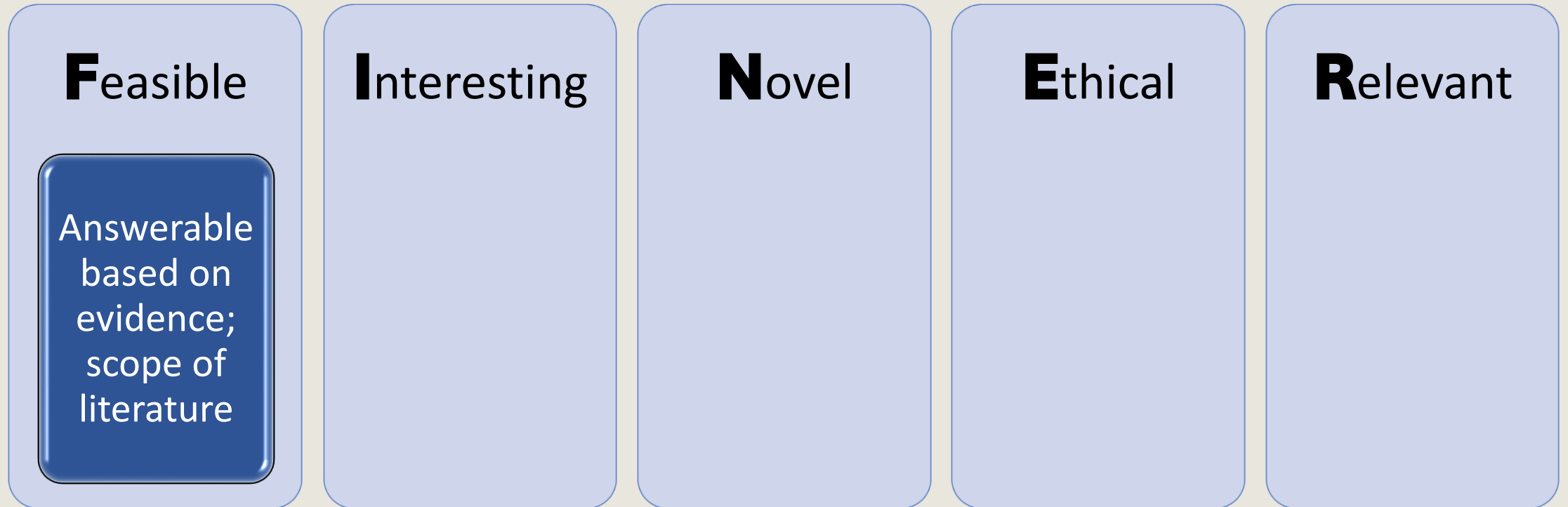
Interesting

Novel

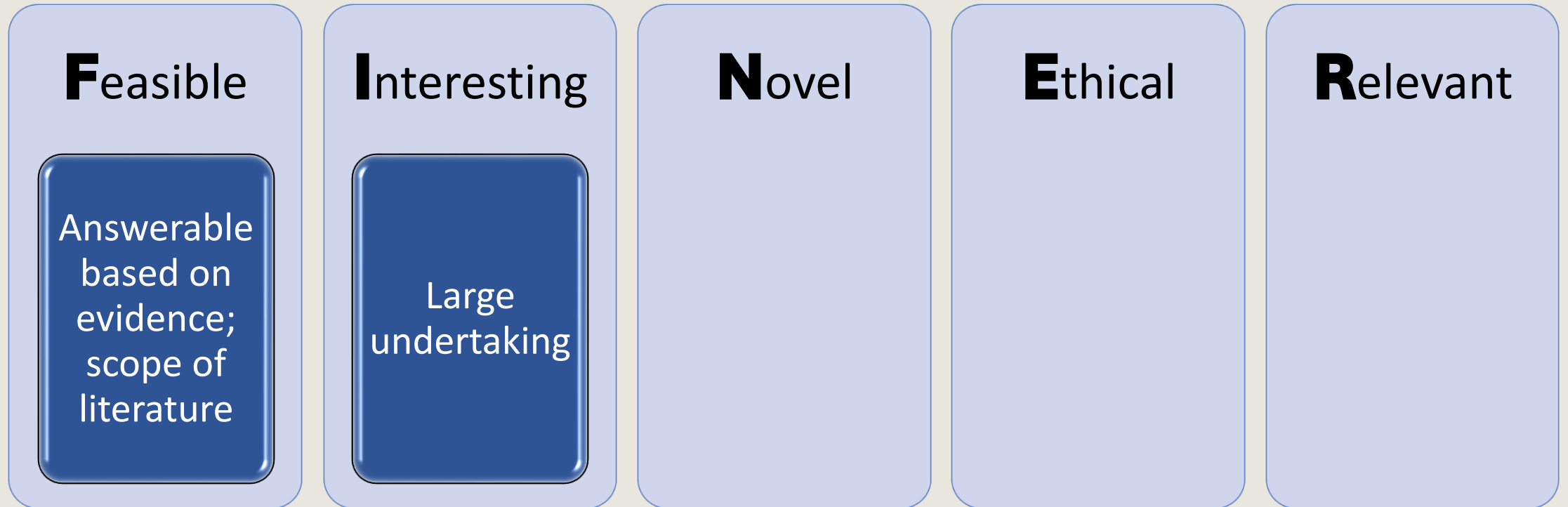
Ethical

Relevant

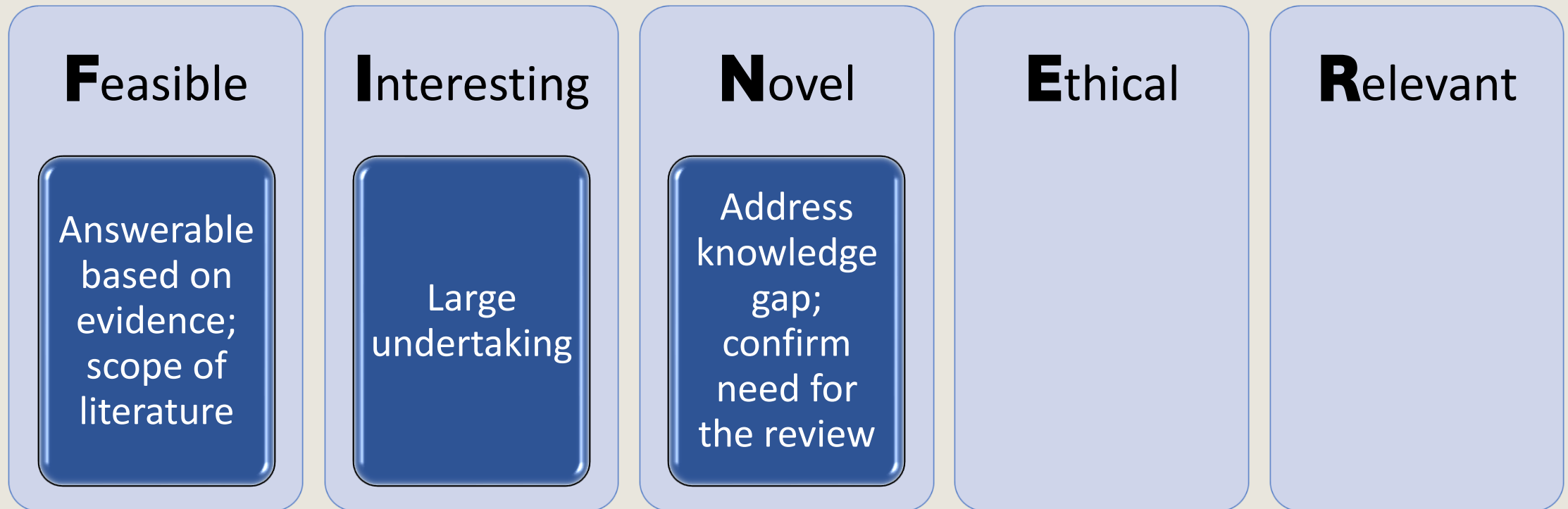
FINER Criteria



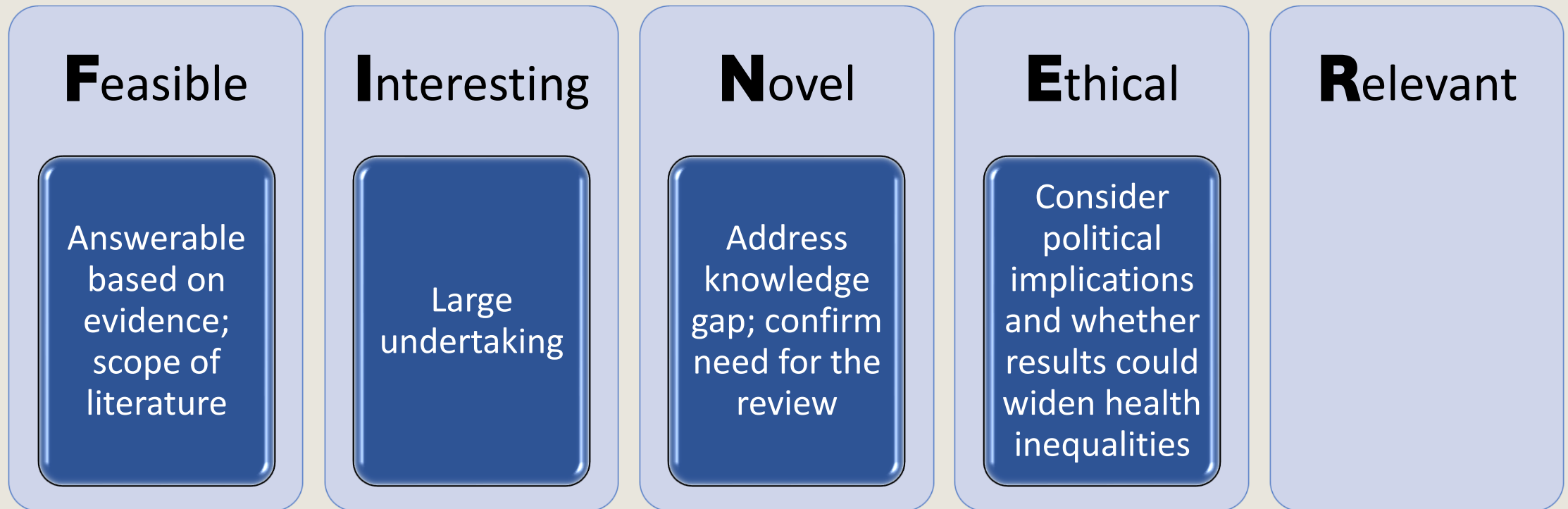
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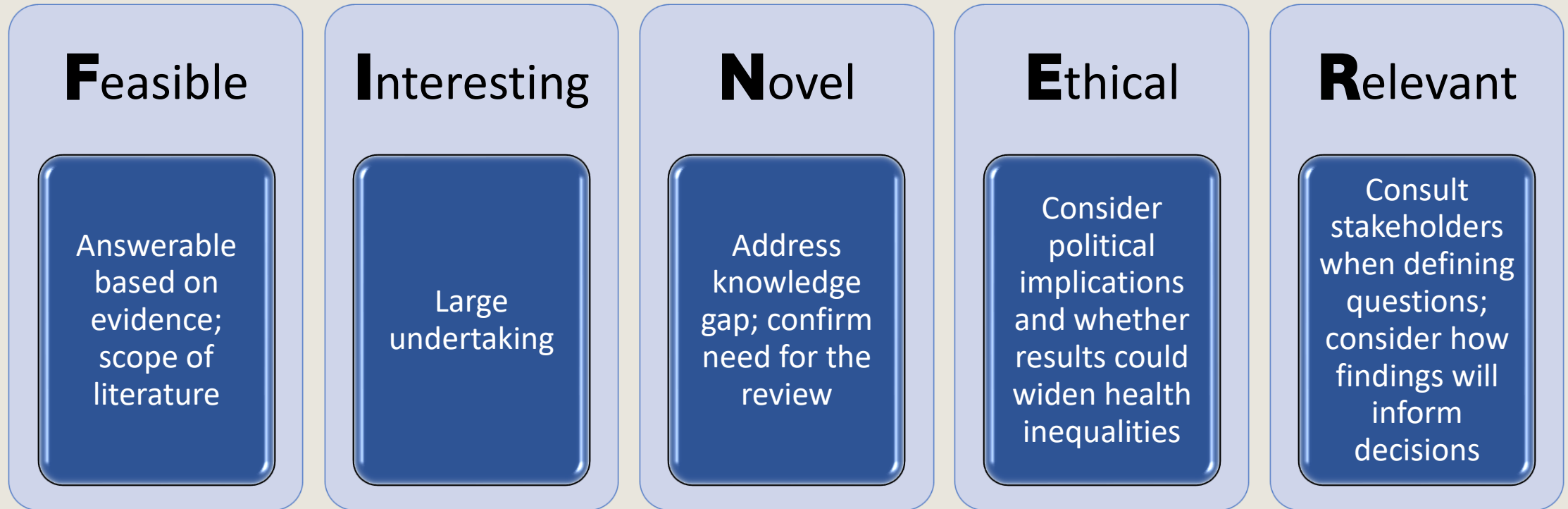
FINER Criteria



FINER Criteria



FINER Criteria



Framing a Review Question

“Item 7. Provide an explicit statement of the question(s) the review will address with reference to participants, interventions, comparators, and outcomes (PICO)”

- PRISMA-P (2015)

Defining the scope

- Broad vs. narrow
- Consider advantages and disadvantages



Making changes to the review question



Making changes to the review question



Protocol amendment

Making changes to the review question



Protocol amendment

Ensure revised question still meets FINER criteria (feasible, interesting, novel, ethical, relevant)

Making changes to the review question



Protocol amendment

Document reasons for changes in methods

Ensure revised question still meets FINER criteria (feasible, interesting, novel, ethical, relevant)

Making changes to the review question



Protocol amendment

Document reasons for changes in methods

Ensure revised question still meets FINER criteria (feasible, interesting, novel, ethical, relevant)

Re-assess search strategy, data collection methods, and articles that have already been screened

Defining outcomes

- Specific endpoints of interest for the systematic review
- Should be defined prior to conducting the review and stated in the protocol



Defining Outcomes

Item 13. “List and define all outcomes for which data will be sought, including prioritization of main and additional outcomes, with rationale”

- PRISMA-P (2015)

Importance of specifying outcomes in advance

- Helps reduce bias
 - Select outcomes independently of knowing their statistical significance



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 - Select outcomes independently of knowing their statistical significance
- Enables assessment of selective reporting of outcomes
 - “addition, removal, or change in the priority of review outcomes between the protocol, methods section, and results of a review” (Shamseer et al., 2015)



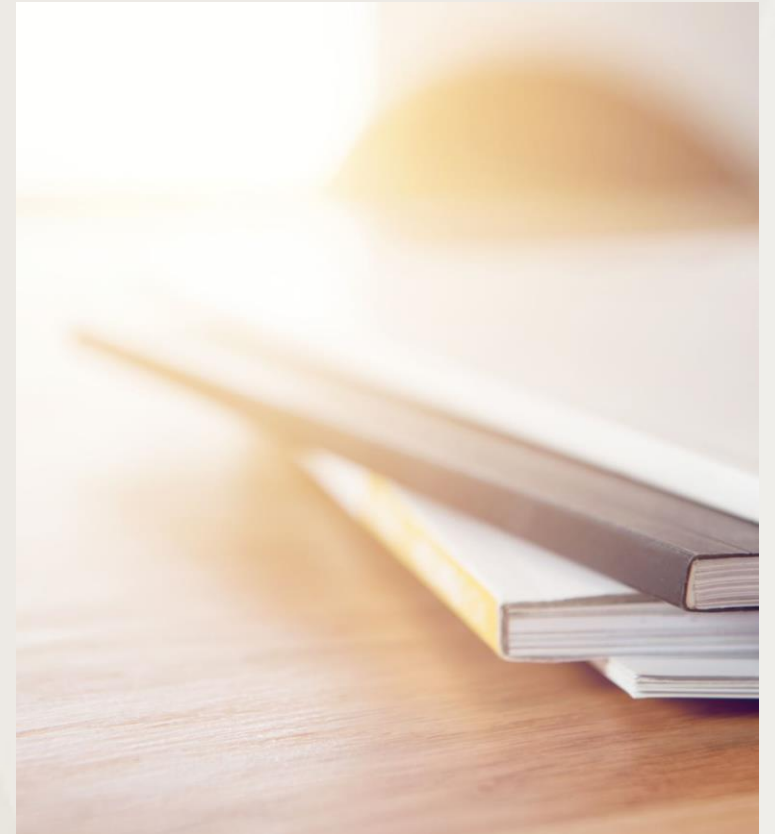
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 - Select outcomes independently of knowing their statistical significance
- Enables assessment of selective reporting of outcomes
 - “addition, removal, or change in the priority of review outcomes between the protocol, methods section, and results of a review” (Shamseer et al., 2015)
- More efficient
 - Know which outcomes to extract from references



Recap

- Discuss how to develop a systematic review question
- Discuss how to define outcomes



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