

How to read a systematic review and meta-analysis and apply the results to patient care: Users' guides to the medical literature

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Clinical decisions should be based on the totality of the best evidence and not the results of individual studies. When clinicians apply the results of a systematic review or meta-analysis to patient care, they should start by evaluating the credibility of the methods of the systematic review, ie, the extent to which these methods have likely protected against misleading results. Credibility depends on whether the review addressed a sensible clinical question; included an exhaustive literature search; demonstrated reproducibility of the selection and assessment of studies; and presented results in a useful manner. For reviews that are sufficiently credible, clinicians must decide on the degree of confidence in the estimates that the evidence warrants (quality of evidence). Confidence depends on the risk of bias in the body of evidence; the precision and consistency of the results; whether the results directly apply to the patient of interest; and the

likelihood of reporting bias. Share