



Streamlining Systematic Reviews Through Pragmatic Problem Formulation and Literature Prioritization

S. Fitch

Tuesday, March 18, 2025

4:30 PM – 5:50 PM

Roundtable Session: Is it Time to Right-Size Systematic Review?

Convention Center

Room W206A

Abstract:

Systematic reviews are essential for identifying, reviewing, and synthesizing high-quality evidence, yet their traditional processes often become time-intensive and resource-heavy—delaying the uptake of findings into policy and practice. This process is further delayed by the growing rate at which peer-reviewed literature pertaining to chemical safety is being published. One way to expedite this process is through pragmatic problem formulation: a clear, early-stage definition of the question or problem. By establishing well-defined objectives that reflect stakeholder needs, researchers can streamline protocols, refine inclusion and exclusion criteria, and keep the review laser-focused on the most relevant material. A key component of efficient problem formulation is literature prioritization, a process that is meant to keep resources focused on the right input. Techniques such as rapid review strategies, automated screening tools, and tiered searching approaches help narrow large bodies of evidence to those studies most relevant to the research question and review. Artificial Intelligence techniques are also being integrated into literature prioritization strategies with increasing frequency.

Herein, key steps for sharpening the review question, involving stakeholders in scoping exercises, and strategically focusing literature retrieval are presented. Ultimately, embedding pragmatic problem formulation and literature prioritization at the outset not only accelerates systematic reviews, but also enhances their impact by ensuring the findings align with the real-world concerns of clinicians, policymakers, and communities. In doing so, we can bridge the gap between the evidence generation and real-world decision-making - faster, more effectively, and with less wasted effort.