Minutes of teleconference of the Cochrane Collaboration Steering Group (CCSG) held on Tuesday 22 May 2012 at 13:00 hours BST

[Minutes approved by email on 31 May 2012.]

Present: Sally Bell-Syer, Lucie Binder (Project Support and Business Communications Officer, minute of item 5), Maria Burgess (Acting Team PA, minutes), Rachel Churchill, Jonathan Craig (CCSG Co-Chair, teleconference Chair), Jeremy Grimshaw (CCSG Co-Chair), Jini Hetherington (Company Secretary), Julian Higgins, Sophie Hill, Steve McDonald, Mona Nasser, Charlotte Pestridge (Consultant, for item 5 only) Mary Ellen Schaafsma, Denise Thomson, David Tovey (Editor in Chief), Liz Whamond and Mingming Zhang.

1. Welcomes, apologies, declarations of interest, and approval of the agenda

Jonathan welcomed everyone to the teleconference; Gail had sent her apologies (but provided written feedback regarding item 5). Lorne Becker would not be joining the call due to a conflict of interest on item 7, and because the agenda did not include matters relevant to the Trading Companies. It was agreed that item 5 should be moved up the agenda and discussed as soon as Charlotte Pestridge joined the call, and item 6 should be moved to the end of the agenda to enable Mingming and Liz to leave the call after summarising their paper and answering any questions.

5. Future Publishing Arrangements Project: report from the Project Board

Due to the commercial sensitivity of the discussion, minutes for this item are not available.

2. Co-Chairs' report

The focus of the Co-Chairs' recent activity had centred on the Future Publishing Arrangements Project (FPAP), the appointment of a new Chief Executive Officer (CEO), and progressing agreed actions from the Paris CCSG meeting. Jonathan invited Paul to report on the progress of the CEO recruitment plan. Paul reported that he and David had met with Kevin Young of RSA Consulting, the recruitment consultants, to discuss the arrangements for recruiting the new CEO. Interviews would take place during the week beginning 23rd July 2012, by which time the Co-Chairs and Human Resources subcommittee would have produced the shortlist of candidates. Paul understood RSA to be optimistic that candidates of a very high quality were likely to emerge, but welcomed recommendations from others. There were no questions.

3. Editor in Chief's report

David reported that he had been working intensively on the FPAP and the Strategic Session in Paris. There were no questions for him.

4. Treasurer's verbal report on current financial situation, and cash flow forecast

The cash flow forecast was considered and it was noted that this included the £450,000 of expenditure from the reserves that had been approved at the recent CCSG meeting in Paris , but that income for the first quarter was unexpectedly higher than had been forecast. David asked why there was a downward trend in CEU salary costs in 2012-13 and 2013-14. Mary Ellen agreed to examine the figures and arrange with Jini to correct the cash flow forecast if necessary.

ACTION: Mary Ellen to check CEU budget figures with David and arrange with Jini to amend the cash flow forecast if necessary.

7. Directorship of Cochrane Innovations

There was strong support for Karen New's appointment as Director, following consideration of her CV and covering letter.

ACTION: Jonathan to inform Lorne of the Steering Group's approval for Karen's appointment; Jini to notify Companies House.

8. Discretionary Fund Application: Dementia and Cognitive Improvement Group

There was general support for this application, though some concerns were expressed regarding ensuring integration with Cochrane IT platforms and workflows, involvement of lay people in the screening process, and maximising the opportunity for financial return through the possible involvement of Cochrane Innovations.

ACTION: Jonathan to advise the Dementia and Cognitive Improvement Group of the Steering Group's approval of their application, and to ask them to work closely with Jessica Thomas (incoming Director of the IMS), Lorne Becker (Cochrane Innovations) and the CEU to ensure that the product integrates fully with other Cochrane platforms.

9. Matters arising from the previous face-to-face CCSG meeting in Paris in April 2012, not appearing elsewhere on this agenda

None.

10. Action items spreadsheet

Jonathan asked CCSG members to communicate the completion of their action items to Maria so that she could keep the spreadsheet up to date. Mona asked if it would be possible to have an interactive version, and also if members were expected to complete the outstanding items of their predecessors on the CCSG. Jini confirmed that the outgoing and incoming members were expected to liaise on these matters, but that there was no formal mechanism for ensuring completion of other people's action items.

ACTION: All to inform Maria of their completed action items; Maria to investigate the possibility of providing an online version of the spreadsheet (e.g. via Google Docs) so that members could update it themselves.

11. Any other business

None.

12. Date of next teleconference

Wednesday 25 July 2012.

13. Environmental sustainability

This item was not discussed.

6. Request for renewal of funding of the Consumer Co-ordinator position

There was very strong support for continuation of this position, and for the recommendations outlined in the background document, inclusive of the budget requested. The only concerns raised were about ensuring that the Consumer Co-ordinator is supported and supervised appropriately, centrally as well as by the Consumers' Executive, and that greater consumer involvement in the work of CRGs is facilitated.

Jonathan would advise Liz and Mingming of this decision and ask them to work with Paul to operationalise it. There was very strong support from the Steering Group for greater consumer involvement in all aspects of the Collaboration. It was recognised that the task is great and that one person cannot do it all.

ACTION: Jonathan to advise Liz and Mingming of the Steering Group's decision; Liz to communicate the decision to the Consumer Co-ordinator.

1. Focus on 'core' functions

Cochrane entity: Cochrane Dementia and Cognitive Improvement Group (CDCIG).

Amount sought: £2880 (A breakdown of costs is attached)

Purpose: To develop a consumer-friendly management interface to complement a mobile app designed to simplify screening as part of a systematic review.

Background

ScreenToGo is an app for iPhone, iPad and Windows smartphones that allows people to complete the screening of citations phase of a systematic review 'on the move'. It was developed to help reduce the burden of screening very large numbers of search results by making the task possible during idle moments in the day (like the commute to work!).

Screening citations forms an integral part of the review process. It is an activity carried out by author teams and members of Cochrane review groups (namely TSCs) throughout the Collaboration. Any tool that can help simplify the screening process has potentially large reach.

ScreenToGo was presented at the 2011 Cochrane Colloquium in Madrid and raised interest in the possibilities for new and more flexible ways of working on a key task in the production and maintenance of reviews, specialised registers and CENTRAL.

In addition, the Madrid presentation raised interest from a number of groups, including the CDCIG, about the scope for tools like *ScreenToGo* to enable wider participation in the systematic review process. By simplifying the process by which citations can be collected together, displayed for screening and subsequently processed, barriers to involving lay volunteers are reduced. CDCIG has demonstrated the potential value of lay involvement in curation of a specialist trials register through its innovative ALOIS Community project. CDCIG is planning a further study that will evaluate the screening of citations by volunteers using *ScreenToGo*.

ScreenToGo was designed in an academic setting. Although the mobile software and supporting 'cloud' database service is complete, it lacks a consumer-friendly way of loading citations into the tool. Additional work is required to complete the supporting website that will allow this to take place.

This application for funding will cover developer time to complete the work promptly by allowing the developer of the tool, Kit Huckvale – currently a PhD student – to take a study break to focus exclusively on *ScreenToGo*. Completing the work quickly will make sure that the potential benefits of the tool can be tested and potentially made available to a broad audience.

Outputs

The proposed outputs are:

- 1. To complete work on a web-based interface that complements the mobile screening app and to enable a wide range of users, including consumers, to create an account on the *ScreenToGo* website, and to upload citations ready for screening using categories set by a review team or a Cochrane Review Group, or even setting their own screening categories.
- 2. To produce a web-app version of the screening tool that will allow it to be run on:
 - Desktop computers and laptops, and
 - Any mobile device.

Currently ScreenToGo works on iPhone, iPad and Windows Phone devices.

A breakdown of the costs and time requirements as well as a detailed list of the components involved is included with this application.

2. Gain to the Collaboration

The use of mobile applications such as *ScreenToGo* opens up great potential in terms of wider user involvement in the generation, maintenance and dissemination of the work of the Cochrane Collaboration. This particular app focusses on a necessary and time-intensive classification task which is best performed by humans rather than machines. The task is essential for the production of systematic reviews, and to keep specialised registers and CENTRAL up-to-date

The CDCIG are keen to explore the further feasibility of recruiting larger numbers of lay volunteers through crowdsourcing channels.

Funding the development of the user-interface would enable wider consumer participation in citation screening, and engagement with the work of the Cochrane Collaboration. It is commensurate with the focus on substantive patient and public involvement highlighted by the NIHR. Volunteer involvement may offer a way of reducing the costs involved with producing and maintaining reviews.

3. Collective benefit

The screening of citations, as mentioned, is a task performed by almost all Cochrane review groups (either by authors or by TSCs or both). Once ready, *ScreenToGo* could be used by anyone both within and outside of the Collaboration. This potentially provides enormous collective benefit to the Collaboration. This is particularly the case because of the simultaneous roll out of the Cochrane Register of Studies (CRS).

The benefits to the Collaboration of involvement at this stage in the app's development are:

1. The opportunity for co-design to increase the usefulness of the tool. For example, feedback from CDCIG helped introduced a keyword highlighting function as well as the ability to quickly view PICOS within the screening tool.

- 2. Integration with the CRS through involvement of Gordon Dooley (Metaxis), with whom CDCIG have worked closely.
- 3. Enable feasibility testing: a pilot study is planned using three Cochrane reviews groups and three types of potential user: Trials search coordinators and experienced screeners, expert consumers (existing Cochrane contributors, authors, consumer referees etc.) and laypeople (patients, carers, students, schoolchildren) with no previous/extensive knowledge of Cochrane. We propose to present the results of this study at the Colloquium in Auckland
- 4. Discussion and consensus on screening methodology across the Collaboration.

4. Likelihood of success

The mobile application and supporting cloud database (which syncs citations and screening decisions to the app) is already functional. The work now lies in the development of a web-based user-friendly interface to enable users to upload their citation sets and retrieve their final screening decisions for subsequent management in their preferred software (e.g. EndNote, etc.) Much of the groundwork for this development has already been completed; for example the database already has the 'connections' ready for a user interface to be built around.

The web interface will be developed by the same developer who successfully produced the mobile app (KH). Likelihood of completion/success is very high.

5. Alternative sources of funding

This project lies outside the scope of KH's PhD and so is not funded directly.

6. Cost of not funding

Timely completion of the user interface will not be possible without this funding. We plan to carry out a pilot study and collect data on the app's usability and acceptability, and to assess the app's potential as a tool for the engagement of consumers with the Cochrane Collaboration, the results of which we hope to present at the Auckland Colloquium.

7. Long-term continuity

This funding would enable a product currently in beta phase to be finalised. Further funding would then be sought.

Web app components		Development time	Testing time*
Review management tools			
Review creation wizard	User interface to create a new review with details of the PICOS etc that will be available for screening.	10 hours	5 hours
Category management tool	User interface to manage the screening categories into which citations included within a review can be allocated.	4 hours	2 hours
Keyword management tool	User interface to manage keywords used to highlight abstracts to aid screening decisions (Keywords could, for example, be derived from the database search strategy).	4 hours	s 2 hours
Citation upload tool	User interface to upload and manage batches of citations for screening within a single review. In the first release, a single file format will be supported: RIS (which can be generated from all popular citation manager software as well as directly exported to from, e.g. PubMed and OVID).	10 hours	6 hours
Collaborator management tool	User interface to allow several users to collaborate on a single screening project, sharing a set of citations and categories in common. Users can be assigned different roles within a screening project. Triangulation of their respective decisions can then be performed.	10 hours	6 hours
Citation management tools			
Citation browser	User interface to browse and search through the citations they have uploaded. Citations can be sorted/filtered in different ways, for example by screening category, journal, author, etc.	10 hours	5 hours
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Universal screening tool	User interface to allow users to screen through the web app: makes ScreenToGo accessible to people without a mobile device and, for those with a smartphone, irrespective of the platform.	32 hours	s 16 hours
Screening reconciliation tool	. User interface to compare screening results when multiple users are screening and assign a consensus decision.	16 hours	s 10 hours
Screening statistics viewer	User interface to present information about screening performance, for example Kappa, time taken to reach decisions, total numbers screened etc.	16 hours	s 10 hours
User management tools			
New user wizard	User interface to allow new users to register to use the ScreenToGo service.	10 hours	s 5 hours
Profile management tool	User interface to allow existing users to update and amend their personal details.	4 hours	s 5 hours
Screening client management tool	User interface to allow existing users to manage the devices which are allowed to connect to their account and download citations for screening.	4 hours	2 hours
Email service	Service to allow account verification, password reminders and review invitation emails to be sent to users.	16 hours	s 10 hours
Other activities			
System testing	Testing activities to make sure that website works in its entireity	-	16 hours
Integration testing	Testing activities to make sure that citations are reliably exchanged between web app and mobile devices.	-	20 hours
·		150 hours	s 125 hours
			275 hours

^{*}Testing time includes time taken to fix and retest code and also includes development of reusable tests to simplify future development work (unit tests).

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