

# PRIORITIZATION APPROACHES IN THE DEVELOPMENT OF HEALTH PRACTICE GUIDELINES: A SYSTEMATIC REVIEW

Amena El-Harakeh<sup>1</sup>, Rami Z. Morsi<sup>2</sup>, Racha Fadlallah<sup>1</sup>, Lama Bou-Karroum<sup>1</sup>, Tamara Lotfi<sup>1,2</sup>, Elie A. Akl<sup>1,2,3\*</sup>  
<sup>1</sup>American University of Beirut, Lebanon | <sup>2</sup>American University of Beirut Medical Center, Lebanon | <sup>3</sup>McMaster University, Canada

## Background

- Given the considerable efforts and resources required to develop guidelines, guideline developers need to prioritize the topics and questions to address.
- The use of a systematic, explicit and transparent prioritization process will direct efforts and funds towards the most important health needs, and will ensure that the guidelines are focused and of a proper scope.

## Objective

The aim of this study was to identify and describe prioritization approaches in the development of clinical, public health, or health systems guidelines.

## Methods

### Eligibility criteria

- Papers describing a prioritization approach in the de novo development, update or adaptation of health practice guidelines.

### Search Strategy

- MEDLINE and CINAHL (from inception to July 2019)
- Google Scholar
- No date or language restrictions

### Study selection and data abstraction

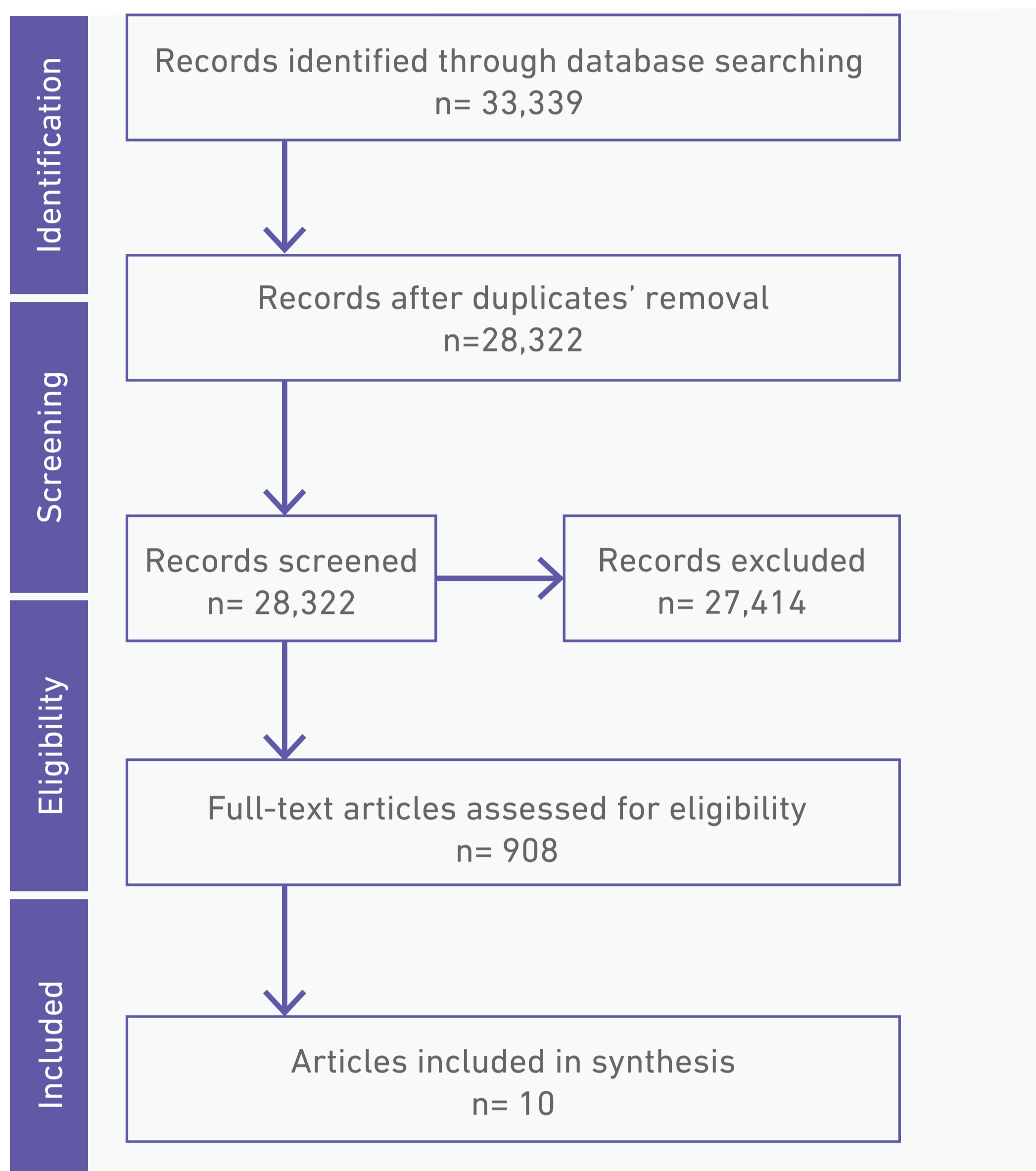
- Performed in duplicate and independently
- Abstracted data:
  - General characteristics of the prioritization approaches
  - Steps of the development process for the prioritization approaches
  - Aspects proposed to be addressed when prioritizing guideline topics

### Data synthesis

- Iterative process of drafting and revision to create a common framework of prioritization criteria that captures all reported criteria
- Semi-quantitative analysis

## Results

Fig. 1 Preferred reporting items for systematic reviews and meta-analyses (PRISMA) study flow diagram for selection.



We identified 10 prioritization approaches



All of the identified prioritization approaches focused on prioritizing guideline topics

None of the approaches was specific to the update or adaptation of guidelines

All focused on the de novo development of guidelines

## Development process

Table 1 Steps of the development process of the approaches for prioritizing guideline topics

%*	Step
90%	Grey literature
90%	Stakeholder involvement
70%	Peer-reviewed literature
60%	Consensus building
50%	Ranking of proposed prioritization criteria
40%	Conducting primary research
40%	Pilot testing

%; Percentage of papers reporting the aspect

## Aspects of prioritization

Table 2 Aspects proposed to be addressed when prioritizing guideline topics

%*	Aspect
10%	<b>When to conduct prioritization?</b> During various steps such as prioritizing the scope of guideline, questions of potential interest, effort of synthesizing evidence, and recommendations.
60%	<b>How to generate an initial list of topics?</b> <ul style="list-style-type: none"> <li>e.g. via surveys, database analysis, and based on issues arising from emerging technologies,</li> <li>Interest-driven (e.g. funder, government)</li> <li>Evidence-informed (scientific evidence, needs assessment, expert opinion).</li> </ul>
100%	<b>What criteria to use?</b>
90%	<b>What stakeholders to involve?</b> <ul style="list-style-type: none"> <li>Number: more than 12 or a range between 5 &amp; 15</li> <li>Involvement methods: Delphi technique, nominal group technique, or workshops</li> <li>Types: patients &amp; public, providers, payers, policy makers, principal investigators, professional societies, and a methodologist</li> </ul>
40%	<b>Documentation</b> Maintained, made available to stakeholders, and form the basis for evaluation

%; Percentage of papers reporting the aspect

## Prioritization criteria

Table 3 Common framework of prioritization criteria and their respective domains

Domain	Criteria	Percentage
Disease-related factors	Health burden	100%
	Economic burden	50%
	Equity relevance	50%
	Burden on healthcare system	30%
	Urgency	10%
Interest	Health professional level	40%
	Consumer level	40%
	National level	20%
Practice	Practice variation	80%
	Uncertainty or controversy about best practice	40%
Guideline development	Absence of guidance	50%
	Unsatisfactory guidance	50%
	Availability of evidence	50%
Potential impact of the intervention	Potential for changing existing guidance	50%
	Impact on health outcomes	70%
	Economic impact	50%
Implementation considerations	Impact on the healthcare system	40%
	Impact on equity/access	20%
	Feasibility of intervention implementation	40%
	Availability of resources	30%

## Discussion

- There were variabilities in the development process of the approaches, aspects proposed to be addressed when prioritizing guideline topics, and prioritization criteria.
- Stakeholder involvement and the use of prioritization criteria represented key aspects of most prioritization approaches.

## Conclusion

- Guideline developers can choose the prioritization approach and criteria that best fit their needs.
- There is a need to further evaluate the value of the identified approaches and to develop standardized and validated priority setting tools.
- Future studies can focus on the effectiveness of the suggested approaches in low-income countries.