SRSM

When to, and when not to replicate systematic reviews: consensus meeting and checklist

Background

Replication is a cornerstone of the scientific method, and in the context of systematic reviews may be appropriate to assess the validity of results and conclusions. With a lack of established guidance, replication of systematic reviews is, however, too often overlooked, done unnecessarily or done poorly.

Objective

Our team aims to establish evidence-informed consensus-based guidance on when to, and when not to replicate systematic reviews.

Methods

We conducted a systematic review of replication methods, key informant interviews, a stakeholder survey and reviewed examples of discordant reviews. Between February 6 and 8, 2019, we held a consensus meeting of 36 participants representing key stakeholder groups: patients, clinicians, journal editors, researchers, systematic review and HTA organizations, and guideline developers.

Results

Interim results of the workshop will be presented including the draft checklist. Along with the checklist, the consensus group endorsed the use of a conceptual value of information assessment which includes 6 domains: 1) demand or priority of the question; 2) importance of the effects (either harm or benefits); 3) expected change in uncertainty by replicating; 4) Chance of implementation; 5) Durability of information and 6) size of population affected.

Discussion/implications

We will discuss potential uses of this replication checklist and assessment to reduce waste in research by different audiences such as commissioners, funders, guideline developers and other stakeholders.