

# Changes in reporting characteristics of systematic reviews for the UK HTA programme

Eva Kaltenthaler<sup>1</sup>, Christopher Carroll<sup>1</sup>, <sup>1</sup>School of Health and Related Research (SchARR), University of Sheffield.

**Background:** A recent publication reported that increasing numbers of systematic reviews are being published and, although standards have improved, many are still poorly conducted and reported, especially non-Cochrane systematic reviews.<sup>1</sup>

**Aim:** The aim of this study was to assess the quality of the conduct and reporting of systematic reviews undertaken for the UK Health Technology Assessment (HTA) programme and published in the journal "Health Technology Assessment"<sup>2</sup> and compare those undertaken in 2004 and 2014.

**Methods:** A comparative sample of all systematic reviews published in 2004 and 2014 in the UK HTA monograph series was identified by a structured search of MEDLINE in August 2016. After piloting of the form, two reviewers each extracted relevant data. These data were tabulated and summarised.

**Results:** The search identified 23 systematic reviews from 2004 and 30 from 2014. By 2014, compared with 2004, a smaller proportion of treatment (53% vs 70%) and pharmaceutical (20% vs 57%) reviews were being published. The process had also clearly become more reflective and rigorous (see Table 1). However, some previous weaknesses persisted, including the general absence of any assessment of publication bias and the failure to report overall numbers of patients in the review.

**Conclusions:** Marked improvements can be seen in the conduct and reporting of systematic reviews published by the UK HTA programme as a result of the publication and general acceptance of the PRISMA statement<sup>3</sup> and the increased application of a smaller number of relevant standards.

**Table 1. Review conduct and reporting components (%)**

Review element	HTA 2004 (n=23)	HTA 2014 (n=30)
Review registration	0	70%
Available protocol	17%	90%
Inclusion of unpublished literature	39%	65%
Use of critical appraisal checklists	32%	61%
Reporting of study flow for inclusion	57%	97%
Reporting of excluded studies	65%	91%

**References:** 1. Page MJ, Shamseer L, Altman DG, Tetzlaff J, Sampson M, Tricco AC, Catala-Lopez F, Li L et al. Epidemiology and Reporting Characteristics of Systematic Reviews of Biomedical Research: A Cross-Sectional Study, PLOS Medicine 13(5): e1002028 <http://journals.plos.org/plosmedicine/article/comments?id=10.1371/journal.pmed.1002028>. 2. NIHR Journals Library Health Technology Assessment Programme <https://www.journalslibrary.nihr.ac.uk/programmes/>. 3. Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097.

