Methodological Expectations of Cochrane Intervention Reviews (MECIR)

Standards for the conduct and reporting of new Cochrane Intervention Reviews, reporting of protocols and the planning, conduct and reporting of updates

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What's new in MECIR 2016

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We are launching a revised set of conduct and reporting standards for intervention reviews, alongside new sets of standards for the reporting of protocols and the planning, conduct and reporting of updates.

Summary of changes

Changes to the conduct and reporting standards for new intervention reviews take account of CEU review screening and user feedback since their initial launch in 2011. We now present these standards as one collection and have removed previous version numbers.

Key points:

- The standards have been revised to incorporate key learning points from CEU review screening.
- The standards continue to support the implementation of existing guidance from the Cochrane Handbook
- The standards should be consulted prior to protocol preparation, reporting the results and conclusions, and again prior to updating the published review
- The standards place a stronger emphasis on

A presentation on the background to these changes delivered for Cochrane Training in April 2016 is available <u>here</u>

Please contact Toby Lasserson <u>tlasserson@cochrane.org</u> or Jackie Chandler <u>ichandler@cochrane.org</u> with any queries relating to these standards.

New standards for the reporting of protocols and the planning, conduct and reporting of updates

Reporting of protocols

We have identified the core reporting components of protocol to align with conduct standards and subsequent reporting standards for new reviews. This is intended to promote early investment in question formulation and review planning. The protocol reporting standards mandate plans for implementing GRADE and Summary of Findings tables in the full review.

Planning, conduct and reporting of updates

These standards ensure authors revaluate the review's importance and relevance before seeking to undertake an update. The previous arbitrary two-year rule is no longer valid and review authors and Groups will start to classify their review's <u>updating status</u>.

Availability of the standards

We are developing an online version which will provide links to resources that address particular standards. Updates to this resource will occur when available. A downloadable version of the complete set in a PDF Booklet is available from the <u>Cochrane Methods website</u>. The online version will allow users to identify and download PDFs of separate standard sets on a section by section basis.

A booklet of the standards will be printed and distributed at the Cochrane Exchange stand at the Seoul Colloquium.

Plans for maintaining the standards

These standards have undergone substantial review and refinement and we do not plan wholesale revisions within the next 2 years. We invite users to check the website (methods.cochrane.org) for any notifications of minor revisions. The online version will be maintained in this way before a major review of the complete set is undertaken.

Implementation of standards

Everyone who uses these standards on a day to day basis should take the opportunity to read through this new version of the standards. Whilst the new sets do not include new methods, renumbering and rewording will likely impact on checklists, learning resources and other products where they are referenced. We encourage CRGs to incorporate this new version into their existing processes and resources at the earliest opportunity. We are liaising with colleagues in the IKMD team and we plan to update the RevMan guidance pane with the revised reporting standards before 2017.

Additional resources such as CEU Screening Notes will provide targeted guidance for more challenging aspects of implementation.

Revised conduct and reporting Standards

Additional standards

We have created additional reporting standards for describing the assessment of heterogeneity, sensitivity analyses and reporting the direction of effect.

STANDARD TYPE	NEW STANDARDS	
Reporting	R49	Assessing heterogeneity: Describe the methods used to identify the presence of heterogeneity between the studies in the review (e.g. non-quantitative assessment, I², Tau² or statistical test).
	R54	Sensitivity analysis: State the basis for any sensitivity analyses performed.
	R87	Direction of effect: State whether findings indicate a clear direction of benefit.

Standards removed

We have removed the standard relating to the differentiation between performance and detection bias because it is now an established approach in many new reviews. We have removed the conduct standard relating to the preparation of Summary of Findings tables and left it as a highly desirable feature of reporting in reviews. However, we have mandated reporting plans to prepare Summary of Findings tables as part of the protocol. We have maintained planning and implementation of GRADE as mandatory conduct standards. Standards relating to review conclusions were removed from the conduct standards because they relate to reporting.

Set	Standard Removed		
Conduct	C56	Differentiating between performance bias and detection bias	
	C75	Including a 'Summary of Findings' table	
	C78	Formulating implications for practice	
	C79	Avoiding recommendations	
	C80	Formulating implications for research	
Reporting	R22	Background text: Avoid the use of plagiarized text.	
	R54	Summary of findings	
	R87	Different scales	

Renumbering and rewording

The addition or removal of standards has impacted on standard numbering and these are given below.

STANDARD TYPE	RENUMBERING	
Conduct	Removal of two standards led to the standards listed between C57 & C76 being renumbered.	
Reporting	Reporting standards from R23 to R64 have undergone renumbering.	

Some standards remain word for word the same. Whilst there are no new substantive expectations in the standards, minor edits have been made to the wording of most standards. We have identified in the table below the standards where substantive changes have been made to the rationale.

STANDARD TYPE	SUBSTANTIAL REWORDING OF STANDARD OR ITS RATIONALE		
	Standard (& new standard number)	Nature of amendment	
Conduct	C14 Predefining outcome domains	Made mandatory. Placed greater emphasis on the need to identify outcomes to form the basis of the GRADE assessment.	
	C15 Choosing outcomes	Enabled inclusion of biochemical, interim and process outcomes where they are important to decision makers.	
	C23 Planning the GRADE assessment and 'Summary of findings' table	Strengthened emphasis of planning and implementation of GRADE	
	C74 Assessing the quality of the body of evidence	Placed emphasis on assessing quality rather than summarizing the body of evidence.	
	C75 Justifying assessments of the quality of the body of evidence	Reworded elaboration emphasizes the adoption of a structured approach.	

	C43 Using data collection forms	Clarified extraction of data with regard to characteristics of interventions.
	C44 Describing studies	Suggested reporting guidance to assist with this process
Reporting	R12 Abstract, Main results: findings	Added explanation that outcomes in summary versions should mirror those in the 'Summary of findings' table
	R52 Subgroup analyses	Added requirement for describing statistical methods and referenced MECIR Conduct Standard 67.
	R51 Data synthesis	Changed from 'quantitative' to 'data' to align with reporting structure in Review Manager software. Simplified standard and added elaboration. Separated detail on assessing heterogeneity (R49).
	R58 Studies awaiting classification	Clarified elaboration to support authors in considering the potential impact of not including completed studies on the review findings as a potential limitation, and extent to which they affect the implications for research.
	R59 Ongoing studies	Highlighted importance of reducing research waste and how authors might draw on known ongoing studies under 'Implications for research'.
	R79 Multiple outcome data	Stressed importance of reporting post hoc decisions to change definition/priority of outcome measures under 'Differences between the protocol and review'.
	R105 Declarations of interests	Standard rewritten to fit with current policy.