

A Collaboration-wide survey of Cochrane authors

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BACKGROUND

The number of Cochrane reviews published each year has become relatively stable over the last five years. However, the number of non-Cochrane systematic reviews is increasing at a rapid rate and in 2008 accounted for more than 75% of the systematic reviews indexed in MEDLINE (Figure 1). This relative increase in non-Cochrane systematic reviews may be related to author perceptions that publishing within *The Cochrane Library* is too difficult. Although we can argue that authors will want to publish in *The Cochrane Library* as the reference database for systematic reviews, unfavourable author perceptions and experiences may impact on the number of people who want to be Cochrane authors, complete reviews, and update their reviews.

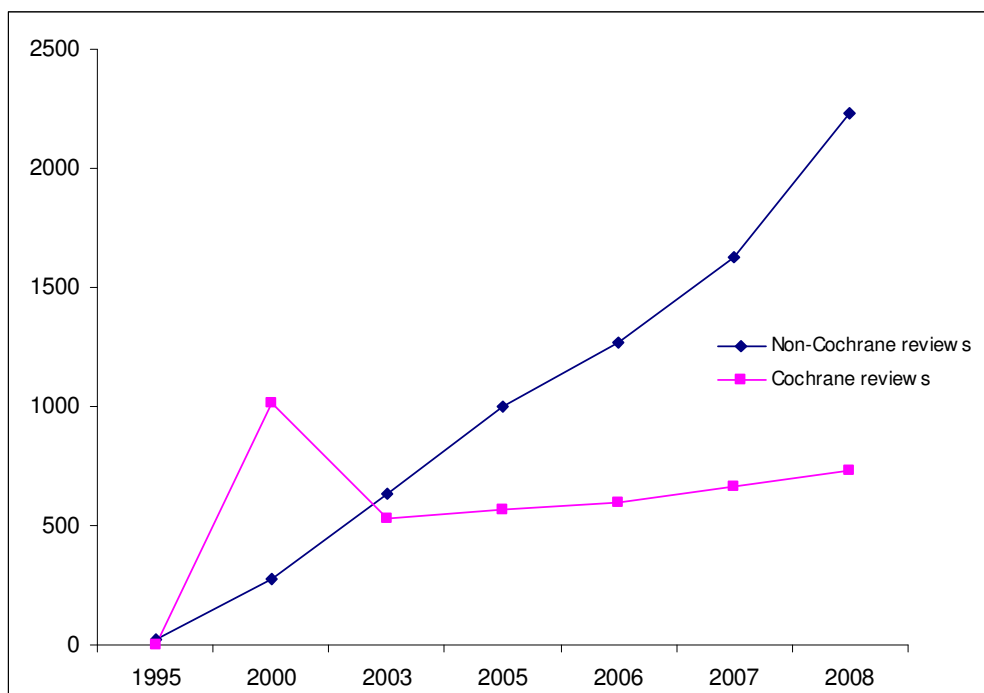


Figure 1: Cochrane versus non-Cochrane reviews published in MEDLINE

The number of Cochrane reviews is estimated by the number of citations for the *Cochrane Database of Systematic Reviews (CDSR)* in MEDLINE. The number of non-Cochrane reviews is estimated by the number of citations in MEDLINE with “systematic review” in the title but not published in *CDSR*.

A better understanding of the review process from the authors’ perspective should help us to identify strategies that can improve the process, thereby improving author recruitment and retention. In addition, this may enable us to identify strategies that can increase the quality and speed of review production and inform future planning for The Cochrane Collaboration. The Cochrane Collaboration Steering Group gave consent for the development of this Collaboration-wide survey of authors at its meeting in October 2006. It builds on the expertise and experience of a number of groups within The Cochrane Collaboration who have done smaller targeted author surveys. Although the working group acknowledges that Cochrane Review Groups can work very differently, questions have not been designed to target specific Review Groups but rather to identify what, if any, additional support authors need across the Collaboration.

Objectives

1. To identify problems and barriers for authors of Cochrane reviews and protocols.
2. To identify what resources have been helpful in the past for authors of Cochrane reviews and protocols.
3. To identify strategies that can improve the review process for authors.

METHODS

Inclusion Criteria

All authors of published Cochrane protocols and reviews.

Data collection

The link to an online survey was sent to authors via the all-author mailing list and follow-up emails were sent monthly over the three month data collection period. The survey and link were also advertised in CC-Net, and was available from the newslink on cochrane.org.

Data were collected over three calendar months from August to October 2008. An estimate of the number of active Cochrane authors on completion of the survey was 13,184 (10,236 authors on the all-author mailing list) with 4,686 of those being contact authors. All responses were anonymous.

Analysis

Descriptive data analysis was used for closed-format responses. Open-format responses were categorized thematically to identify key response categories.

Dissemination of results

The Steering Group Executive has agreed that the results of this survey when finalised should be widely disseminated via all entity e-mail lists and the all-authors list. It is intended that the results will also be made available via cochrane.org and their availability advertised through mailing lists and newsletters.

RESULTS

Experience as a systematic review author

In total, 1784 authors responded to the survey. 51% were health professionals, 44% were researchers, and 2% were consumers. Most (89%) had published in a peer-reviewed journal and 22% had another role within The Cochrane Collaboration. More than half (57%) had attended courses provided by The Cochrane Collaboration.

Only 10% of respondents were authors of protocols alone, 28% were authors of reviews alone and the remaining 62% were authors of both reviews and protocols. A high proportion of respondents were contact authors, 51% were contact authors for protocols and 41% for reviews. Respondents had been authors on a median of one review and two protocols. Nearly half (49%) of respondents had co-authored more than one protocol and 46% had authored more than two reviews.

The median starting date as an author with The Cochrane Collaboration was 2001. When asked 'Would you do another review with The Cochrane Collaboration?' the majority (67%) said they would, 7% said they would not and 26% were unsure. In response to the statement, 'Overall, working with The Cochrane Collaboration as an author has been a positive experience', 42% strongly agreed, 46% agreed, 8% neither agreed nor disagreed, and 4% disagreed.

Nearly half of respondents (44%) had also co-authored a non-Cochrane systematic review. This did not include other versions of reviews that had been published in *The Cochrane Library*. The median number of systematic reviews they had published outside *The Cochrane Library* was two.

Working in English

When authors were asked if English was their first language, 47% responded that it was not. Only 9% of these authors agreed that they had difficulty with the reading in English required for a Cochrane review, but 47% had difficulty with the required writing in English. While 42% of authors for whom English was not their first language knew someone working within The Cochrane Collaboration who could help with translation, 65% of authors who did not know someone stated that they would like help with English.

Problems getting a title registered

To the question, 'Have you had any problems getting a title registered?', 24% of authors for whom this question was applicable (319/1318) answered 'Yes, a little' or 'Yes, a lot'. Table 1 shows the percentage of these authors who experienced each of the listed problems from most to least frequent. These problems fell into two categories of 'Finding a title' and 'Communication'. Problems in 'Finding a title' included overlap with other titles, finding a title which hadn't already been registered by someone else, and identifying a title of interest. Problems with 'Communication' included communicating with the relevant Cochrane review Group and identifying whom to approach.

Overlap with other registered titles	45%
Communicating with the relevant Review Group	35%
Finding a title which hadn't been registered	31%
Identifying who to approach	22%
Finding a title which interested you	20%
<i>Other</i>	17%

Table 1: Types of title problems

There were 62 open-text responses relating to other problems with the title registration process (Appendix: Table 8). Most were from authors who were unable to register a title (n=12) or who commented on the delay in the process (n=10) or on the manner of communication with the Cochrane review Group (n=9).

Problems publishing the protocol

A positive response to the question, 'Did you have any problems publishing the protocol/s?' was given by 37% of authors for whom the question was applicable (475/1286). The types of problems are listed in order of frequency in Table 2. The most frequent problems with publishing the protocol were writing in the Cochrane format or style and developing the statistical methods required for the protocol.

<i>Cochrane review format/style</i>	34%
<i>Developing statistical methods</i>	32%
<i>Communicating with the Review Group</i>	28%
<i>Defining the search strategy</i>	23%
<i>Writing the methods</i>	18%
<i>Inclusion/exclusion criteria</i>	16%
<i>Writing the background</i>	12%
<i>Finding co-authors</i>	9%
<i>Other</i>	20%

Table 2: Types of protocol problems

The majority of the 96 other comments in relation to the development of a protocol (Appendix: Table 9) were about the editorial/ peer review process (n=49). Most of these were comments on delay in this process (n=16) and the way in which it was managed (n=14), particularly the multiple iterations of this stage. Authors also referred to a lack of consistency (n=11), within and between Review Groups, in how they were instructed to prepare their protocol.

Problems publishing the review

More than half of authors (53%) for whom the question was applicable (601/1141) responded that they had had problems publishing their review/s. These are listed in Table 3 in order of decreasing frequency. The most common problem, cited by 46% of authors, was obtaining unpublished information from study authors.

Obtaining unpublished information from study authors	46%
Commitment from co-authors	26%
Using RevMan	26%
Obtaining copies of study paper/abstracts	25%
Analyzing the data	22%
Writing in the Cochrane style/format	22%
Communicating with the Review Group	22%
Translation of articles	21%
Writing the Discussion and/or Recommendations	18%

Extracting the data	17%
Assessing the quality of included studies	15%
Writing the Results	10%
Assessing the studies for inclusion or exclusion	9%
Doing the search	8%
<i>Other</i>	16%

Table 3: Types of review problems

Of the 137 open-text responses on problems with publishing the review (Appendix: Table 10), 51 were related to the editorial and peer review process. The greatest proportion of these comments were about delays in the process (n=17) and the adequacy of peer reviewer/editorial expertise in the systematic review process (n=11).

Problems with the editorial and peer review process

Table 4 shows the problems with the editorial and/or peer review process that were most commonly reported by the 41% of authors who had problems with this stage of the review (544/1339). At 57%, delay in receiving editorial and peer review comments was the most frequently cited problem. The percentage of authors who found comments contradictory (38%) and too numerous (26%) was also high, and authors reported that they had difficulty knowing how to respond (31%) and which comments to respond to (22%).

Delay in receiving comments	57%
Contradictory comments	38%
Knowing how to respond to comments	31%
Number of comments	26%
Knowing which comments to respond to	22%
<i>Other</i>	14%

Table 4: Types of editorial and peer review problems

Most of the 84 other comments received on the Editorial/Peer Review Process (Appendix: Table 11) were in regards to the management of the process (n=18), particularly around multiple iterations, the volume of comments and how to deal with contradictory comments. Some authors again questioned whether the expertise of peer reviewers and/or editors in systematic reviews was as good as it should be (n=12).

Problems with updating reviews

The question on updating was not considered applicable by 48% of authors. However, 53% of the authors for whom this question was applicable (402/751) reported problems with updating. The types of problems are listed below in Table 7. At 67%, time was by far the biggest challenge for authors in updating their reviews, followed by changed priorities (36%) and the unavailability of co-authors (29%).

Time	67%
Changed priorities	36%
Review co-authors unavailable	29%
Knowing when your update was due	17%
Getting copies of new studies	14%
Searching for new studies	13%
<i>Other</i>	20%

Table 5: Types of updating problems

Additional problems relating to the updating process were identified by 81 authors (Appendix: Table 12). The majority of these related to new methods (n=14), the change to RevMan 5 (n=10) and funding the update (n=8).

Barriers for review authors

Table 6 shows the percentage of authors who found the listed factors impacted on their ability to undertake a Cochrane review. These are listed in descending order of the percentage of authors who found them a barrier to some extent. Time was again identified as a major barrier being cited by 96% of authors who responded to this question.

	Not at all	A little	A lot
Time barrier	4%	26%	70%
Co-author communication	48%	43%	9%
Author mix	55%	37%	8%
Academic credit	57%	32%	11%
Information about the review process	65%	30%	5%
Communicating with the Review Group	67%	26%	8%

Table 6: Barriers to undertaking a Cochrane review

Were resources helpful?

Table 7 shows the percentage of authors who found that the resources The Cochrane Collaboration makes available to authors were of help in completing their reviews. A high proportion (>80%) of authors found contact with the Cochrane Review Group, the *Handbook*, the Cochrane website and the *RevMan User Guide* helpful. The open learning resources were least likely to be found helpful at 46%. However, a large proportion of authors (42%) were not aware that this resource was available. Nearly a third (29%) of authors were also not aware of the availability of the *Cochrane Style Guide*.

	Yes	Didn't know about it
Handbook	88%	8%
Review Group contact	88%	---
Website	84%	8%
RevMan User Guide	83%	7%
Workshops	60%	8%
Style Guide	60%	29%
Review Group resources	57%	27%
Open Learning	46%	42%

Table 7: Cochrane resources that were helpful

Support for authors

424 authors responded to the question asking them to identify any other support from The Cochrane Collaboration that they had found helpful (Appendix: Table 13). The majority of these were contact with Review Group staff (n=164). Support with searching (n=50), translation (n=22), training (n=31), statistics (n=21) and obtaining papers (n=18), and having a local contact or mentor (n=24) or someone who could provide advice (n =11) were also considered helpful.

682 authors had suggestions on how The Cochrane Collaboration could improve support for authors (Appendix: Table 14). The most frequent suggestions for support were improvements in training (n=68), the editorial process (n=68), communication (n=64) and funding (n=48). Access to mentors (n=30), statistical support (n=28), support with searching (n=24), support with RevMan (n=28), assistance with obtaining papers (n=31) and the translation of papers (n=24) were also high frequency responses. A number of these authors pointed out that many authors do not have access to facilities that can be used for searching and obtaining papers.

Authors' suggestions for improved communication were most frequently related to how Review Groups communicated with them (n=42). They suggested that Review Groups should keep in touch with authors while they were doing reviews, that there should be less delay in responses, that Review Groups should ensure they responded to e-mails promptly and, in some cases, that Review Groups could be more respectful in their communications with authors.

The most frequent suggestions for support in the editorial process were related to addressing editorial delays (n=30). However, a number of authors recognised that Review Group resources were stretched and could therefore be the cause of the delay in responses. Consistency in the editorial process was also a high frequency response (n=26). Most comments on consistency within Review Groups were in relation to a lack of consistency between peer reviewers and/or editors, between different iterations of the review process, and with the recommendations of the *Handbook*. However, a number of authors had worked across a range of Cochrane Review Groups and had also commented on a lack of consistency in the recommendations and practices across Groups. Fourteen authors also commented on what they considered to be the micromanagement or bureaucratic management of reviews and felt that this could be improved.

Authors also commented on the often voluntary nature of their work and suggested that it could be better recognised through funding (n=48) or assisting authors to obtain credit (n = 21) through their institutions or in recognition of the time it takes to prepare a review.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

Unfortunately, despite multiple advertisements of the survey, response rates were relatively low, i.e. 17.4% of the 10,236 authors on the all-author mailing list. This may have been in part due to reports that the survey was very slow to download at a number of sites across a number of countries. However, as 53% of respondents (n=947) were contact authors this means that a better proportion (approximately 26%) of contact authors were represented. In general, the authors who responded to this survey were experienced Cochrane review authors (nearly half had authored more than one review and 89% had been authors in peer reviewed journals). The high proportion of authors (22%) who had another role in The Cochrane Collaboration suggests that there may have been a bias in responses to authors who worked within Cochrane entities.

Overall, although most authors were very positive about their experience as authors with The Cochrane Collaboration, these need to be taken in context with the low overall response rate. In addition, problems were frequently cited through all stages of the review process. Although time was a challenge frequently cited by authors, additional problems identified with the review process and suggestions from authors can be used to inform strategies which may improve the time impact of authoring a Cochrane review.

A high proportion of authors who commented on what they had found helpful, strongly acknowledged the support that had been given to them by their Review Group (88%), although some suggested that communication with authors could be improved. Authors also found that it was helpful to have someone to whom they could turn for advice such as a mentor or local contact. They considered it particularly useful if they could have a reliable contact for advice on statistics and analysis. A helpdesk, mentors and a feedback mechanism such as a discussion list were the most frequent suggestions to address this need. Training was also considered helpful but limited access to training was commented on by authors and was a common suggestion for improved support. Online methods of training were suggested by a number of authors. Again, statistics and analysis were identified as key areas with which authors needed

more support, and they suggested more training in this area and to a lesser extent with RevMan. Authors also wanted a more timely training resource, particularly one that would be available when they were undertaking analysis.

Recommendations

1. That because time is a major limitation for authors in writing and updating reviews, The Cochrane Collaboration should consider ways of making the process more time efficient for Cochrane authors.
2. That because increasing Review Group workloads may hamper communication with authors, The Cochrane Collaboration should work with members of Cochrane Review Groups to develop a more time efficient process for supporting authors.
3. That training, particularly training in analysis and statistics, is more accessible to all authors and is offered in a more timely manner (e.g. online training modules).
4. That advice, particularly on analysis and statistics, is made more accessible to authors.
5. That mentoring partnerships and/or discussion lists are facilitated by The Cochrane Collaboration.
6. That The Cochrane Collaboration considers better ways of facilitating communication between Cochrane Review Groups and authors.
7. That The Cochrane Collaboration considers ways of supporting authors whose first language is not English with preparing Cochrane reviews.
8. That authors are supported with searching and, if necessary, with obtaining papers and translation of papers.
9. That The Cochrane Collaboration should work with members of Cochrane Review Groups to develop improved processes for the management of editorial and peer review feedback. In particular, the number of iterations at all stages of the review, the management of contradictory comments, and editors and peer reviewers knowledge of the Cochrane review process.
10. If authors are to be surveyed again, The Cochrane Collaboration should investigate ways of providing a more efficient survey link.

APPENDICES

Table 8: Have you had any problems getting a title registered? Open-text responses.

Type	Number
Agreement	1
Bureaucratic	3
Co-authors	2
Communication	9
Consistency	1
Delay	10
Disagreement	1
Finding Review Group	5
Guidance	1
Management	2
Overlap	4
Ownership	3
Registering title	12
Review Group resources	2
Scope	3
Title that has not progressed	3
Total	62

Table 9: Did you have any problems publishing the protocol/s? Open-text responses.

Type	Number
Bureaucracy	1
Co-author	8
Communication	2
Communication - mentor	1
Consistency	11
Delay	8
Editorial communication	4
Editorial consistency	2
Editorial delay	16
Editorial detail	6
Editorial expertise	7
Editorial management	14
Editorial subtotal	49
Few studies	1
Management	2
New methods	1
Overlap	2
Ownership	1
Revman	4
Scope	3
Scope: Review Group	1
Templates	1
Total	96

Table 10: Did you have any problems publishing your review/s? Open-text responses.

Type	Number
Access	1
Analysis	3
Archie	1
Bureaucratic	1
Co-authors	6
Commitment	1
Communication	1
Computer skills	1
Consistency	7
Co-publication	1
Data from authors	2
Delay	6
Dual publication	1
Duplication	2
Editorial communication	5
Editorial consistency	4
Editorial delay	17
Editorial demands	4
Editorial ethics	1
Editorial expertise	11
Editorial flexibility	1
Editorial management	8
Editorial subtotal	51
Empty review	2
Facilities	1
Funding	3
Increasing demands	2
Info from authors	3
Management	3
Mentor	1
Micromanagement	2
Motivation	1
Other methods	4
Overlap	1
Ownership	1
Papers	3
Protocol changes	1
Publishing agreements	1
Relevant studies	1
Resources	2
Revman	2
Search specificity	1
Statistics	2
Support	1
Time	9
Training: analysis	1
Translation	2
Volunteerism	2
Total	137

Table 11: Have you had any difficulties with the editorial and/or peer review process during protocol or review stages? Open-text responses.

Type	Number
Advice	4
Changes	1
Co-authors	1
Communication	6
Consistency	7
Delay	9
Disagreements	5
Ethics	1
Expertise	12
Failure to publish	1
Few comments	1
Management	18
Micromanagement	3
Opinion	1
Ownership	7
Statistics	2
Time	2
Timeliness	1
Total	84

Table 12: Have you had any difficulties with updating your review? Open-text responses.

Type	Number
Advice	1
Archie	2
Bureaucratic	1
Changed priorities	1
Co-authors	3
Communication	4
Communication: co-authors	3
Consistency	2
Credit	2
Delay	2
Demands	4
Editorial management	1
Funding	8
Guidance	3
Management	2
Motivation	1
New methods	14
No new data	1
Ownership	2
Papers	1
Policy	6
Protocol changes	3
RevMan	10
Scope	1
Search methods	1
Suggestion	1
Translation	1
Total	81

Table 13: Is there any other support from The Cochrane Collaboration that you have found helpful?

Type	Number
Advice	11
Centres	28
Co-authors	2
Communication: training	1
Contact authors	1
Credit	2
Cochrane review Group	164
Databases	2
Discussion group	5
Editorial	2
Encouragement	2
English	1
Examples	5
Experience	1
Follow-up	1
Funding	3
Guidelines	5
Mentors/Local support	24
Methods	3
Ombudsman	1
Papers	18
Personal support	2
Protected time	5
Resources	2
Review completion	1
Revman	2
Sample	1
Searches	50
Secretariat	1
Staff	2
Statistics	21
Templates	1
Training	7
Training: Colloquia	9
Training: communication	1
Training: local	4
Training: online	2
Training: Workshops	8
Training subtotal	31
Translation	22
Update	1
Website	1
Total	424

Table 14: Do you have any suggestions on how The Cochrane Collaboration could improve support for authors?

Type	Number		
		Funding: identification	2
Admin support	2	Funding: time	4
Assistance: updates	1	Funding: training	1
Authors: developing countries	1	Funding: updates	1
Authorship	4	Funding subtotal	48
Beginner guide	1	Generic templates	8
Bureaucracy	2	Grievances	5
Co-authors	2	Grievances: authors	2
Communication	8	Guides	16
Communication: authors	42	Helpdesk	18
Communication: changes	1	Developing countries	1
Communication: courses	1	Local contact	2
Communication: delay	1	Mentor	30
Communication: editors	6	Micromanagement	12
Communication: progress	1	Monitoring: Review Groups	1
Communication: resources	2	Monitoring: review	1
Communication: training	2	More centres	1
Communication subtotal	64	Negative image	1
Contacts	3	New methods	3
Co-publication	4	Papers	31
Credit	11	Policy: protocols	1
Credit: authors	1	Policy: titles	2
Credit: institutional	3	Process clarity	1
Credit: time	2	Process: delay	4
Credit: updates	3	Process: efficiency	1
Credit subtotal	21	Process: simplify	7
Delay	10	Process subtotal	13
Editorial role	1	Profile	2
Editorial: clarity	1	Qualitative	1
Editorial: consistency	26	Recognition: :time	1
Editorial: delay	30	Ref database	1
Editorial: detail	2	Resources	2
Editorial: expertise	8	Resources: updates	1
Editorial: guidelines	3	Reviews: other languages	1
Editorial: management	15	Revman: help	1
Editorial: support	4	Revman: improve	2
Editorial subtotal	68	Revman: simplify	18
Encouragement	2	Revman: support	6
Engagement	2	Revman: upgrades	1
English	9	RevMan subtotal	28
Facilities	5	Searching	24
Facilities: realtime	1	Skillmix	5
Feedback	16	Software support	2
Feedback: analysis	1	Staff support	4
Feedback: timeliness	1	Statistics	28
Fellowships	1	Streamline	2
Flexibility	11	Support: administrative	10
Funding	32	Support: reviews	1
Funding updates	1	Support: searching	2
Funding: colloquia & workshops	7	Templates	1

Time	10	Training: online	10
Titles	1	Training: quality	1
Titles: priority	2	Training: reviews	4
Titles: registered	1	Training: RevMan	7
Training	26	Training: statistics	3
Training: access	3	Training: updates	1
Training: analysis	1	Training subtotal	68
Training: analysis	1	Translation	24
Training: communication	1	Transparency	1
Training: developing countries	3	Updates	4
Training: distance	1	Updates: credit	1
Training: local	3	Updates: policy	4
Training: methods	1	Website: simplify	1
Training: NESB	2	Writing assistance	1
Training: new changes	1	Total	682