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## PLOS Medicine study scrutinizes the quality of systematic reviews indexed in Medline

Systematic reviews (SR) grow increasingly popular, but continue to vary widely in quality of conduct and reporting, according to a study of these reviews published this week in PLOS Medicine by David Moher of The Ottawa Hospital and the University of Ottawa, Ontario, Canada, and colleagues.

SR, which identify, select, critically appraise, and synthesize the results of all existing studies of a given question, are considered the highest level of evidence for decision makers. To determine the number currently published, and assess the quality of conduct and reporting, Moher and colleagues assessed a cross section of all SR indexed in Medline in February 2014. They found 682 SR—a 3-fold increase over the last decade—mainly of therapeutic questions and largely from the UK, US, and China. In a random sample of 300 of these SR, Moher and colleagues found that at least a third of the reviews did not report how the reviewers searched for studies or how they assessed the quality of the included studies, unpublished data was rarely sought (7%), and at least a third of the reviews used statistical methods discouraged by leading organizations that have developed guidance for systematic reviews (for example, Cochrane and the Institute of Medicine).

Based on their findings, Moher and colleagues recommend "development of software to facilitate better reporting, certified training for journal editors in how to implement the use of reporting guidelines such as PRISMA (http://prisma-statement.org/), and formal training of biomedical researchers in research design and analysis."

## Research Article

http://journals.plos.org/plosmedicine/article?id=10.1371/journal.pmed.1002028

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