

Scoping Review



systematic review



A Scoping Review Maps the body of literature on a topic (**often a broad topic**) and identifies key concepts and research gaps.

It may include data from any type of evidence and research methodology. it can be used as a standalone project or as a **preliminary step to a systematic review.**

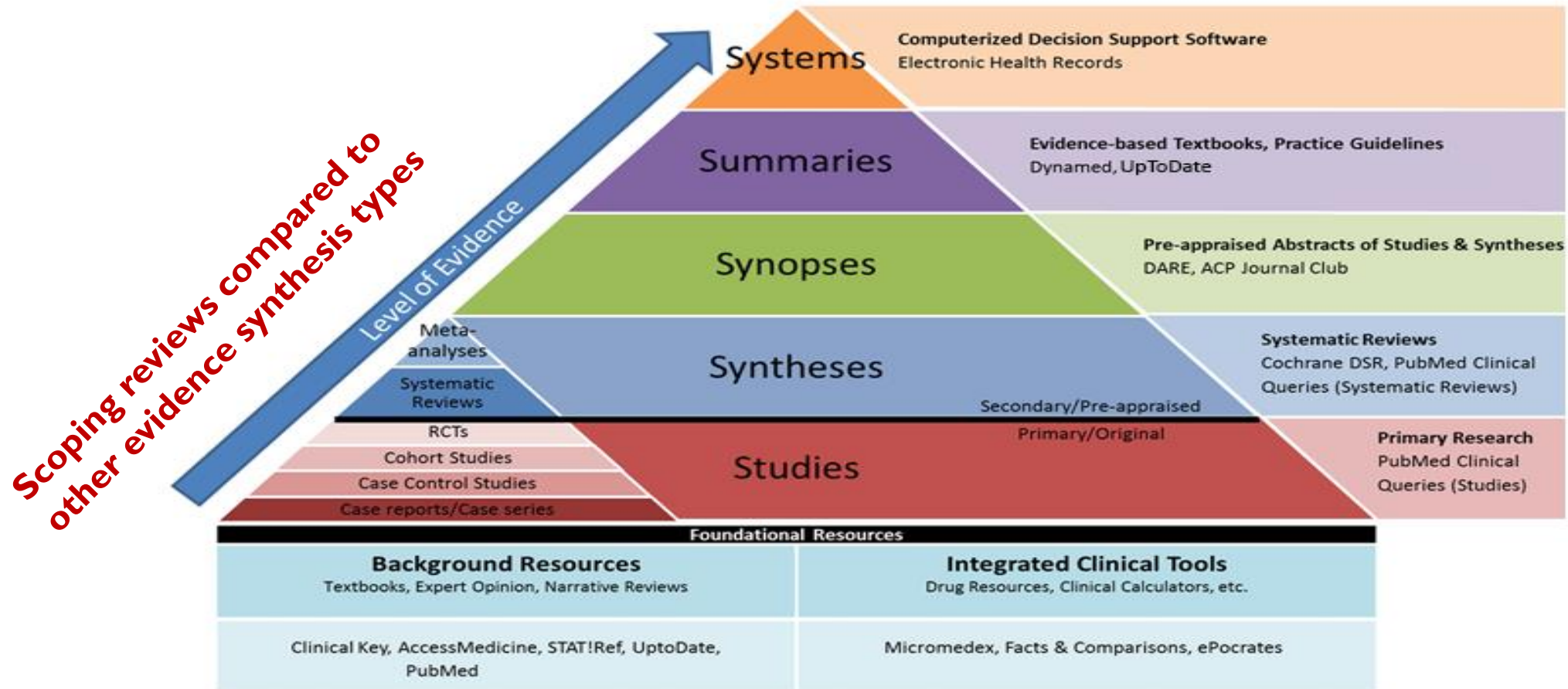
Purposes for conducting a scoping review

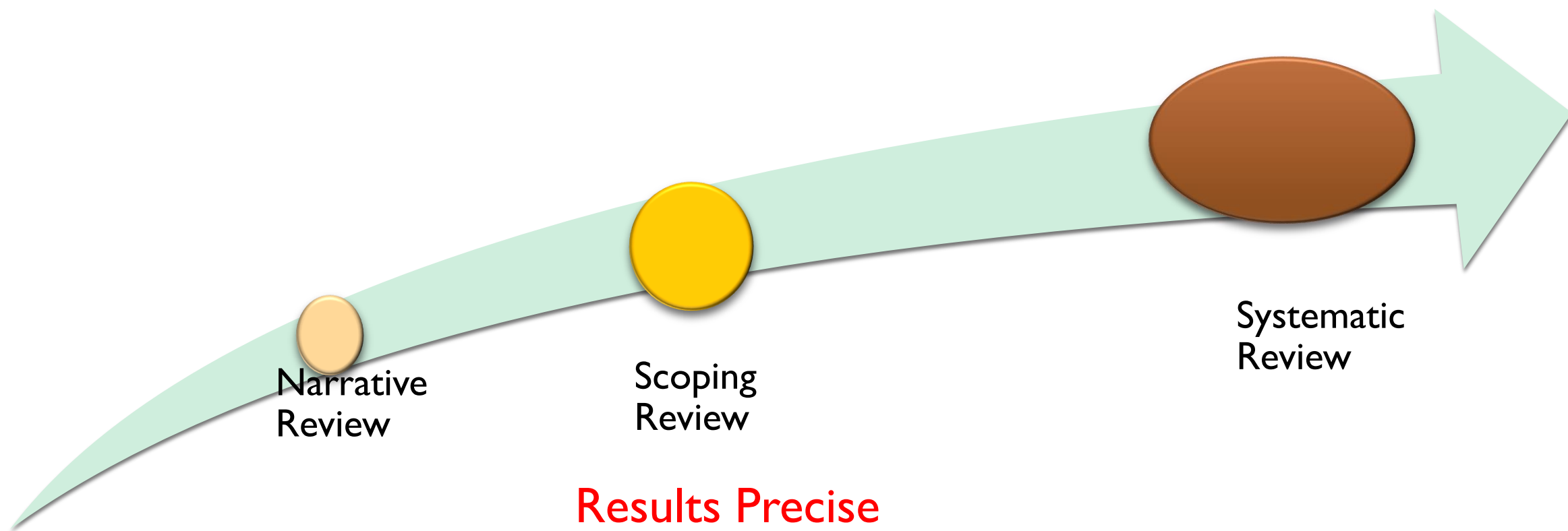
- To identify the types of **available evidence in a given field**
- To clarify **key concepts/ definitions** in the literature at present
- To examine how research is conducted on a certain topic or field
- To identify key characteristics or factors related to a concept
- As a precursor to a systematic review, in other words **Hypothesis generating Studies**
- To identify and **analyze knowledge gaps**
- It is similar to Situation analyses in other word it is Exploratory projects

indications for systematic reviews

- particular question or questions in other words **Hypothesis testing studies**
- **systematic methods** that are selected with a view to minimizing bias, thus providing more reliable findings from which conclusions can be decisions made
- **structured and pre-defined process** that requires **rigorous methods**
- Uncover the international evidence
- Confirm current practice/ address any variation/ identify new practices
- Identify and inform areas for future research
- Identify and investigate conflicting results
- Produce statements to **guide decision-making**

What is the highest level of evidence in research





Scoping vs Systematic Review

- ✓ Is not easier than a systematic review.
- ✓ Is not faster than a systematic review, may take longer.
- ✓ More citations to screen
- ✓ Different screening criteria/process than a systematic review
- ✓ Increased emphasis for hand searching the literature.
- ✓ May require larger teams because of larger volume of literature.
- ✓ **Inconsistency in the conduct of scoping reviews.**
- ✓ often leads to a broader, less defined search .(overview other than clear answer)
- ✓ Requires multiple structured searches instead of one.
- ✓ Scoping review is less precise than systematic review

SCOPING REVIEW



SYSTEMATIC REVIEWS





scoping review indications

- To identify the types of available evidence in a given field
- To identify and analyze **gaps** in the knowledge base (rare)
- To identify key characteristics or factors related to a concept
- As a **precursor** to a systematic review (can assured of locating adequate numbers of relevant studies for inclusion) . **12% of scoping reviews**

To examine how research is conducted on a certain topic

Acta Orthopaedica

The Official Publication of the Nordic Orthopedic Federation

[Acta Orthop.](#) 2015 Apr; 86(2): 159–168.

Published online 2015 Mar 25. doi: [10.3109/17453674.2014.972890](https://doi.org/10.3109/17453674.2014.972890)

PMCID: [PMC4404765](#)

PMID: [25301435](#)

Wear of highly crosslinked polyethylene acetabular components

A review of RSA studies

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Abstract

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Background and purpose

Wear rates of highly crosslinked polyethylene (XLPE) acetabular components have varied considerably between different published studies. This variation is in part due to the different techniques used to measure wear and to the errors inherent in measuring the relatively low amounts of wear in XLPE bearings. We undertook a scoping review of studies that have examined the in vivo wear of XLPE acetabular components using the most sensitive method available, radiostereometric analysis (RSA).

(radiostereometric analysis)

Overview of scoping review steps by the Joanna Briggs institute

Protocol, title, background, review question(s) & objective(s)

Eligibility criteria and comprehensive searching to identify sources of evidence

Search strategy should be comprehensive

Selection of relevant sources of evidence (screening)

2 reviewer ≤

Extracting and charting the results

Conclusions and implications

**Similar :
conduct Sys.R**

Question Formulation

Framework	Dimensions
PICOs	Population, Intervention, Comparator, Outcomes, Study design
PCC	Population, Concept, Context

Context :tertiary institutes, geographic location ,low- to middle-income countries, cancer care services, Context may also be social or cultural e.g. Indigenous

Concept : the key issue or topic quality of life , social intervention , causality

	Traditional Literature Reviews	Scoping reviews	Systematic reviews
A priori review protocol	No	Yes (some)	Yes
PROSPERO registration of the review protocol	No	No ^a <i>Yes</i>	Yes
Explicit, transparent, peer reviewed search strategy	No	Yes	Yes
Standardized data extraction forms	No	Yes	Yes
Mandatory Critical Appraisal (Risk of Bias Assessment)	No	No ^b <i>Gap</i>	Yes
Synthesis of findings from individual studies and the generation of 'summary' findings ^c	No	No	Yes

^aCurrent situation; this may change in time. ^bCritical appraisal is not mandatory, however, reviewers may decide to assess and report the risk of bias in scoping reviews. ^cBy using statistical meta-analysis (for quantitative effectiveness, or prevalence or incidence, diagnostic accuracy, aetiology or risk, prognostic or psychometric data), or meta-synthesis (experiential or expert opinion data) or both in mixed methods reviews

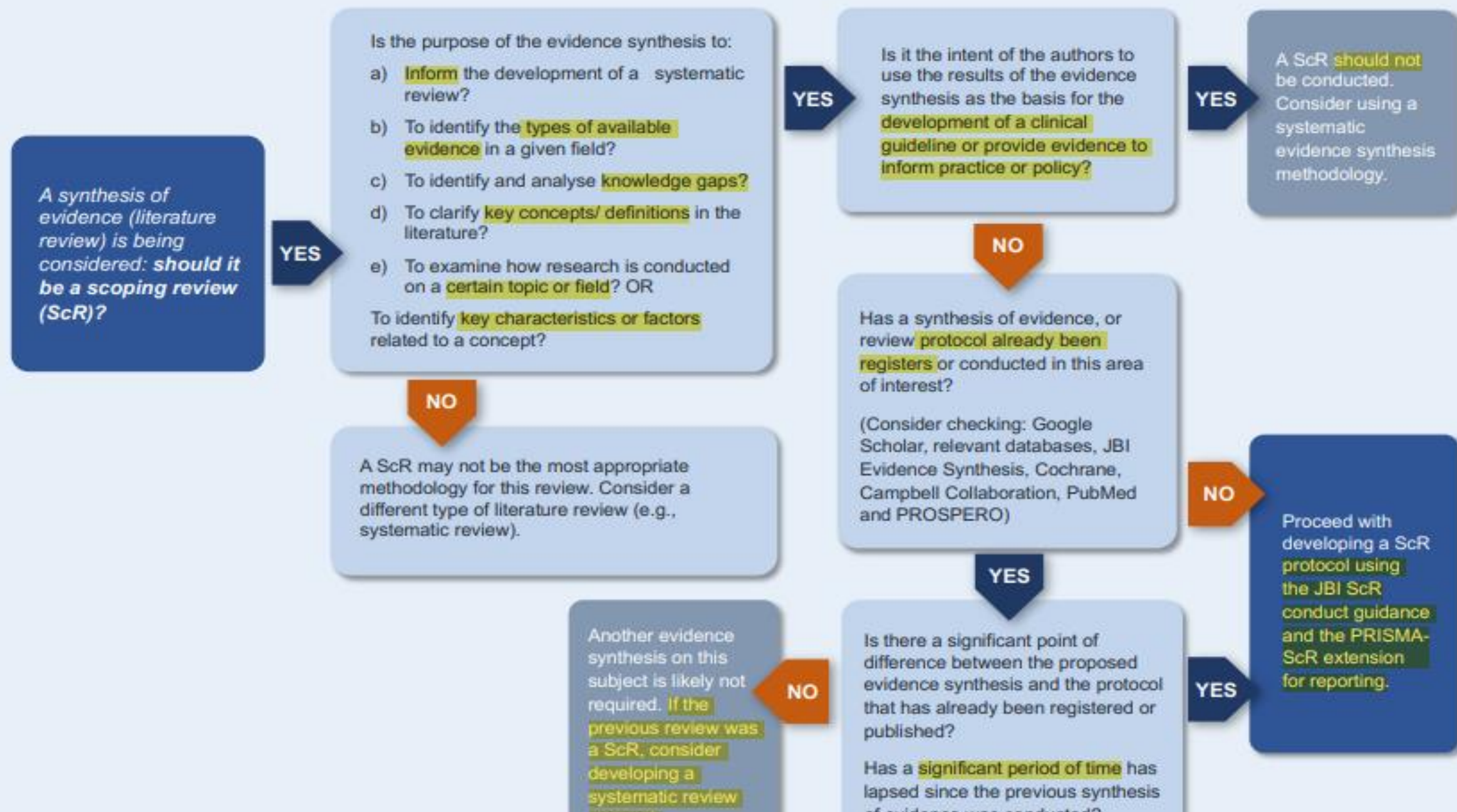
- 
- It is important to mention some **potential abuses** of scoping reviews. Reviewers may conduct a scoping review as an alternative to a systematic review in order to **avoid the critical appraisal stage** of the review and expedite the process, **thinking that a scoping review may be easier than a systematic review to conduct.**

Conclusion

Researchers may **preference the conduct of a scoping review over a systematic review** where the **purpose** of the review is to identify knowledge gaps, scope a body of literature, clarify concepts, investigate research conduct, or to inform a systematic review. Although conducted for **different purposes compared to systematic reviews**

Scoping reviews still **require rigorous and transparent methods** in their conduct to ensure that the results are trustworthy.

Decision tree for selecting scoping review methodology



Thank you for listening

