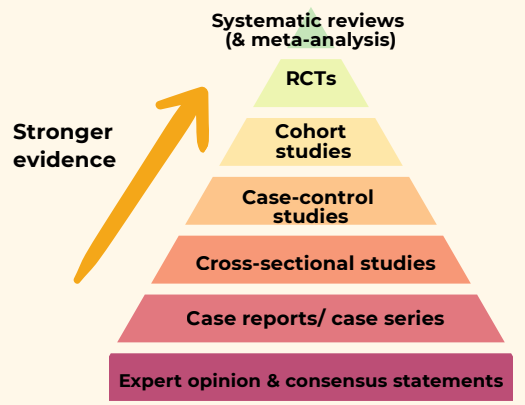


EVIDENCE SYNTHESIS

Evidence synthesis is a **research method** that identifies, selects, appraises, and **combines results from multiple studies** to answer a question in a transparent, reproducible way.

Evidence synthesis informs guidelines, evidence-based medicine, best-practice recommendations, and highlights knowledge gaps.

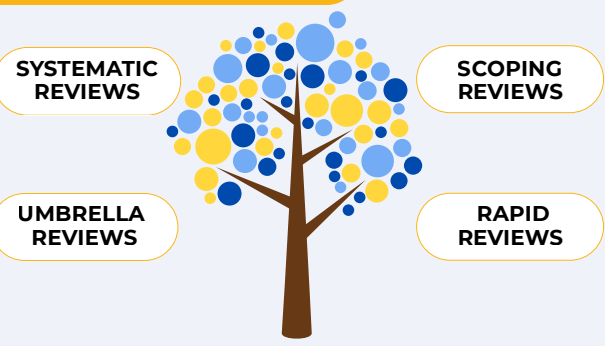
HIERARCHY OF EVIDENCE



MAIN TYPES OF EVIDENCE SYNTHESIS

Comprehensive synthesis answering a focused question, using rigorous, transparent methods to minimize bias. **With or without meta-analysis** (statistical technique).

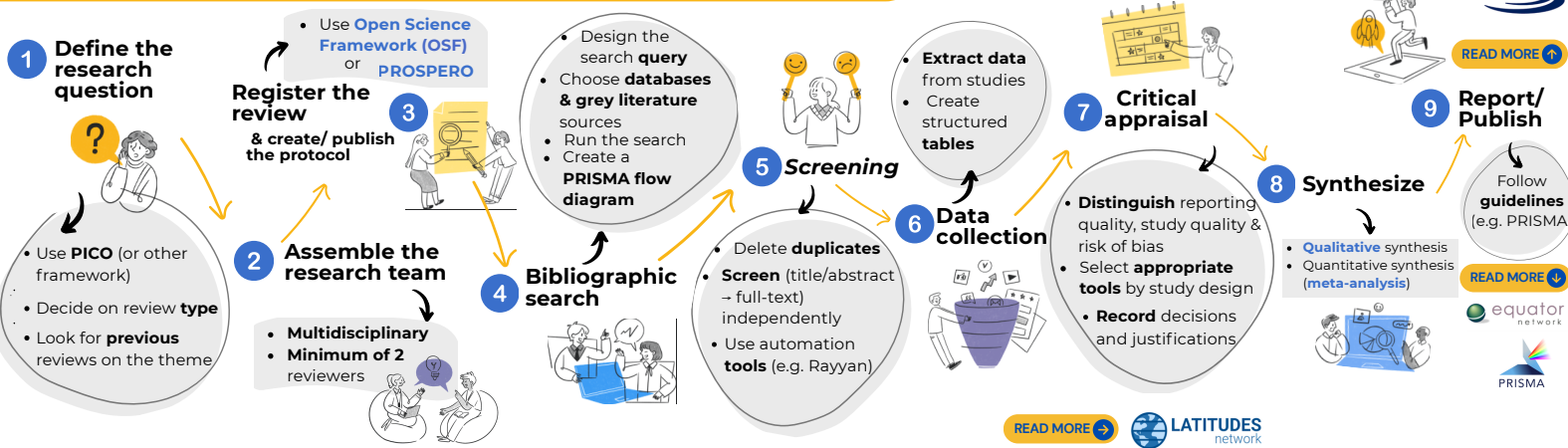
A "review of reviews" that **summarizes** findings from **multiple systematic reviews**.



Maps research on a broad topic, **identifying key concepts and gaps**, but generally does not appraise quality or provide a definitive answer.

Uses streamlined, time-constrained methods to quickly **summarize evidence for urgent decision-making**, often prioritizing speed over comprehensiveness.

STEPS IN A SYSTEMATIC/SCOPING REVIEW



AI IN EVIDENCE SYNTHESIS

- **Search support:** it can suggest keywords, help refine search strings, develop research questions, find topic-related papers...
- **Screening prioritisation:** it can potentially reduce manual screening burden while still requiring human decisions...
- **Data extraction and summarisation:** semi-automated extraction of study characteristics and drafting of plain-language summaries that must be checked...

AI tools (examples)

USE AI RESPONSIBLY: Evidence synthesis can be AI-assisted NOT AI-automated

- ✓ **Human in the loop:** always verify AI outputs and make final calls (inclusion/exclusion, risk of bias, and conclusions)
- ✓ **Be transparent:** record and report which tools were used, for which tasks, and any important settings or prompts.
- ✓ **Be aware of AI limits:** AI can miss studies, hallucinate data, and reflect biased training sets, so validation and ongoing evaluation are essential.

[READ MORE](#) Responsible AI use in Evidence Synthesis (RAISE): recommendations and guidance