

LANGUAGE OF EVIDENCE

Defining the terms of evidence-based medicine

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Using systematic literature surveillance

Evidence-based medicine (EBM) involves decision-making based on the systematic identification and critical appraisal of research evidence in combination with clinical expertise and patient values.¹ Two important EBM tools are systematic reviews and an activity known as systematic literature surveillance.

Surveillance complements commonly used resources. Systematic reviews answer a precisely defined question using explicit methods to search for, select, evaluate, and synthesize available evidence. Though extremely valuable, new systematic reviews cannot be produced at a rate that keeps pace with new research information.²

Systematic literature surveillance, by contrast, starts with the evidence and uses explicit, protocol-based methods to select, evaluate, and synthesize new research information. It is an efficient way to find answers to numerous clinical questions, and thus complements systematic reviews for supporting point-of-care clinical references. Both tools should be an indispensable part of supporting clinical practice.

It can dramatically change knowledge. Imagine being faced with a patient who has a clinically significant head injury and not having immediate specialty backup. Steroid administration has been promoted to reduce cerebral edema. You search the Cochrane Library and find a systematic review of 19 randomized trials with 2295 patients. The review concludes that evidence is insufficient to rule out moderate benefits or moderate harms.³ A source

complementing systematic reviews with systematic literature surveillance would include a more recent randomized trial with 10,008 patients showing that steroids significantly increase mortality at 2 weeks.⁴

And it's efficient. Because each article can be identified and evaluated "once"—rather than repeatedly for separate questions posed in systematic reviews—systematic literature surveillance is a more efficient means for answering a large number of questions. It may be used for clinician alerting/newsletter services^{5,6} or for updating knowledge syntheses in a clinical reference.⁷

To find the best available evidence during clinical practice, the evidence-based clinician should use references that synthesize the results of systematic literature surveillance *and* systematic reviews. ■

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