

## Systematic literature review: Guidelines and methodological principles

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### Abstract

Systematic literature reviews have long been considered the hallmark of evidence-based research and practice. Originating in the late 1970s, systematic literature reviews attempt to synthesize all evidence regarding an explicit research question by using a planned, thorough, transparent, and reproducible method. In the past 20 years, the number of systematic reviews published has grown significantly, of which many have contributed to the pool of best available evidence. However, the methodological rigor of a considerable amount of published systematic literature reviews is inadequate, leading to flawed conclusions.

The purpose of this article is to define systematic literature reviews and differentiate them from other types of literature reviews; highlight their importance; briefly describe their history; demonstrate five established steps in conducting a systematic literature review applied to a physical therapy related research question; and underscore important methodological principles involved in conducting systematic literature reviews. This article can inform both scholars in the field of physical therapy who are planning to undertake a systematic literature review and those requested to review a systematic literature review prior to its publication, as well as practicing physical therapists

who read systematic literature reviews and seek tools to critically appraise their methodology.

**Keywords:** Systematic review, Evidence based medicine, Research methods