

Screening Notes: Common issues in Summary of Findings tables and how to address them

The Cochrane Editorial Unit (CEU) has been undertaking pre-publication screening of Cochrane Reviews since 2013. In that time a team of editors from the CEU has assessed hundreds of submissions, and has not only identified areas for improvement within individual reviews, but also extracted and gathered data to help improve production practices across Cochrane Reviews. In the interests of making this information widely available as a resource for Cochrane contributors, Cochrane Editor Newton Opiyo has begun compiling a series of 'Screening Notes', which will publish periodically here on the Cochrane Blog. The first Screening Notes post is available at <https://community.cochrane.org/news/screening-notes-planning-methods-using-grade-and-preparing-summary-findings-tables>.

Context

Summary of Findings (SoF) tables provide useful formats for presenting and interpreting evidence. They are intended to help users access key data faster and improve understanding of main results. Information covered in SoF tables (e.g. about the GRADE process) is also useful for developing other parts of the review (e.g. interpreting and communicating results in the Abstract, Plain Language Summary, and Discussion sections). SoF tables are increasingly being incorporated into Cochrane Reviews; however, there are a number of common errors that we identify, limiting their value in evidence synthesis.

In this edition of Screening Notes, we highlight common issues encountered within CEU screening of SoF tables, and offer some suggestions on how to address them. In addition to the specific suggestions, we encourage authors to use the GRADE tool (www.grade.pro) in preparing SoF tables (among other benefits, using GRADEpro helps improve consistency, and facilitates replication and adaptation of tables for different uses). We have summarized the key issues and provided examples of best practice reviews addressing the issues in Table 1. This information is intended to supplement guidance provided in the *Cochrane Handbook* and related resources.¹⁻³

Table 1. Common issues in Summary of Findings tables and how to address them

Issue	What to do
<p>PICO Setting of the research question often not specified.</p>	<p>Provide a brief description of the setting of the research question (e.g. community, hospital, outpatient, inpatient, country).</p>
<p>Outcomes</p> <p>Adverse effects or harms often not presented.</p> <p>Time of outcome measurement, scale of measurement, or range of scores often not specified.</p> <p>Important outcomes often omitted if not measured or reported by included studies.</p>	<p>Present most important outcomes for patients and decision makers:</p> <ul style="list-style-type: none"> • Include at least one adverse effect outcome (helps ensure a balanced assessment of treatment effect). • Specify time point of outcome measurement (e.g. <i>Follow-up: 3 to 6 months</i>). • Specify scale of measurement and explain scores (e.g. <i>Pain measured by VAS instrument; scale 0 to 100, 0 = no pain, 100 = worst possible pain</i>). • For outcomes measured at multiple time points, present one valid time point (short- or long-term as appropriate). • Include key outcomes even if data not available from included studies (i.e. outcomes not measured or reported). Knowledge about lack of data is important, highlights gap in the available evidence. <p>Illustrative example, ref. 4; <i>See: Methods section (Summary of Findings tables)</i> <i>See: Summary of Findings table for the Main comparison & Additional Summary of Findings tables</i></p>
<p>Assumed (baseline) risk or score</p> <p>Sources of assumed (baseline) risks or scores often not specified.</p>	<p>Present at least one baseline risk or score for each outcome.</p> <p>Provide information about source of baseline risk or score (this provides the basis for translating relative effects into absolute effects; and also informs inference about applicability of review findings).</p> <p>Potential sources of baseline risks or scores:</p> <ul style="list-style-type: none"> • Well-conducted observational studies with representative participants and interventions. • Median risk or score among control groups in included studies (rather than weighted average). • Control group risk or score from one well conducted study among included studies.

- If considerable variation in baseline risks or scores exists across included studies, present a range of baseline risks or scores derived from these studies.
- If no meaningful estimate for baseline score can be derived (e.g. from standardized mean difference measure), this should be stated.

Illustrative example, ref. 4;

See: Summary of Findings table for the Main comparison & Additional Summary of Findings tables

Corresponding risk or score

Present at least one corresponding intervention risk or score, including confidence interval.

Standardized mean differences (SMDs) often not translated into easily understood measures (most readers less familiar with results expressed in standard deviation units).

Provide an interpretation of SMD in the Comments column (e.g. based on Cohen’s effect sizes where appropriate):

- 0.2 represents a small effect.
- 0.5 represents a moderate effect.
- 0.8 represents a large effect.

“A standard deviation of 0.2 represents a small difference between groups”

Convert SMD into Mean difference (MD); provide a comparison of the MD with Minimum Important Difference (MID) if known (e.g. MID derived from relevant literature or based on effect sizes used in sample size calculations in the included studies).

“The mean difference did not reach a clinically important improvement of 50 points”

“Differences of less than 10 points on the VAS may not be clinically important”

To convert SMD into MD:

1. Select one well-conducted study with representative participants and intervention from the meta-analysis.
2. Multiply the standard deviation of the control group by the pooled SMD.
3. The resulting number is the MD and can be presented in the SoF table in the usual way (the original pooled SMD should be presented in the Comments column).

Illustrative example, ref. 4;

See: Methods section (Identification and definitions of minimum important difference)

	See: <i>Summary of Findings table for the Main comparison & Additional Summary of Findings tables</i>
<p>Explanatory footnotes</p> <p>Lack of clarity on quality assessment criteria, in particular GRADE factors involved and levels of downgrading or upgrading quality.</p> <p>Upgrading quality of randomized trials.</p>	<p>Specify GRADE factor and number of levels of downgrading or upgrading quality:</p> <p><i>“Downgraded one level for serious risk of bias (due to high risk of selection bias in the majority of included studies)”</i></p> <p>Explain decisions for not downgrading quality where relevant:</p> <ul style="list-style-type: none"> • May not downgrade for imprecision if the confidence interval for the relative effect translates into a small difference in absolute effect. • May not downgrade for inconsistency if the direction of effect is consistent across studies, despite evidence of statistical heterogeneity. <p>Upgrading criteria should only be applied to well conducted observational studies.</p> <p>Illustrative example, refs. 4 & 5; See: <i>Summary of Findings table for the Main comparison & Additional Summary of Findings tables</i></p>
<p>Other aspects: Number of comparisons</p> <p>Choice of comparisons presented in SoF tables often not explained where multiple comparisons addressed (e.g. only comparisons with the most data presented).</p>	<p>Prioritize comparisons covered in tables (i.e. focus on the most important comparisons for decision makers).</p> <p>Present comparison most important to users as Main SoF table; other relevant comparisons can be included as Additional SoF tables.</p> <p>Illustrative example, ref. 4; See: <i>Methods section (Summary of Findings tables)</i> See: <i>Summary of Findings table for the Main comparison & Additional Summary of Findings tables</i></p>
<p>Other aspects: Narrative data</p> <p>Key outcomes often omitted from tables if data not meta-analyzed.</p>	<p>Present key outcomes irrespective of the synthesis method (it's feasible to present numerical data alongside narrative data in SoF tables).</p> <p>Illustrative example, ref. 6; See: <i>Summary of Findings table for the Main comparison</i></p>

Other aspects: Subgroup and sensitivity analysis

Where reported, no clear rationale for inclusion of data from subgroup or sensitivity analysis.

Inclusion of findings from subgroup or sensitivity analysis need to be justified:

- Only present subgroup findings from the analysis of pre-defined subgroups if they are reliable enough to provide critical information for decision making.
- Only present results of sensitivity analysis if effect sensitive to assumption, for instance, to choice of meta-analytic model. However, it is useful to draw on the results from sensitivity analysis to justify downgrading decisions.

References

1. Guyatt GH, Oxman AD, Santesso N, et al. [GRADE guidelines: 12. Preparing summary of findings tables-binary outcomes](#). J Clin Epidemiol. 2013 Feb;66(2):158-72.
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3. Cochrane Handbook Chapter 11.5: 'Summary of findings' tables.
http://handbook.cochrane.org/chapter_11/11_5_summary_of_findings_tables.htm
4. Beirne PV, Hennessy S, Cadogan SL, et al. [Needle size for vaccination procedures in children and adolescents](#). Cochrane Database Syst Rev. 2015 Jun 18;(6):CD010720.
5. Santesso N, Carrasco-Labra A, Langendam M, et al. [Improving GRADE evidence tables part 3: detailed guidance for explanatory footnotes supports creating and understanding GRADE certainty in the evidence judgments](#). J Clin Epidemiol. 2016 Jun; 74:28-39.
6. Smith SM, Wallace E, O'Dowd T, et al. [Interventions for improving outcomes in patients with multimorbidity in primary care and community settings](#). Cochrane Database Syst Rev. 2016 Mar 14;3:CD006560.