The Cochrane Database of Systematic Reviews and impact factor

Can Cochrane Review Groups influence their impact factor?

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A core principle of The Cochrane Collaboration is to uphold the importance of quality and minimising bias. It is therefore essential that we act in a way that is transparent, defensible, and consistent with current best scientific publishing practice. The Cochrane Collaboration has earned a reputation of upholding sound ethical practices and safe-guarding this is paramount. It is therefore crucial that we do not engage in "gaming" of the impact factor. Therefore any changes to practice should pass the following tests:

- Are the changes consistent with the core values of The Cochrane Collaboration and perceived best scientific publishing practice?
- Are the changes in the interests of readers of the Cochrane Database of Systematic Reviews (CDSR)?

The CEU has revisited a paper by Hans van der Wouden, [1] which identified strategies that could be used by Cochrane Review Groups and authors to protect the impact factor. Some of these strategies are listed below. It is important to stress that the list represents a menu, to be used with appropriate discretion. No single item should be undertaken in all situations. Nonetheless, the Cochrane Editorial Unit believes that it should be possible to execute many of the operations listed below without compromising Cochrane ethos or principles, and indeed in many circumstances they will represent a service to the readers.

- Prioritise the updating of highly cited and accessed Cochrane Reviews, and de-prioritise the updating of poorly cited and accessed Cochrane Reviews. Proposed changes, currently in consultation, to the way that Cochrane Reviews are categorised might facilitate such decisions.
- Prioritise updates where the conclusions are likely to change.
- Avoid creating more than one citation version to a Cochrane Review within a two-year impact-factor (i.e. don't update more frequently than every two years), except where there is a specific indication to do so.
- Prepare editorials or other articles in other ISI-indexed journals that cite recently published Cochrane Reviews.
- Form relationships with disease-specific journals that produce 'highlights' of research published in other journals, and send them relevant Cochrane Reviews for them to consider as a 'highlight'.
- One way that has been proposed to increase the impact factor is to increase the self-citation rate. We do
 not advocate this approach as a method to improve the impact factor; however, other Cochrane
 Protocols and Cochrane Reviews should be cited if they are relevant and the citation would provide a
 service to readers navigating a topic in the CDSR. We should also be mindful that if the self-citation rate
 to other Cochrane Reviews within the 2-year impact-factor window reaches 20% of the total CDSR
 citations, ISI may stop providing an impact factor. See Table 1 for details of how the 2010 impact factor
 and self-citation rate would have changed with extra citations to Cochrane Reviews in the two-year
 impact factor window. As the table indicates, even adding only one additional internal reference to a
 Cochrane Review published in the relevant two-year window, to each Cochrane Review published in
 2010, would have increased the self citation rate to 19%. It is for this reason that we are advocating
 adding such references only when it adds value to the reader, and not as a means of increasing impact
 factor.

Table 1. Effect on the 2010 impact factor and self-citation rate, if Cochrane Reviews in the denominator had cited 1, 2 or 3 additional Cochrane Reviews in the 2-year impact factor window.

	#CRs in 2010 impact factor denominator	Total #citations in 2010	#self citations in 2010	Self citation rate (%)	Impact factor
Actual 2010 data	1128	6978	419	6.0045858 41	6.186 =6978/112 8
If each of the 1128 Cochrane Reviews in the 2010 denominator cited 1 additional Cochrane Review in the impact factor window		8106 =1128+697 8	1547 =1128+419	19.084628	7.186 =8106/112 8
If each of the 1128 Cochrane Reviews in the 2010 denominator cited 2 additional Cochrane Review in the impact factor window		9234 =(1128*2)+ 6978	2675 =(1128*2)+ 419	28.969027	8.186 =9234/112 8
If each of the 1128 Cochrane Reviews in the 2010 denominator cited 3 additional Cochrane Review in the impact factor window		10362 (1128*3)+6 978	3803 =(1128*3)+ 419	36.701408	9.186 =10362/11 28

References

1. Hans van der Wouden. Improving the Impact Factor - Suggestions for CRGs and authors. Version 12 September 2008 (as supplied 20 September 2011). Data on file.