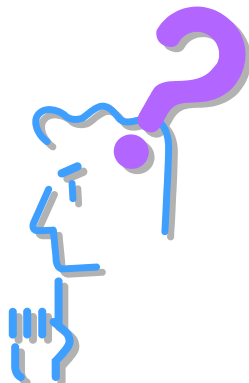


How do you include trials with more than two groups into a single meta-analysis?



Many clinical trials randomise participants to one of several intervention groups (typically one control group and two or more intervention groups). When considering such trials for a systematic review, a reviewer must think about which intervention groups are relevant to their review and which groups are relevant to particular meta-analyses.

In addition, if more than two groups are to be considered for a single meta-analysis, the reviewer has a couple of options available to them:

1. Each pair-wise comparison (control versus intervention 1; control versus intervention 2 ...) may be included separately, but with control group(s) divided out evenly among the comparisons. For example, if a trial compares 100 control hospitals with 100 hospitals receiving reminders for asthma and with another 100 hospitals receiving reminders for diabetes, then two comparisons of 100 intervention hospitals against 50 control hospitals might be entered into a meta-analysis

of reminders.

2. All intervention arms might be combined into one group, and all control arms might be combined into a control group. In the above example, this implies a single comparison of 100 hospitals (control) versus 200 hospitals (intervention 1+2).

In no circumstances should all participants in the control group be added twice to the same meta-analysis. Further detailed discussion may be found in the latest version of the Cochrane Handbook.

Things for reviewers to consider

Which intervention groups are relevant to the review?

Which intervention groups are relevant to a particular meta-analysis?

How to include multiple intervention groups in a meta-analysis?

Craig Ramsay
EPOC Statistical Editor

Do you have any methodology questions?

Contact
Laura McAuley at
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We may feature the answer to your question in our next

Methodology Resources

The Cochrane Reviewer's Handbook

On-line and in PDF format at <http://www.cochrane.org/cochrane/hbook.htm>

The Reviewers' Handbook is the official document which describes in detail the process of creating Cochrane systematic reviews.

NEW Cochrane Collaboration open learning material for reviewers

On-line and in PDF format at <http://www.cochrane-net.org/openlearning/>

This material is designed to help train reviewers in the methods and processes of performing a Cochrane review. It includes information about the formulation of appropriate questions, literature-searching, critical appraisal, statistical analysis and interpretation and application of findings. Use this with The Cochrane Reviewer's Handbook and as a stand alone training module.

EPOC Methods Papers

Papers available in PDF format at <http://www.epoc.uottawa.ca/methods.htm>

These papers were developed to deal with common methodological issues encountered within our reviews.